
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**
Washington, D.C. 20549

FORM 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2020

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report

For the transition period from to

Commission file number 001-35126

21Vianet Group, Inc.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Cayman Islands

(Jurisdiction of incorporation or organization)

Guanjie Building Southeast 1st Floor, 10# Jiuxianqiao East Road

Chaoyang District

Beijing, 100016

The People's Republic of China

(Address of principal executive offices)

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Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
American depository shares, each representing six Class A ordinary shares, par value US\$0.00001 per share Class A ordinary shares, par value US\$0.00001 per share*	VNET	NASDAQ Global Select Market

* Not for trading, but only in connection with the listing on the Nasdaq Global Select Market of the American depository shares
Securities registered or to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)
Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:
None
(Title of Class)

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report: 672,024,600 Class A ordinary shares (excluding treasury shares and Class A ordinary shares in the form of ADSs that are reserved for issuance upon the exercise of share incentive awards), 145,875,113 Class B ordinary shares and 60,000 Class C ordinary shares, par value US\$0.00001 per share, were outstanding as of December 31, 2020.

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes No

Note – Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer" and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer Accelerated filer Non-accelerated filer
Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act.

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes No

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INTRODUCTION

Unless otherwise indicated and except where the context otherwise requires, references in this annual report on Form 20-F to:

- “ADSs” refers to our American depository shares, each representing six Class A ordinary shares, par value US\$0.00001 per share;
- “21Vianet,” “we,” “us,” “our company,” and “our” refer to 21Vianet Group, Inc., its subsidiaries and its consolidated affiliated entities;
- “China” or the “PRC” refers to the People’s Republic of China, excluding, for the purpose of this annual report only, Hong Kong, Macau and Taiwan;
- “Greater Bay Area” refers to Guangdong-Hong Kong-Macau Greater Bay Area, consisting of Guangzhou, Shenzhen, Zhuhai, Foshan, Dongguan, Zhongshan, Jiangmen, Huizhou, and Zhaoqing, as well as Hong Kong and Macau;
- “ordinary shares” or “shares” refer to our ordinary shares, which include all Class A ordinary shares, par value US\$0.00001 per share, Class B ordinary shares, par value US\$0.00001 per share, and Class C ordinary shares, par value US\$0.00001 per share, collectively;
- “variable interest entities,” or “VIEs,” refer to Beijing Yiyun Network Technology Co., Ltd. (previously known as Beijing aBitCool Network Technology Co., Ltd.), or 21Vianet Technology, Beijing iJoy Information Technology Co., Ltd., or BJ iJoy, WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.), or WiFire Network and Shanghai Zhiyan Yunwei Technology Co., Ltd., or SH Zhiyan, four domestic PRC companies in which we do not have equity interests but whose financial results have been consolidated into our consolidated financial statements in accordance with U.S. GAAP due to our having effective control over, and our being the primary beneficiary of, the four companies;
- “consolidated affiliated entities” refer to our variable interest entities and their direct and indirect subsidiaries; and
- “RMB” and “Renminbi” refer to the legal currency of China. Unless otherwise noted, all translations from RMB to U.S. dollars and from U.S. dollars to RMB in this annual report were made at a rate of RMB6.5250 to US\$1.00, the exchange rate on December 31, 2020 as set forth in the H.10 statistical release published by the Federal Reserve Board.

FORWARD-LOOKING STATEMENTS

This annual report on Form 20-F contains forward-looking statements that involve risks and uncertainties. All statements other than statements of historical facts are forward-looking statements. These forward-looking statements are made under the “safe harbor” provisions of the U.S. Private Securities Litigation Reform Act of 1995. Known and unknown risks, uncertainties and other factors, including those listed under “Item 3. Key Information-D. Risk Factors,” may cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements.

You can identify some of these forward-looking statements by words or phrases such as “may,” “will,” “expect,” “anticipate,” “aim,” “estimate,” “intend,” “plan,” “believe,” “is/are likely to,” “potential,” “continue” or other similar expressions. We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends that we believe may affect our financial condition, results of operations, business strategy and financial needs. These forward-looking statements include:

- our goals and strategies and our expansion plans;
- our future business development, financial condition and results of operations;
- the expected growth of the data center and cloud services market;
- our expectations regarding demand for, and market acceptance of, our services;

- our expectations regarding maintaining and strengthening our relationships with customers;
- our plans to invest in research and development to enhance and complement our existing solution and service offerings;
- international trade policies, protectionist policies and other policies that could place restrictions on economic and commercial activity; and
- general economic and business conditions in the regions where we provide our solutions and services.

These forward-looking statements involve various risks and uncertainties. Although we believe that our expectations expressed in these forward-looking statements are reasonable, our expectations may later be found to be incorrect. Our actual results could be materially different from our expectations. Other sections of this annual report include additional factors that could adversely impact our business and financial performance. Moreover, we operate in an evolving environment. New risk factors and uncertainties emerge from time to time and it is not possible for our management to predict all risk factors and uncertainties, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. You should read thoroughly this annual report and the documents that we refer to with the understanding that our actual future results may be materially different from and worse than what we expect. We qualify all of our forward-looking statements by these cautionary statements.

PART I

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS

Not applicable.

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not applicable.

ITEM 3. KEY INFORMATION

A. Selected Financial Data

Selected Consolidated Financial Data

The following selected consolidated financial information for the periods and as of the dates indicated should be read in conjunction with our consolidated financial statements and related notes and “Item 5. Operating and Financial Review and Prospects” in this annual report.

Our selected consolidated financial data presented below for the years ended December 31, 2018, 2019 and 2020 and our balance sheet data as of December 31, 2019 and 2020 have been derived from our audited consolidated financial statements included elsewhere in this annual report.

Our selected consolidated financial data presented below for the years ended December 31, 2016 and 2017 and our balance sheet data as of December 31, 2016, 2017 and 2018 have been derived from our audited financial statements not included in this annual report. Our audited consolidated financial statements are prepared in accordance with U.S. GAAP.

Starting in 2016, we began reporting our operating results in two operating segments, namely hosting and related services and managed network services. Content delivery network services, or CDN services, which were previously offered as part of our hosting and related services business segment, were moved to the managed network services business segment in the fourth quarter of 2016. Our consolidated statements of operations for the years ended December 31, 2016 and 2017 as presented in this annual report were modified to reflect this change in segment reporting for consistency purposes.

In September 2017, we completed the disposal of our managed network services business segment, including CDN services, hosting area network services, route optimization and last-mile broadband businesses, and deconsolidated the financial results related to the managed network services business segment in our consolidated statements of operations starting from the fourth quarter of 2017.

	For the Years Ended December 31,					
	2016 RMB	2017 RMB	2018 RMB	2019 RMB	2020 RMB US\$	
Consolidated Statement of Operations Data:						
Net revenues:						
Hosting and related services	2,668,655	2,975,178	3,401,037	3,788,967	4,829,019	740,080
Managed network services	973,119	417,527	—	—	—	—
Total net revenues	3,641,774	3,392,705	3,401,037	3,788,967	4,829,019	740,080
Cost of revenues ⁽¹⁾	(2,929,638)	(2,634,295)	(2,456,166)	(2,849,518)	(3,753,008)	(575,174)
Gross profit	712,136	758,410	944,871	939,449	1,076,011	164,906
Operating (expenses) income:						
Sales and marketing expenses ⁽¹⁾	(352,926)	(256,682)	(172,176)	(206,309)	(235,012)	(36,017)
Research and development expenses ⁽¹⁾	(149,337)	(149,143)	(92,109)	(88,792)	(112,891)	(17,301)
General and administrative expenses ⁽¹⁾	(639,648)	(519,950)	(462,637)	(415,277)	(535,111)	(82,009)
(Allowance)/reversal for doubtful debt	(117,564)	(37,427)	598	(1,557)	(2,393)	(367)
Changes in the fair value of contingent purchase consideration payable	93,307	(937)	13,905	—	—	—
Impairment of long-lived assets	(392,947)	(401,808)	—	—	(81,619)	(12,509)
Impairment of goodwill	—	(766,440)	—	—	—	—
Impairment of receivables from equity investees	—	—	—	(52,142)	—	—
Other operating income	6,783	5,439	5,027	6,862	7,619	1,168
Operating (loss) profit	(840,196)	(1,368,538)	237,479	182,234	116,604	17,871
Net loss	(931,922)	(917,644)	(186,736)	(181,246)	(2,680,259)	(410,766)
Net loss (income) attributable to non-controlling interest						
	298,324	144,914	(18,329)	(1,046)	(29,088)	(4,458)
Net loss attributable to 21Vianet Group, Inc.	(633,598)	(772,730)	(205,065)	(182,292)	(2,709,347)	(415,224)
Loss per share:						
Basic	(1.37)	(1.36)	(0.30)	(0.27)	(4.47)	(0.69)
Diluted	(1.37)	(1.36)	(0.30)	(0.27)	(4.47)	(0.69)
Loss per ADS:						
Basic	(8.22)	(8.16)	(1.80)	(1.62)	(26.82)	(4.14)
Diluted	(8.22)	(8.16)	(1.80)	(1.62)	(26.82)	(4.14)
Shares used in loss per share computation:						
Basic	617,169,833	672,836,226	674,732,130	668,833,756	716,888,919	716,888,919
Diluted	617,169,833	672,836,226	674,732,130	668,833,756	716,888,919	716,888,919

(1) Share-based compensation was included in the related operating expense categories as follows:

	For the Years Ended December 31,					US\$
	2016	2017	2018	2019	2020	
	RMB	RMB	RMB	RMB	RMB	
	(in thousands)					
Allocation of share-based compensation expenses:						
Cost of revenues	(4,110)	(277)	2,668	1,884	15,251	2,337
Sales and marketing expenses	2,490	(681)	2,139	354	38,247	5,862
Research and development expenses	(2,924)	142	1,385	1,177	634	97
General and administrative expenses	123,273	47,945	53,346	40,501	82,672	12,670
Total share-based compensation expenses	118,729	47,129	59,538	43,916	136,804	20,966

	As of December 31,					US\$
	2016	2017	2018	2019	2020	
	RMB	RMB	RMB	RMB	RMB	
	(in thousands)					
Consolidated Balance Sheet Data:						
Cash and cash equivalents	1,297,418	1,949,631	2,358,556	1,808,483	2,710,349	415,379
Restricted cash (current asset)	1,963,561	242,494	265,214	478,873	270,450	41,448
Short-term investments	277,946	548,890	245,014	363,856	285,872	43,812
Accounts and notes receivable, net	655,459	455,811	524,305	657,158	847,233	129,844
Total current assets	5,158,561	4,245,542	4,678,109	5,228,184	6,055,607	928,062
Restricted cash (non-current asset)	33,544	3,344	37,251	69,821	135,638	20,787
Total assets	12,421,524	9,908,161	11,150,717	14,273,706	19,373,755	2,969,157
Total current liabilities	4,373,857	1,764,184	2,191,210	4,469,021	6,121,960	938,232
Total liabilities	5,570,507	4,707,157	5,787,533	9,042,078	12,476,275	1,912,072
Total mezzanine equity	700,000	—	—	—	—	—
Total shareholders' equity	6,151,017	5,201,004	5,363,184	5,231,628	6,897,480	1,057,085

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

A description of factors that could materially affect our business, financial condition or operating results is provided below.

Summary of Risk Factors

An investment in our ADSs is subject to a number of risks, including risks related to our business and corporate structure, risks related to doing business in China and risks related to our ADSs. The following summarizes some, but not all, of these risks. Please carefully consider all of the information discussed in “Item 3. Key Information—D. Risk Factors” in this annual report for a more thorough description of these and other risks.

Risks Related to Our Business and Industry

- We may not be able to successfully implement our growth strategies or manage our growth.
- We may not be able to increase sales to our existing customers and attract new customers, which would adversely affect our results of operations.
- Delays in the construction of new data centers or the expansion of existing data centers could involve significant risks to our business.

- The ongoing COVID-19 pandemic could materially and adversely affect our business, financial condition and results of operations.
- We have a history of net loss and we are uncertain about our future profitability.
- If we are unable to meet our customers' requirements, our reputation and results of operations could suffer.
- Any significant or prolonged failure in our infrastructure or services would lead to significant costs and disruptions and would reduce our revenues, harm our business reputation and have a material adverse effect on our financial condition and results of operations.
- We rely on customers in the internet industry for most of our revenues.
- Failure to maintain our partnership with Microsoft may have a material and adverse effect on our operations and the strategic goals of our cloud service business.
- We depend on third-party suppliers for key elements of our network infrastructure, data center and telecommunication network services, and we also compete with some of the third-party suppliers, primarily China Telecom and China Unicom, for certain telecommunication resources.

Risks Related to Our Corporate Structure

- If the PRC government finds that the arrangements that establish the structure for operating our business do not comply with PRC government restrictions on foreign investment in the telecommunications business or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.
- Our contractual arrangements with our variable interest entities may result in adverse tax consequences to us.
- We rely on contractual arrangements with our variable interest entities and their shareholders for our China operations, which may not be as effective as direct ownership in providing operational control.
- The shareholders of our variable interest entities may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition.

Risks Related to Doing Business in China

- Adverse changes in political and economic policies or political or social conditions of the PRC government could have a material adverse effect on the overall economic growth of China, which could reduce the demand for our services and adversely affect our competitive position.
- Our independent registered public accounting firm, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection.
- Uncertainties with respect to the PRC legal system could limit legal protections available to you and us.
- Uncertainties exist with respect to the interpretation and implementation of the newly enacted PRC Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.
- We may rely on dividends paid by our operating subsidiaries to fund cash and financing requirements, and limitations on the ability of our operating subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business and fund our operations.

- If we fail to acquire, obtain or maintain applicable telecommunications licenses, or are deemed by relevant governmental authorities to be operating without full compliance with the laws and regulations, our business would be materially and adversely affected.
- Under the New PRC Enterprise Income Tax Law, we may be classified as a “resident enterprise” of China. Such classification could result in unfavorable tax consequences to us and our non-PRC holders of shares and ADSs.
- We and our non-tax resident investors face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies.
- Discontinuation of any of the preferential tax treatments available to us or imposition of any additional taxes could adversely affect our financial condition and results of operations.

Risks Related to Our ADS

- The market price of our ADSs has fluctuated and may continue to be volatile, which could result in substantial losses to holders of our ADSs.
- Our directors and employees may face claims and lawsuits as a result of their position in other companies, which may also harm our reputation.
- Our triple-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.
- Future sales of a substantial number of our ADSs in the public market, or the perception that these sales could occur, could cause the price of our ADSs to decline.
- We are exempt from certain corporate governance requirements of Nasdaq and we intend to rely on certain exemptions.
- We are a foreign private issuer within the meaning of the rules under the U.S. Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies.

Risks Related to Our Business and Industry

We may not be able to successfully implement our growth strategies or manage our growth.

Our total net revenues generated from hosting and related services increased from RMB3,401.0 million in 2018 and further to RMB3,789.0 million in 2019, and further to RMB4,829.0 million (US\$740.1 million) in 2020, representing a compound annual growth rate, or CAGR, of 19.2%. Our total net revenues increased by 27.4% from RMB3,789.0 million as of December 31, 2019 to RMB4,829.0 million (US\$740.1 million) as of December 31, 2020. The total number of cabinets under our management increased from 30,654 as of December 31, 2018 to 36,291 as of December 31, 2019 and further increased to 53,553 as of December 31, 2020. In order to meet growing customer demands, we plan to continue to increase our service capacity through new self-built data centers and new phases of existing self-built data centers, which require us to commit a substantial amount of operating and financial resources. Furthermore, we intend to continue expanding our overall service offerings, customer base, employee headcount, and operations. Our planned capital expenditures, together with our ongoing operating expenses, will cause substantial cash outflows.

Site selection of data centers is a critical factor in our expansion plans. The lack of suitable properties available with the necessary combination of high power capacity and optical fiber connectivity may have a negative impact on our revenue growth. We may overestimate the demand for our services in the markets where we operate and increase our data center capacity or expand our internet network more aggressively than needed, which may cause an increase in our costs and expenses and have a negative impact on our gross profit margins. Furthermore, the costs of construction and maintenance of new data centers constitute a significant portion of our capital expenditures and operating expenses. If our planned expansion does not achieve the desired results, our business, profitability and results of operations could be materially and adversely affected.

We have been providing retail data center services to customers by offering them colocation, interconnectivity and other value-added services with standardized cabinets since our inception. In 2019, we developed our “dual-core” growth strategy to expand into wholesale data center services to construct and develop hyperscale data center sites for large-scale technology companies based on their customized standards. The wholesale data center services market has a different competitive landscape, and different consumer preferences and spending patterns from the retail data center services market. We may need to build brand recognition in this market through further investments in sales and promotional activities in addition to those that we originally planned. Our ability to attract customers of wholesale services will depend on a variety of factors, including our capabilities in data center design, construction and delivery, data centers’ operating reliability and security as well as our management and maintenance services. Our inability to develop, provide or effectively execute any of these initiatives may hinder the implementation of this new growth strategy and may adversely affect our business, financial condition and results of operations.

Furthermore, if our information systems are unable to support the demands placed on them by our growth, we may need to implement new systems, which would be disruptive to our business. We may also initiate similar network upgrades in the future if required by our operations. If we fail to improve our operational systems or to expand our customer service capabilities to keep pace with the growth of our business, we could experience customer dissatisfaction, cost inefficiencies, and lost revenue opportunities, which may materially and adversely affect our results of operations.

We may not be able to increase sales to our existing customers and attract new customers, which would adversely affect our results of operations.

Our growth depends on our ability to continue to expand our service offerings to existing customers and attract new customers. Our customer base for hosting and related services increased from nearly 5,000 enterprise customers as of December 31, 2018 to more than 6,000 as of December 31, 2020. Our average monthly recurring revenues per cabinet for managed retail services was RMB8,258, RMB8,747 and RMB8,984 (US\$1,377) for the year ended December 31, 2018, 2019 and 2020. We may be unable to sustain our growth for a number of reasons, such as:

- capacity constraints;
- inability to identify new locations or reliable data centers for cooperation or lease;
- a reduction in the demand for our services due to economic recessions;
- inability to market our services in a cost-effective manner to new customers;
- inability of our customers to differentiate our services from those of our competitors, or inability to effectively communicate such distinctions;
- inability to successfully communicate the benefits of data center services to businesses;
- the decision of businesses to host their internet infrastructure internally or in other hosting facilities as an alternative to the use of our data center services;
- inability to increase our sales to existing customers; and
- reliability, quality or compatibility problems with our services.

A substantial amount of our past revenues was derived from service offerings to existing customers. Our costs associated with increasing revenues from existing customers are generally lower than costs associated with generating revenues from new customers. Therefore, slowing revenue growth or declining revenues from our existing customers, even if offset by an increase in revenues from new customers, could reduce our operating margins. Any failure to grow our revenues from existing customers or attract new customers for a prolonged period of time could have a material adverse effect on our results of operations. Certain of our existing customers that have strong in-house IT capabilities may choose to build their own data centers, which could adversely affect our ability to increase our sales to them. If we are unable to satisfy the needs or requirements of our significant customers, such as industry-leading internet companies or cloud service providers, we may not be able to retain them for existing services or attract them to purchase additional services from us, which may materially and adversely affect our business, financial condition and results of operations.

Delays in the construction of new data centers or the expansion of existing data centers could involve significant risks to our business.

In order to meet customer demand in some of our existing and new markets, we need to expand existing data centers, lease new facilities or obtain suitable land to build new data centers. Expansion of existing data centers and/or construction of new data centers are currently underway, or being contemplated, in many of our markets. Such expansion and construction require us to carefully select and rely on the experience of one or more designers, general contractors, and subcontractors during the design and construction process. If a designer, general contractor, or significant subcontractor experiences financial or other problems during the design or construction process, we could experience significant delays and incur increased costs to complete the projects, resulting in adverse impacts on our results of operations.

Government policies and restrictions on the construction of new data centers or the expansion of existing data centers may also have a material impact on our business. For example, since January 2019, the Ministry of Industry and Information Technology, or the MIIT, and other regulatory authorities encourage data centers to adhere to certain average levels of energy conservation and aim to reach several goals including, among others, maintaining the power usage effectiveness, or PUE, of newly constructed large and extra-large data centers at or below 1.4 from the year 2022 onward. Some local governmental authorities also issued regulations and relevant implementation rules in order to control the construction and expansion of data centers. For example, on September 6, 2018, the General Office of the People's Government of Beijing Municipality issued a notice prohibiting new construction or expansion of data centers which are involved in providing internet data services or information processing and storage support services within certain areas of Beijing. Governmental authorities in Shanghai also announced similar guidance on January 2, 2019, which provides that the PUE of newly constructed internet data centers is required to be strictly controlled below 1.3, and the PUE of reconstructed internet data centers is required to be strictly controlled below 1.4. These regulatory developments and uncertainties regarding their implementation may adversely affect the expansion and/or construction progress of our data centers. While we endeavor to obtain the required regulatory approvals for the development and operation of our data centers (including fixed asset investment project filings and conducting energy conservation examinations of our data center construction projects to meet the requirements under national and local laws and regulations), we cannot assure you that all of our data centers have met the requirements or that we have obtained or will obtain all relevant approvals, the lack of which could have an adverse effect on our business and expected growth.

In addition, we need to work closely with the local power suppliers in the regions where we plan to expand existing data centers or construct new data centers. If we experience significant delays in the supply of power required to support the data center expansion or new construction, either during the design or construction phases, the progress of the data center expansion and/or construction could deviate from our original plans, which could have a material and adverse effect on our revenue growth, profitability and results of operations.

The ongoing COVID-19 pandemic could materially and adversely affect our business, financial condition and results of operations.

Beginning in early 2020, there was an outbreak of a novel strain of coronavirus, or COVID-19, in China. In the first half of 2020, the COVID-19 pandemic resulted in quarantines, travel restrictions, and the temporary closure of business venues and facilities in China, with some of these restrictive measures still sporadically in effect today. In response to the pandemic, we implemented remote working arrangements and suspended our offline customer acquisition activities and business travels to help ensure the safety and health of our employees. All of these measures have affected general commercial activities in China and our operating activities.

While the duration and severity of the spread of the COVID-19 pandemic are not predictable, the global spread of the COVID-19 pandemic in major countries of the world may result in global economic distress, and the extent to which it may affect our results of operations will depend on future developments of the COVID-19 pandemic, which are highly uncertain and difficult to predict. If the construction of new data centers or the expansion of existing data centers cannot be completed or delivered on time due to the COVID-19 pandemic, we might be unable to meet our customer demand in the existing and new markets as expected, which may adversely and materially affect our business, financial condition and results of operations. Any economic slowdown in China due to the outbreak of COVID-19 may have a negative impact on our capital expenditures, which may further result in insufficient funds for our future expansion or growth and decreases in our revenues, and our business, financial condition and results of operations may be materially and adversely affected. In addition, the business disruptions caused by the outbreak of COVID-19 might also materially and adversely affect our customers' business operations and financial conditions, especially for small- and medium-sized enterprises, and they might start to encounter cash flow or operating difficulties, which may reduce their demand for our services, increase the accounts receivable turnover days or even increase the default risks. All of these consequences would negatively affect our results of operations. Any prolonged disruption of our businesses or those of our customers or business partners could negatively impact our financial condition and results of operations.

We have a history of net loss and we are uncertain about our future profitability.

We have incurred net loss of RMB186.7 million, RMB181.2 million and RMB2,680.3 million (US\$410.8 million) in 2018, 2019 and 2020, respectively. We cannot assure you that we will be able to generate net profits in the future. Our net loss has resulted primarily from our cost of revenues and investments made to grow our business, such as in telecommunication costs, research and development efforts and sales and marketing efforts. We expect our costs and expenses to increase in absolute amounts as we continue to grow our business. Moreover, we intend to continue to invest in the foreseeable future in expanding our data center infrastructure, improving our technologies, hiring qualified research and development personnel and offering additional solutions and products, which is expected to cause our cost of revenues, sales and marketing expenses and research and development expenses to continually increase. We also plan to invest in sales, marketing and branding efforts. These efforts may be more costly than we expect and our revenues may not increase sufficiently to offset our expenses, which may result in increased operating and net loss in the short term with no assurance that we will eventually achieve our intended long-term benefits or profitability.

If we are unable to meet our customers' requirements, our reputation and results of operations could suffer.

Our agreements with our customers contain certain guarantees regarding our performance. For hosting services, we generally guarantee 99.9% uptime for power and 99.9% uptime for network connectivity, failure of which will cause us to provide free service for a period of time. In 2016, one of our data centers in southern China experienced a network outage for an extended period of time due to supplier-side connectivity issues. As a result, we failed to meet the 99.9% uptime guarantee for network connectivity, and consequently were required to provide free service for a period of time to all customers who were affected pursuant to our agreements with these customers. This was an isolated incident and did not have any material impact on our business. If in the future similar incidents were to recur or we are unable to provide customers with quality customer support, we could face customer dissatisfaction, decreased overall demand for our services, and loss of revenue. In addition, inability to meet customer service expectations may damage our reputation and could consequently limit our ability to retain existing customers and attract new customers, which would adversely affect our ability to generate revenue and negatively impact our results of operations.

Any significant or prolonged failure in our infrastructure or services would lead to significant costs and disruptions and would reduce our revenues, harm our business reputation and have a material adverse effect on our financial condition and results of operations.

Our data centers, power supplies and network are vulnerable to disruptions and failure of infrastructure. Problems with the cooling equipment, generators, backup batteries, routers, switches, or other equipment, whether or not within our control, could result in service interruptions or data losses for our customers as well as equipment damage. Our customers locate their computing and networking equipment in our data centers, and any significant or prolonged failure in our infrastructure or services could significantly disrupt the normal business operations of our customers and harm our reputation and reduce our revenue. While we offer data backup services and disaster recovery services, which could mitigate the adverse effects of such a failure, most of our customers do not subscribe for these services. Accordingly, any failure or downtime in any of our data centers could affect many of our customers. The total destruction or severe impairment of any of our data centers could result in significant downtime of our services and loss of customer data. Since our ability to attract and retain customers depends on our ability to provide highly reliable services, even minor interruptions of our services could harm our reputation.

While we have not experienced any material interruptions in the past, service interruptions continue to be a significant risk for us and could materially impact our business. Any service interruptions could:

- require us to waive fees or provide free services;
- cause our customers to seek damages for losses incurred;
- require us to replace existing equipment or add redundant facilities;
- cause existing customers to cancel or elect to not renew their contracts;
- harm our brand and reputation as a reliable data center services provider; or
- make it more difficult for us to attract new customers or cause us to lose market share.

Any of these events could materially increase our expenses or reduce our revenues, which would have material adverse effect on our business, financial condition and results of operations.

We rely on customers in the internet industry for most of our revenues.

We derived a majority of our revenues in 2018, 2019 and 2020 from customers in China's internet industry, including online media, e-commerce, live broadcasting, social networking, online gaming companies, portals, search engines, financial technology companies and cloud services providers. The business models of some internet companies are relatively new and have not been well proven. Many internet companies base their business prospects on the continued growth of China's internet market, which may not happen as expected.

In addition, our business would suffer if companies in China's internet industry reduce the outsourcing of their data center services. If any of these risks materialize, we may lose customers or have difficulties in selling our services, which would materially and adversely affect our business and results of operations.

Failure to maintain our partnership with Microsoft may have a material and adverse effect on our operations and the strategic goals of our cloud service business.

Through our strategic partnership with Microsoft, we started providing public cloud services in 2013 and hybrid cloud services in 2014. We are Microsoft's local partner for all of its four major cloud offerings: Microsoft Azure, Office 365, Dynamics 365 and Power Platform services. We partner with Microsoft to provide Cloud services that allow enterprise and individual customers to run their applications over the internet using the IT infrastructure. We generally charge end customers of cloud services for a fixed fee or fee based on the actual usage of the cloud resources at predetermined rates over the subscription period, which in general is one year. There can be no certainty that our partnership with Microsoft will not be changed or terminated. Any change in the partnership with Microsoft could cause delays in the delivery of our cloud service and possible losses in revenue, which could adversely affect our results of operations. In addition, alternative partners may not be available, or may not provide their products or services at similar of favorable prices. To the extent that we are unable to maintain our partnership with Microsoft, and if we have not yet established, or are unable to establish, partnerships with other cloud service providers, our operations, reputation and strategic goals of cloud service business would be adversely affected.

Actual or alleged failure to comply with data privacy and protection laws and regulations could have a serious adverse effect on our reputation, and discourage current and potential clients from doing business with us.

We are subject to various privacy and data protection laws and regulations in China, including, without limitation, the PRC Cyber Security Law, or the Cyber Security Law. The Cyber Security Law, which came into effect on June 1, 2018, requires network operators to perform certain functions related to cyber security protection and the strengthening of network information management through taking technical and other necessary measures as required by laws and regulations to safeguard the operation of networks, responding to network security effectively, preventing illegal and criminal activities, and maintaining the integrity and confidentiality and usability of network data. In addition, the Cyber Security Law imposes certain requirements on network operators of critical information infrastructure. For example, network operators of critical information infrastructure generally shall, during their operations in the PRC, store the personal information and important data collected and produced within the territory of PRC, and shall perform certain security obligations as required under the Cyber Security Law. The Cyber Security Law is relatively new and subject to interpretation by the regulator. In light of rapid advances in its implementation, the implementation of the Cyber Security Law involves potential risks to our business because we may be deemed as the network operator of critical information infrastructure thereunder.

While we have taken various measures to comply with all applicable data privacy and protection laws and regulations in China, we cannot assure you that the measures we have taken or will take are adequate under the Cyber Security Law, and we may be held liable in the event of any breach of the relevant requirements under the Cyber Security Law or other relevant laws and regulations. We may also be held liable in the event of any breach of general clauses on our compliance with such statutory requirements as well as some other specific requirements related to data protection under the relevant customer contracts. If further changes in our business practices are required under China's evolving regulatory framework for the protection of information in cyberspace, our business, financial condition and results of operations may be adversely affected.

We depend on third-party suppliers for key elements of our network infrastructure, data center and telecommunication network services, and we also compete with some of the third-party suppliers, primarily China Telecom and China Unicom, for certain telecommunication resources.

Our success depends in part upon our relationships with third-party suppliers, primarily China Telecom and China Unicom, for key elements of network infrastructure and telecommunication network services, including hosting facilities and bandwidth, and to some extent, optical fibers. We directly enter into agreements with the local subsidiaries of China Telecom and China Unicom, from whom we lease cabinets in the data centers built and operated by them, with power systems, cabling and wiring and other data center equipment pre-installed. Because each local subsidiary of China Telecom and China Unicom has independent authority and budget to enter into contracts, our contract terms with these subsidiaries vary and are determined on a case-by-case basis. We generally define “partnered” data centers as the data center space and cabinets we lease from China Telecom, China Unicom and other third parties through agreements. Based on the specific requests of our customers, demands in different cities and our strategy for points of presence, or POP, establishment, the locations and number of our partnered data centers may change from time to time. As of December 31, 2020, we leased a total of 3,677 cabinets that are housed in our 52 partnered data centers, accounting for approximately 7% of the total number of our cabinets under management.

We also rely on our internet bandwidth suppliers, consisting primarily of China Telecom, China Unicom and China Mobile, for a significant portion of our bandwidth needs and lease optical fibers from them to connect our data centers with each other and with the telecommunications backbones and other internet service providers. Our agreements with local subsidiaries of major telecommunication carriers usually have a term of one to three years and an automatic renewal option. We can offer no assurances that these service providers will continue to provide services to us on a cost-effective basis or on otherwise competitive terms, if at all, or that these providers will provide us with additional capacity to adequately meet customer demand or to expand our business. Any of these factors could limit our growth prospects and materially and adversely affect our business.

China Telecom and China Unicom also provide data center and bandwidth services and directly compete with us while we exercise little control over them. See “— We may not be able to compete effectively against our current and future competitors.” We believe that we have good business relationships with China Telecom and China Unicom, and we have access to adequate hosting facilities and bandwidth to provide our services. However, there can be no assurance that we can always secure hosting facilities and bandwidth from China Telecom and China Unicom on commercially acceptable terms, or at all.

In addition, we currently purchase routers, switches and other equipment from a limited number of suppliers. We do not carry significant inventories of the products we purchase, and we have no guaranteed supply arrangements with our suppliers. The loss of any significant vendor could delay the build-out of our infrastructure and increase our costs. If our suppliers fail to provide products or services that comply with evolving internet standards or that interoperate with other products or services we use in our network infrastructure, we may be unable to meet all or a portion of our customer service commitments, which could materially and adversely affect our business and results of operations.

Furthermore, we have experienced and expect to continue to experience interruptions or delays in network services. Any failure on our part or the part of our third-party suppliers to achieve or maintain high data transmission capacity, reliability or performance could significantly reduce customer demand for our services and damage our business and reputation. As our customer base grows and their usage of telecommunications resources increases, we may be required to make additional investments in our capacity to maintain adequate data transmission speed. The availability of such capacity may be limited or the cost may be unacceptable to us. If adequate capacity is not available to us as our customers’ usage increases, our network may be unable to achieve or maintain sufficiently high data transmission capacity, reliability or performance. In addition, our operating margins may suffer if our bandwidth suppliers increase the prices for their services and we are unable to pass along the increased costs to our customers.

Our business operations are extensively impacted by the policies and regulations of the PRC government. Any policy or regulatory change may cause us to incur significant compliance costs.

We are subject to extensive national, provincial and local governmental regulations, policies and controls. PRC governmental authorities and agencies regulate many aspects of Chinese industries, including without limitation, the following aspects:

- construction or development of new data centers or renovation, rebuilding or expansion of existing data centers;
- environmental protection laws and regulations;
- security laws and regulations;

- establishment of or changes in shareholder of foreign investment enterprises;
- foreign exchange;
- taxes, duties and fees;
- customs;
- land planning and land use rights; and
- energy conservation and emission reduction;

The liabilities, costs, obligations and requirements associated with these laws and regulations may be material, may delay the commencement of operations at our new data centers or cause interruptions to our operations. Failure to comply with the relevant laws and regulations in our operations may result in various penalties, including, among others the suspension of our operations and thus adversely and materially affect our business, prospects, financial condition and results of operations. While we have endeavored to comply with the relevant laws and regulations in the development and operation of our data centers, we may incur additional costs in order to fulfill such requirements, and we cannot assure you that we have complied with, or will comply with the requirements of all relevant laws and regulations, including obtaining of all relevant approvals required for the development and operation of data centers.

Difficulties in identifying, consummating and integrating acquisitions and alliances and potential write-offs in connection with our investment or acquisitions may have a material and adverse effect on our business and results of operations.

As part of our growth strategy, we have acquired, and may in the future acquire, companies that operate businesses complementary to ours. From time to time, we may also make alternative investments and enter into strategic partnerships or alliances as we see fit. Past and future acquisitions, partnerships or alliances may expose us to certain risks, including risks associated with:

- the integration of new operations and the retention of customers and personnel of the acquired businesses;
- significant volatility in our profitability due to changes in the fair value of our contingent purchase consideration payable;
- unforeseen or hidden liabilities, including those associated with different business practices;
- the diversion of management's attention and resources from our existing business and technology by acquisition, transition and integration activities;
- failure to achieve synergies with our existing business and generate revenues as anticipated;
- failure of the newly acquired businesses, technologies, services and products to perform as anticipated;
- inability to generate sufficient revenues to offset additional costs and expenses;
- breach or termination of key agreements by the counterparties;
- international operations conducted by some of our acquired business;
- potential claims over payment of contingent purchase consideration; or
- the potential loss of, or harm to, relationships with both our employees and customers resulting from our integration of new businesses.

In addition, we record goodwill if the purchase price we pay in the acquisitions is greater than the amount assigned to the fair value of the net assets or business acquired. We are required to test our goodwill and intangible assets for impairment annually, or more frequently, if events or changes in circumstances indicate that these assets may become impaired. We may record impairment of goodwill and acquired intangible assets in connection with our acquisitions if the carrying value of our acquisition goodwill and related acquired intangible assets in connection with our past or future acquisitions are determined to be impaired. We cannot assure you that the acquired businesses, technologies, services and products from our past acquisitions and any potential transaction will generate sufficient revenues to offset the associated costs or other potential unforeseen adverse effect on our business. Furthermore, we may need to raise additional debt or sell additional equity or equity-linked securities to make or complete such acquisitions. See “— We may require additional capital to meet our future capital needs, which may adversely affect our financial position and result in additional shareholder dilution.”

We may not be able to compete effectively against our current and future competitors.

We compete with various industry players, including telecommunication carriers such as China Telecom and China Unicom, carrier-neutral service providers in China such as SINNET and GDS, cloud services providers such as AWS and Alibaba Cloud, virtual private network, or VPN, service providers such as Citic Telecom CPC, China Telecom, PCCW, and CBCcom, as well as new market entrants in the future. Competition is primarily centered on the quality of service and technical expertise, security, reliability and functionality, reputation and brand recognition, financial strength, the breadth and depth of services offered, geographic coverage and price. Some of our current and future competitors may have substantially greater financial, technical and marketing resources, greater brand recognition, and more established relationships with current or potential customers than we do, which would allow them to:

- adapt to new or emerging technologies and changes in customer requirements more quickly;
- bundle certain services and provide to customers at reduced prices;
- take advantage of acquisition and other opportunities more readily;
- adopt more aggressive pricing policies and devote greater resources to the promotion, marketing, and sales of their services; and
- devote greater resources to the research and development of their products and services.

If we are unable to compete effectively and successfully against our current and future competitors, our business prospects, financial condition and results of operations could be materially and adversely affected.

Our self-built and partnered data centers are vulnerable to security breaches, which could disrupt our operations and have a material adverse effect on our business, financial condition and results of operations.

A party who is able to compromise the security measures of our data centers and networks or the security of our infrastructure could misappropriate either our proprietary information or the information of our customers, or cause interruptions or malfunctions in our operations. In addition, we have limited control over our partnered data centers, which are primarily operated by China Telecom or China Unicom. We may be required to devote significant capital and resources to protect against such threats or to alleviate problems caused by security breaches. As techniques used to breach security change frequently and are generally not recognized until launched against a target, we may not be able to implement security measures in a timely manner or, if and when implemented, we may not be certain whether these measures could be circumvented. Any breaches that may occur could expose us to increased risk of lawsuits, material monetary damages, potential violations of applicable privacy and other laws, penalties and fines, loss of existing or potential customers, harm to our reputation and increases in our security and insurance costs, which could have a material adverse effect on our business, financial condition and results of operations. In addition, the local authorities in the PRC may conduct various reviews and inspections on our business operations from time to time, which could cover a broad range of aspects, including network and information security, and compliance with applicable laws, rules and regulations. If any non-compliance incidents in our business operation are identified, we may be required to take certain rectification measures in accordance with applicable laws and regulations, or we may be subject to other regulatory actions such as administrative penalties. For example, in November 2020, the MIIT conducted an inspection on us and identified certain security issues in our cloud systems. We were ordered to rectify such issues before December 11, 2021. As of the date of this annual report, we are in the process of rectifying such issues. However, given the continuously changing regulatory environment of China, we cannot assure you that we will be able to fully rectify all non-compliance incidents in a timely manner or fully satisfy the regulatory requirements, or we will not be subject to any future regulatory reviews and inspections where other non-compliance incidents might be identified, which might materially and adversely affect our business, financial condition, results of operations and prospects. For a detailed discussion, see “Item 4. Information on the Company—B. Business Overview—Regulations — Regulations on Internet Security.”

In addition, any assertions of alleged security breaches or systems failure made against us, whether true or not, could harm our reputation, cause us to incur substantial legal fees, divert management's attention and have a material adverse effect on our business, reputation, financial condition and results of operations.

We may require additional capital to meet our future capital needs, which may adversely affect our financial position and result in additional shareholder dilution.

We will require significant capital expenditures and cash investments to fund our future growth. We may need to raise additional funds through equity or debt financings in the future in order to meet our capital needs mostly in relation to the construction of our self-built data centers and future acquisition opportunities. If we raise additional funds through further issuances of equity or equity-linked securities, our existing shareholders could suffer significant dilution in their percentage ownership of our company, and any new equity securities we issue could have rights, preferences, and privileges senior to those of holders of our ADSs and ordinary shares. We may not be able to raise required cash on terms acceptable to us, or at all. If new financing sources are required, but are insufficient or unavailable, we may need to modify our growth and operating plans and business strategies based on available funding, if any, which would harm our ability to grow our business.

Servicing our debt requires a significant amount of cash, and we may not have sufficient cash flows from our business to pay our substantial debt.

Our ability to make scheduled payments of the principal of, to pay interest on or to refinance our indebtedness, including the notes, depends on our future performance, which is subject to economic, financial, competitive and other factors beyond our control. Our business may not continue to generate cash flow from operations in the future sufficient to service our debt and make necessary capital expenditures. If we are unable to generate cash flow, we may be required to adopt one or more alternatives, such as selling assets, restructuring debt or obtaining additional equity capital on terms that may be onerous or highly dilutive. Our ability to refinance our indebtedness will depend on the capital markets and our financial condition at such time. We may not be able to engage in any of these activities or engage in these activities on desirable terms, which could result in a default on our debt obligations.

As of December 31, 2020, our total consolidated indebtedness and other liabilities, representing the aggregate amount of borrowings, bonds payable, accounts and notes payable, accrued expenses and other payables and convertible promissory notes, were RMB7,980.0 million (US\$1,223.0 million). Failure to service our debt would constitute an event of default under the terms of our outstanding debt, which would have a material adverse effect on our financial condition and results of operations. Furthermore, if our bond rating is downgraded or we incur any change of control event, our financial condition or results of operations would be materially and adversely affected.

Our substantial level of indebtedness could adversely affect our ability to raise additional capital to fund our operations, expose us to interest rate risk to the extent of our variable rate debt, and if we are unable to comply with the restrictions and covenants contained in our debt agreements, an event of default could occur under the terms of such agreements, which could cause repayment of such debt to be accelerated.

We have substantial indebtedness. As of December 31, 2020, we had total outstanding debts (representing borrowings and bonds payable) of RMB3,044.9 million (US\$466.7 million). Based on our current expansion plans, we expect to continue to finance our operations partially through the incurrence of debt. Our indebtedness could, among other consequences:

- make it more difficult for us to satisfy our obligations under our indebtedness, exposing us to the risk of default, which, in turn, would negatively affect our ability to operate as a going concern;
- require us to dedicate a substantial portion of our cash flows from operations to interest and principal payments on our indebtedness, reducing the availability of our cash flows for other purposes, such as capital expenditures, acquisitions and working capital;
- limit our flexibility in planning for, or reacting to, changes in our business and the industries in which we operate;
- increase our vulnerability to general adverse economic and industry conditions;
- place us at a disadvantage compared to our competitors that have less debt;

- expose us to fluctuations in the interest rate environment because the interest rates on borrowings under our project financing agreements are variable;
- increase our cost of borrowing;
- limit our ability to borrow additional funds; and
- require us to sell assets to raise funds, if needed, for working capital, capital expenditures, acquisitions or other purposes.

As a result of covenants and restrictions, we are limited in how we conduct our business, and we may be unable to raise additional debt or equity financing to compete effectively or to take advantage of new business opportunities. Our current or future borrowings could increase the level of financial risk to us and, to the extent that the interest rates are not fixed and rise, or that borrowings are refinanced at higher rates, our available cash flow and results of operations could be adversely affected.

If we are unable to comply with the restrictions and covenants in our current or future debt and other agreements, there could be a default under the terms of these agreements. In the event of a default under these agreements, the holders of the debt could terminate their commitments to lend to us, accelerate the debt and declare all amounts borrowed due and payable or terminate the agreements, whichever the case may be. In addition, one of our variable interest entities and one of our subsidiaries have pledged the equity interests they hold in certain of their subsidiaries to the financial institutions as collateral to secure the loans or finance leases provided by these financial institutions. If there is any default under these loans or finance leases and we are unable to repay the debt, the pledged equity interests may be foreclosed by these creditors and our business could be adversely affected.

Furthermore, some of our debt agreements may contain cross-acceleration or cross-default provisions. As a result, our default under one debt agreement may cause the acceleration of debt or result in a default under our other debt agreements. If any of these events occur, we cannot assure you that our assets and cash flows would be sufficient to repay in full all of our indebtedness, or that we would be able to find alternative financing. Even if we could obtain alternative financing, we cannot assure you that it would be on terms that are favorable or acceptable to us.

Increased power costs and limited availability of electrical resources could adversely affect our results of operations.

We are a large consumer of power and costs of power account for a significant portion of our overall costs for both our self-built data centers and partnered data centers. We may not be able to pass on increased power costs to our customers, which could harm our results of operations.

Power and cooling requirements at our data centers are also increasing as a result of the increasing power demands of today's servers. Since we rely on third parties to provide our data centers with power, our data centers could have a limited or inadequate access to power. Our customers' demand for power may also exceed the power capacity in our older data centers, which may limit our ability to fully utilize these data centers. This could adversely affect our relationships with our customers, which could harm our business and have an adverse effect on our results of operations.

If we are unable to successfully identify and analyze changing market trends and adjust our growth strategies accordingly in a timely and cost-effective manner, our results of operations could be adversely affected.

As China's internet infrastructure market remains at an early stage, especially compared to those in more advanced economies, we generally operate in a more complex business environment with changing market dynamics. On the one hand, the imbalance between material growth in internet traffic and the relative limited supply of high quality internet infrastructure services drives strong demand for not only data center services, but also complementary value-added services in adjacent markets, including among others, interconnectivity services, network transmission services and cloud services. On the other hand, the potential changes in competitive landscape and regulations in an otherwise highly regulated market continue to present ambiguities and challenges. Therefore, we need to evaluate, on a continuous basis, the changing market dynamics and from time to time make adjustments to our growth strategies and operations accordingly. Any material changes to our strategies and operations, including adjustments to business models, new business areas and acquisitions, are evaluated financially, strategically and operationally by our management and approved by our board of directors. If we fail to capture new growth opportunities, or become unsuccessful in modifying our strategies and operations to adapt to these changing market conditions in a timely and cost-effective manner, our results of operations could be materially and adversely affected.

In addition, we have expanded, and may continue to expand, into new business areas that we believe can either strengthen our competitive position or benefit our future growth. Some of these new business areas require substantial upfront investments before generating any revenues. If we fail to successfully manage the progress of our new growth initiatives, or if changing market conditions work against our proposed business plans, or if we fail to compete effectively with other market players, we may not be able to attract new customers and generate revenues and profits as anticipated, which may materially and adversely affect our business expansion.

If we are unable to adapt to evolving technologies and customer demands in a timely and cost-effective manner, our ability to sustain and grow our business may suffer.

To be successful, we must improve the performance, features and reliability of our services and adapt our business strategies to the rapidly changing market, which may cause us to incur substantial costs. We may not be able to adapt on a timely basis to changing technologies, if at all. Our ability to sustain and grow our business would suffer if we fail to respond to these changes in a timely and cost-effective manner. New technologies or industry standards have the potential to replace or provide lower cost alternatives to our data center services. The adoption of such new technologies or industry standards could render some or all of our services obsolete or unmarketable. We cannot guarantee that we will be able to identify the emergence of all of these new service alternatives successfully, modify our services accordingly, or develop and bring new products and services to market in a timely and cost-effective manner to address these changes. If and when we do identify the emergence of new service alternatives and introduce new products and services, those new products and services may need to be made available at lower price points than our then-current services. Failure to provide services to compete with new technologies or the obsolescence of our services could lead us to lose current and potential customers or could cause us to incur substantial costs, which would harm our results of operations and financial condition. Our introduction of new alternative products and services that have lower price points than current offerings may result in our existing customers switching to the lower cost products, which could reduce our revenues and have a material adverse effect of our results of operations.

If we fail to maintain a strong brand name, we may lose our existing customers and have difficulties attracting new customers, which may have an adverse effect on our business and results of operation.

We have built a strong brand in Chinese, “世纪互联”, among our customers. As our business grows or changes, we plan to continue to focus our efforts to establish a wider recognition of our brand to attract potential customers, and we may also introduce additional brands in relation to our business. We cannot assure you that we will effectively allocate our resources for these activities or succeed in maintaining and broadening our brand recognition among customers. Our major brand names and logos are registered trademarks in China. However, preventing trademark and trade name infringement or misuse could be difficult, costly and time-consuming, particularly in China. There had been incidents in the past where third parties used our brand without our authorization and we had to resort to litigation to protect our intellectual property rights. See “Item 8.A—Legal Proceedings” for our disputes with Shanghai 21Vianet Information Systems Co., Ltd. We may continue to experience similar disputes in the future or otherwise fail to fully protect our brand name, which may have an adverse effect on our business and financial results.

Any negative publicity and allegations against us may adversely affect our brand, public image and reputation, which may harm our ability to attract and retain users and business partners and result in material adverse impact on our business, results of operations and prospects.

Negative publicity and allegations about us, our products and services, our financial results or our market position in general, including by short sellers or investment research firms, regardless of their veracity, may adversely damage our brand, public image and reputation, harm our ability to attract and retain users and result in material adverse impact on our share price, business and results of operations. For example, in September 2014, Trinity Research Group, or Trinity, a short seller that was allegedly formed in 2014, issued reports alleging that we operated through a Ponzi scheme and reported fraudulent financials and operating metrics. The trading price of our ADSs declined and two shareholder class action lawsuits were filed against us and some of our directors and senior executive officers. See “Item 8.A—Legal Proceedings.” Although through two separate and comprehensive rebuttal reports, we rejected all the allegations set out in Trinity’s reports, and such class action lawsuits were settled in 2018, our share price fluctuated after such negative publicity. We may be involved in similar class action lawsuits in the future. Any negative publicity could adversely damage our brand, public image and reputation, which may have an adverse impact on our business and results of operations.

Rapid urbanization and changes in zoning and urban planning in China may cause our leased properties to be demolished, removed or otherwise affected.

China is undergoing a rapid urbanization process, and zoning requirements and other governmental mandates with respect to urban planning of a particular area may change from time to time. When there is a change in zoning requirements or other governmental mandates with respect to the areas where our data centers are located, the affected data centers may need to be demolished and removed. As a result, we may have to relocate our data centers to other locations. We have not experienced such demolition and relocation in the past, but we cannot assure you that we will not experience demolitions or interruptions of our data center operations due to zoning or other local regulations. Any such demolition and relocation could cause us to lose primary locations for our data centers and we may not be able to achieve comparable operation results following the relocations. While we may be reimbursed for such demolition and relocation, we cannot assure you that the reimbursement, as determined by the relevant government authorities, will be sufficient to cover our direct and indirect losses. Accordingly, our business, financial condition and results of operations may be materially and adversely affected.

Our leases for data centers could be terminated early, we may not be able to renew our existing leases on commercially reasonable terms, and our rent could increase substantially in the future, which could materially and adversely affect our operations.

As of December 31, 2020, we operated 32 self-built data centers in China and most of our self-built data centers are located on leased properties. We lease buildings with suitable power supplies and safe structures meeting our data center requirements and convert them into data centers by installing power generators, air conditioning systems, cables, cabinets and other equipment. We also build our own data centers from the ground up after obtaining suitable land. We also purchase data centers in use or under construction from third parties. We generally refer to these three types of data centers as “self-built” data centers. Our leases generally have terms ranging from two to 20 years with renewal options. We plan to renew our existing leases upon expiry. However, we may not be able to renew these leases on commercially reasonable terms, if at all. We may experience an increase in our rental costs for our leased data centers. In addition, although the lessors of our self-built data centers generally do not have the right of early termination and we have not experienced any early termination, leases could be terminated early if we are in material breach of the lease agreements or the leased premises become unavailable due to reasons beyond the lessors’ control. If our leases for data centers were terminated early, we may have to relocate our data center equipment and the servers and equipment of our customers to a new building and incur significant costs related to relocation. Any relocation could also affect our ability to provide services and harm our reputation. As a result, our business and results of operations could be materially and adversely affected.

We may be subject to legal proceedings or arbitration claims in the ordinary course of our business, and the court rulings or arbitration awards may not be favorable to us.

We have been involved, and may continue to be involved, in legal proceedings or arbitration claims in the ordinary course of our business, including those in relation to contract disputes between us and our customers, suppliers or other business partners as well as labor disputes with our employees. Such proceedings or claims, regardless of their outcome, could harm our reputation, divert our management’s attention and cause us to incur a substantial amount of legal expenses. If the outcomes of these legal proceedings or arbitration claims are unfavorable to us, we may incur significant legal liabilities and our reputation, financial condition and results of operations could be materially and adversely affected.

We were named as a defendant in a putative shareholder class action lawsuit in the past, if we are involved in similar class action lawsuits, such proceedings could have a material adverse impact on our business, financial condition, results of operation, cash flows and reputation.

In the past, we have been named as defendant in a putative shareholder class action lawsuit described in “Item 8.A—Legal Proceedings,” which has been settled, but we may be involved in similar class action lawsuits in the future. Any such class action lawsuit, whether or not successful, may utilize a significant portion of our cash resources, divert management’s attention from the day-to-day operations of our company, harm our reputation and restrict our ability to raise capital in the future, all of which could harm our business. We also may be subject to claims for indemnification related to these matters, and we cannot predict the impact that indemnification claims may have on our business or financial results.

Our business depends substantially on the continuing efforts of our executives, and our business may be severely disrupted if we lose their services.

Our future success heavily depends upon the continued services of our executives and other key employees. In particular, we rely on the expertise and experience of Sheng Chen, our co-founder and executive chairman of the board of directors. We rely on their industry expertise, their experience in our business operations and sales and marketing, as well as their relationships with our employees, major shareholders, customers and government authorities. If one or more of our senior executives were unable or unwilling to continue in their present positions, we might not be able to replace them easily or at all. If any of our senior executives joins a competitor or forms a competing company, we may lose customers, suppliers, key professionals and staff members. Each of our executive officers has entered into an employment agreement with us, which contains non-competition provisions. However, if any dispute arises between our executive officers and us, we cannot assure you the extent to which any of these agreements could be enforced in China, where these executive officers reside, in light of the uncertainties with China's legal system. See "— Risks Related to Doing Business in China — Uncertainties with respect to the PRC legal system could limit legal protections available to you and us."

If we are unable to recruit or retain qualified personnel, our business could be harmed.

We must continue to identify, hire, train, and retain IT professionals, technical engineers, operations employees, and sales and management personnel who maintain relationships with our customers and who can provide the technical, strategic, and marketing skills required for our company to grow. There is a shortage of qualified personnel in these fields, and we compete with other companies for the limited pool of these personnel. Any failure to recruit and retain necessary technical, managerial, sales, and marketing personnel, including but not limited to members of our executive team, could harm our business and our ability to grow.

If we fail to protect our intellectual property rights in general, our business may suffer.

We consider our copyrights, trademarks, trade names and internet domain names invaluable to our ability to continue to develop and enhance our brand recognition. Historically, the PRC has afforded less protection to intellectual property rights than the United States. We utilize proprietary know-how and trade secrets and employ various methods to protect such intellectual property. Unauthorized use of our copyrights, trademarks, trade names and domain names may damage our reputation and brand. Preventing copyright, trademark and trade name infringement or misuse could be difficult, costly and time-consuming, particularly in China. The measures we take to protect our copyrights, trademarks and other intellectual property rights are currently based upon a combination of trademark and copyright laws in China and may not be adequate to prevent unauthorized uses. Furthermore, application of laws governing intellectual property rights in China is uncertain and evolving, and could involve substantial risks to us. If we are unable to adequately protect our trademarks, copyrights and other intellectual property rights in the future, we may lose these rights, our brand name may be harmed, and our business may suffer materially. Furthermore, our management's attention may be diverted by violations of our intellectual property rights, and we may be required to enter into costly litigation to protect our proprietary rights against any infringement or violation.

We may face intellectual property infringement claims that could be time-consuming and costly to defend. If we fail to defend ourselves against such claims, we may lose significant intellectual property rights and may be unable to continue providing our existing services.

Our technologies and business methods, including those relating to data center services, may be subject to third-party claims or rights that limit or prevent their use. Companies, organizations or individuals, including our competitors, may hold or obtain patents or other proprietary rights that would prevent, limit or interfere with our ability to make, use or sell our services or develop new services, which could make it more difficult for us to operate our business. Intellectual property registrations or applications by others relating to the type of services that we provide may give rise to potential infringement claims against us. In addition, to the extent that we gain greater visibility and market exposure as a public company, we are likely to face a higher risk of being subject to intellectual property infringement claims from third parties. We expect that infringement claims may further increase as the number of products, services and competitors in our market increases. Further, continued success in this market may provide an impetus to those who might use intellectual property litigation as a tool against us.

It is critical that we use and develop our technology and services without infringing the intellectual property rights of third parties, including but not limited to patents, copyrights, trade secrets and trademarks. Intellectual property litigation is expensive and time-consuming and could divert management's attention from our business. A successful infringement claim against us, whether with or without merit, could, among other things, require us to pay substantial damages, develop non-infringing technology or enter into royalty or license agreements that may not be available on acceptable terms, if at all, and cease making, licensing or using products that have infringed a third party's intellectual property rights. Protracted litigation could also result in existing or potential customers deferring or limiting their purchase or use of our products until resolution of such litigation, or could require us to indemnify our customers against infringement claims in certain instances. Any intellectual property litigation could have a material adverse effect on our business, financial condition and results of operations or financial condition.

If we fail to defend ourselves against any intellectual property infringement claim, we may lose significant intellectual property rights and may be unable to continue providing our existing services, which could have a material adverse effect on our results of operations and business prospects.

If our customers' proprietary intellectual property or confidential information is misappropriated or disclosed by us or our employees in violation of applicable laws and contractual agreements, we could be exposed to protracted and costly legal proceedings and lose clients.

We and our employees are in some cases provided with access to the proprietary intellectual property and confidential information of our customers, including technology, software products, business policies and plans, trade secrets and personal data. Many of our customer contracts require that we do not engage in the unauthorized use or disclosure of such intellectual property or information and that we will be required to indemnify our customers for any loss they may suffer as a result. We use security technologies and other methods to prevent employees from making unauthorized copies, or engaging in unauthorized use or unauthorized disclosure, of such intellectual property and confidential information. We also require our employees to enter into non-disclosure arrangements to limit access to and distribution of our customers' intellectual property and other confidential information as well as our own. However, the steps taken by us in this regard may not be adequate to safeguard our customers' intellectual property and confidential information. Moreover, most of our customer contracts do not include any limitation on our liability with respect to breaches of our obligation to keep the intellectual property or confidential information we receive from them confidential. In addition, we may not always be aware of intellectual property registrations or applications relating to source codes, software products or other intellectual property belonging to our customers. As a result, if our customers' proprietary rights are misappropriated by us or our employees, our customers may consider us liable for such acts and seek damages and compensation from us.

The benefits from our partnership with Warburg Pincus may take longer than expected to realize, if at all.

In March 2017, we signed an investment agreement with Warburg Pincus to establish a multi-stage joint venture and build a digital real estate platform in China. The cooperation was expected to allow us to reduce capital expenditures as Warburg Pincus will take primary responsibilities to build new wholesale data centers. In July 2019, we reached a supplemental agreement with Warburg Pincus to restructure the partnership, pursuant to which the assets and projects of one joint venture were distributed, the shareholding structure of other joint ventures were adjusted and a new joint venture was established for sourcing and developing new projects. For more details, see "See Item 4.B —Business Overview — Our Infrastructure — Our Data Centers." There is no guarantee that the joint venture will turn out to be successful, and the benefits from our partnership with Warburg Pincus may take longer than expected to realize, if at all.

A severe or prolonged downturn in the global or Chinese economy could materially and adversely affect our business and our results of operation.

The global macroeconomic environment is facing numerous challenges. The growth rate of the Chinese economy has gradually slowed since 2010 and the trend may continue. There is considerable uncertainty over the long-term effects of the expansionary monetary and fiscal policies adopted by the central banks and financial authorities of some of the world's leading economies, including the United States and China. Unrest, terrorist threats and the potential for war in the Middle East and elsewhere may increase market volatility across the globe. The global economy has been also facing challenges arising from uncertainties over the impact of the United Kingdom's exit from the European Union, the ongoing trade disputes and tariffs between the PRC and the United States, as well as the outbreak and global spread of novel coronavirus, or COVID-19, and the related economic policies taken by various governments in the world. There have also been concerns about the relationship between China and other countries, including the surrounding Asian countries, which may potentially have economic effects. In particular, there is significant uncertainty about the future relationship between the United States and China with respect to trade policies, treaties, government regulations and tariffs. Economic conditions in China are sensitive to global economic conditions, as well as changes in domestic economic and political policies and the expected or perceived overall economic growth rate in China.

Any severe or prolonged slowdown in the global or Chinese economy could significantly impact and reduce domestic commercial activities in China, which may lead to decreased demand for our colocation or managed services and have an adverse impact on our business, financial condition and results of operations. A decrease in economic activities, whether actual or perceived, a further decrease in economic growth rates or an otherwise uncertain economic outlook in China could have a material adverse effect on our customers' expenditures. In addition, if market conditions were to worsen, some of our customers may have difficulty paying us and we may have to increase our allowance for doubtful debt. Finally, we could also face intense pricing pressure under economic conditions if our competitors lower prices and attempt to lure away our customers with lower cost solutions. If any of these risks materializes, our business, financial condition and results of operations would be materially and adversely affected.

Our business could be adversely affected by trade tariffs or other trade barriers.

There have recently been heightened tensions in international economic relations, particularly between the U.S. and China. Since July 2018, the U.S. government has imposed, and has proposed to impose additional, new or higher tariffs on certain products imported from China to penalize China for what it characterizes as unfair trade practices. China has responded by imposing, and proposing to impose additional, new or higher tariffs on certain products imported from the U.S. In May 2019, the U.S. government announced to increase tariffs to 25%, and China responded by imposing tariffs on certain U.S. goods on a smaller scale, and proposed to impose additional tariffs on U.S. goods. On June 1, 2019, the tariffs announced in May 2019 came into effect on US\$60 billion worth of U.S. goods exported to China. On September 1, 2019, as announced, the U.S. began implementing tariffs on more than US\$125 billion worth of Chinese imports. On September 2, 2019, China lodged a complaint before the World Trade Organization against the U.S. over import tariffs. In December 2019, the U.S. and China reached a limited trade agreement to roll back existing tariff rates on certain Chinese goods and cancel new levies set to take effect on December 15, 2019 in exchange for Chinese purchases of U.S. farm goods and obtain other concession. However, there can be no assurances that the U.S. or China will not increase tariffs or impose additional tariffs in the future. Although we do not currently export any products to the U.S., it is not yet clear what impact these tariffs may have on our business. Although we only provide services, tariffs could potentially impact the businesses of our suppliers, customers and business partners which may in turn affect our business and results of operations. In addition, these developments could have a material adverse effect on global economic conditions and the stability of global financial markets. Any of these factors could have a material adverse effect on our business, financial condition and results of operations.

We could be adversely affected by political tensions between the United States and China.

Political tensions between the United States and China have escalated due to, among other things, trade disputes, the COVID-19 outbreak, the PRC National People's Congress' passage of the Hong Kong National Security Law, sanctions imposed by the U.S. Department of Treasury on certain officials of the Hong Kong Special Administrative Region and the central government of the PRC, as well as the executive orders issued by U.S. President Donald J. Trump in August 2020 that prohibit certain transactions with ByteDance Ltd., Tencent Holdings Ltd. and the respective subsidiaries of such companies. In August 2020, the U.S. government further tightened export controls on Huawei, including by confirming that the expired Temporary General License authorizing certain dealings with Huawei will not be renewed and restricting non-U.S. chipsets based on or using U.S. technology from being exported to Huawei. On September 18, 2020, the U.S. Department of Commerce announced prohibitions on certain services and transactions relating to mobile applications WeChat and TikTok. In addition, in November 2020, U.S. President Donald J. Trump issued further executive order that prohibits U.S. persons from transacting publicly traded securities of certain "Communist Chinese military companies" named in such executive order, the U.S. Department of Defense designated Xiaomi Corporations, which is one of our largest customers, as one of the "Chinese Communist Military Company" on January 15, 2021. Relations between the two countries may also deteriorate due to the imposition of U.S. sanctions on four Chinese officials from China's central government and the Hong Kong Special Administrative Region in November 2020, as well as the imposition of Chinese sanctions on four individuals from the U.S. in the same month. On January 5, 2021, U.S. President Donald J. Trump signed an executive order prohibiting transactions with Alipay, QQ Wallet, Tencent QQ, WeChat Pay, and other popular Chinese software applications in the U.S. China has implemented, and may further implement, measures in response to the Chinese trade policies, treaties, tariffs and sanctions and restrictions against Chinese companies initiated by the U.S. government. On September 19, 2020, the Ministry of Commerce of the PRC issued the Provisions on the Unreliable Entity List, pursuant to which foreign entities or individuals may be subject to, among others, restriction or prohibition from engaging in China-related import or export activities and investment in China if such entities or individuals are designated to be an "unreliable entity list" by the PRC government. The Ministry of Commerce of the PRC further published the Rules on Counteracting Unjustified Extra-territorial Application of Foreign Legislation and Other Measures on January 9, 2021, which applies to cases where the extraterritorial application of foreign laws and measures violates international law and basic norms of international relations, and improperly prohibits or restricts PRC citizens, legal persons or other organizations from conducting normal economic, trade and related activities with third countries (regions) and their citizens, legal persons or other organizations.

Rising political tensions could reduce levels of trade, investments, technological exchanges and other economic activities between the two major economies, which would have a material adverse effect on global economic conditions and the stability of global financial markets. Any of these factors could have a material adverse effect on our business, prospects, financial condition and results of operations. Furthermore, there have been recent media reports on deliberations within the U.S. government regarding potentially limiting or restricting China-based companies from accessing U.S. capital markets. If any such deliberations were to materialize, the resulting legislation may have a material and adverse impact on the stock performance of China-based issuers listed in the United States. It is unclear if this proposed legislation would be enacted.

Based on our current assessment of the situation, we do not believe that our business operations or financial performance will be materially and adversely affected by the above developments, though Huawei, Bytedance Ltd. and two entities associated with Xiaomi Corporations are our current customers. Huawei and Bytedance Ltd. together contributed to less than 5% of our net revenues for 2019 and 2020. However, we cannot assure you that, if the political tension between the United States and China intensifies and further regulations affecting our business or customers are passed, our business will not be materially and adversely affected.

Our results of operations have fluctuated and may continue to fluctuate, which could make our future results difficult to predict. This may also result in significant volatility in, and otherwise adversely affect, the market for our ADSs.

Our results of operations have fluctuated and may continue to fluctuate due to a variety of factors, which are outside of our control. As a result, comparing our results of operations on a period-to-period basis may not be meaningful. You should not rely on our results of operations for any prior periods as an indication of our future operating performance. Fluctuations in our revenue can lead to even greater fluctuations in our results of operations. Our budgeted expense levels depend in part on our expectations of long-term future revenue. Given relatively fixed operating costs related to our personnel and facilities, any substantial adjustment to our expenses to account for lower than expected levels of revenue will be difficult and time consuming. Consequently, if our revenues do not meet projected levels, our operating performance will be negatively affected. Fluctuations in our results of operations could result in significant volatility in, and otherwise adversely affect, the market for our ADSs.

If we fail to maintain an effective system of internal control over financial reporting, we may be unable to accurately report our financial results or prevent fraud, and investor confidence in our company and the market price of our ADSs may be adversely affected.

The SEC, as required by Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, adopted rules requiring most public companies to include a management report on such company's internal control over financial reporting in its annual report, which contains management's assessment of the effectiveness of the company's internal control over financial reporting. In addition, when a company meets the SEC's criteria, an independent registered public accounting firm must report on the effectiveness of the company's internal control over financial reporting.

Our management and independent registered public accounting firm have concluded that our internal control over financial reporting as of December 31, 2020 was effective. However, we cannot assure you that in the future our management or our independent registered public accounting firm will not identify material weaknesses during the Section 404 of the Sarbanes-Oxley Act audit process or for other reasons. In addition, because of the inherent limitations of internal control over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may not be prevented or detected on a timely basis. As a result, if we fail to maintain effective internal control over financial reporting or should we be unable to prevent or detect material misstatements due to error or fraud on a timely basis, investors could lose confidence in the reliability of our financial statements, which in turn could harm our business, results of operations and negatively impact the market price of our ADSs, and harm our reputation. Furthermore, we have incurred and expect to continue to incur considerable costs and to use significant management time and other resources in an effort to comply with Section 404 and other requirements of the Sarbanes-Oxley Act.

Compliance with rules and regulations applicable to companies publicly listed in the United States is costly and complex and any failure by us to comply with these requirements on an ongoing basis could negatively affect investor confidence in us and cause the market price of our ADSs to decrease.

In addition to Section 404, the Sarbanes-Oxley Act also mandates, among other things, that companies adopt corporate governance measures, imposes comprehensive reporting and disclosure requirements, sets strict independence and financial expertise standards for audit committee members, and imposes civil and criminal penalties for companies, their chief executive officers, chief financial officers and directors for securities law violations. For example, in response to the Sarbanes-Oxley Act, Nasdaq has adopted additional comprehensive rules and regulations relating to corporate governance. These laws, rules and regulations have increased the scope, complexity and cost of our corporate governance and reporting and disclosure practices. Our current and future compliance efforts will continue to require significant management attention. In addition, our board members, chief executive officer and chief financial officer could face an increased risk of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified board members and executive officers to fill critical positions within our company. Any failure by us to comply with these requirements on an ongoing basis could negatively affect investor confidence in us, cause the market price of our ADSs to decrease or even result in the delisting of our ADSs from Nasdaq.

We are subject to China's anti-corruption laws and the U.S. Foreign Corrupt Practices Act. Our failure to comply with these laws could result in penalties, which could harm our reputation and have an adverse effect on our business, financial condition and results of operations.

We are subject to the U.S. Foreign Corrupt Practices Act, or the FCPA, which generally prohibits companies and anyone acting on their behalf from offering or making improper payments or providing benefits to foreign officials for the purpose of obtaining or keeping business, along with various other anti-corruption laws, including China's anti-corruption laws. Our existing policies prohibit any such conduct and we are in the process of implementing additional policies and procedures designed to ensure that we, our employees and intermediaries comply with the FCPA and other anti-corruption laws to which we are subject. There is, however, no assurance that such policies or procedures will work effectively all the time or protect us against liability under the FCPA or other anti-corruption laws for actions taken by our employees and intermediaries with respect to our business or any businesses that we may acquire. We operate in the data center services industry in China and generally purchase our hosting facilities and telecommunications resources from state or government-owned enterprises and sell our services domestically to customers that include state or government-owned enterprises or government ministries, departments and agencies. This puts us in frequent contact with persons who may be considered "foreign officials" under the FCPA, resulting in an elevated risk of potential FCPA violations. If we are found to be not in compliance with the FCPA and other applicable anti-corruption laws governing the conduct of business with government entities or officials, we may be subject to criminal and civil penalties and other remedial measures, which could have an adverse impact on our business, financial condition and results of operations. Any investigation of any potential violations of the FCPA or other anti-corruption laws by U.S. or foreign authorities, including Chinese authorities, could adversely impact our reputation, cause us to lose customer sales and access to hosting facilities and telecommunications resources, and lead to other adverse impacts on our business, financial condition and results of operations.

We have granted, and may continue to grant, stock options and other forms of share-based incentive awards, which may result in significant share-based compensation expenses.

As of April 13, 2021, options to purchase 492,864 ordinary shares and 4,344,504 restricted stock units, or RSUs, have been granted under our 2010 share incentive plan, or the 2010 Plan, 2014 share incentive plan, or the 2014 Plan, and 2020 share incentive plan, or the 2020 Plan. For details about our share incentive plans, see "Item 6.B—Compensation of Directors and Executive Officers—Share Incentive Plans." For the years ended December 31, 2019 and 2020, we recorded RMB43.9 million and RMB136.8 million (US\$21.0 million), respectively, for share-based compensation expenses. We believe share-based incentive awards enhance our ability to attract and retain key personnel and employees, and we will continue to grant stock options, restricted stock units and other share-based awards to employees in the future.

We are required to account for share-based compensation in accordance with Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 718, Compensation — Stock Compensation, which generally requires that share-based awards granted to employees be measured and recognized, as an expense, based on the grant date fair value and recognized as compensation expenses over the requisite service period or performance period. For the years ended December 31, 2018, 2019 and 2020, we incurred share-based compensation expense of RMB59.5 million, RMB43.9 million and RMB136.8 million (US\$21.0 million). If our share-based compensation expenses continue to be significant, our results of operations would be materially and adversely affected. However, if we limit the size of grants under our share incentive plans to minimize share-based compensation expenses, we may not be able to attract or retain key personnel.

Our use of certain leased properties could be challenged by third parties or governmental authorities, which may cause interruptions to our business operations.

Some of the lessors of our leased properties have not provided us with their property ownership certificates or any other documentation proving their rights to lease those properties to us. If our lessors are not the owners of the properties and they have not obtained consents from the owners or their lessors or permits from the relevant governmental authorities, our leases could be invalidated. If this occurs, we may have to renegotiate the leases with the owners or other parties who have the right to lease the properties, and the terms of the new leases may be less favorable to us. If we were not able to find replacement premises for our operation due to any lease deficiencies, the daily operations of such premises may be negatively affected. In addition, a substantial portion of our leasehold interests in leased properties have not been registered with the relevant PRC governmental authorities as required by relevant PRC laws. The failure to register leasehold interests may expose us to potential fines.

Title defects with respect to or encumbrances on certain land and buildings or failure to obtain requisite approvals, licenses or permits in carrying out our property construction may cause interruptions to our business operations. As of the date of this annual report, we had not obtained property ownership certificates with respect to two buildings currently used by us for operating our data centers. We are in the process of applying for the registration of the land use right and property ownership certificates pursuant to the applicable contracts for assignment of state-owned construction land use right, but we are unable to estimate the time required to complete such registration and obtain such certificates.

We may not have adequate insurance coverage to protect us from potential losses.

Our operations are subject to hazards and risks normally associated with daily operations for our data centers. Currently, we maintain insurance policies for our equipment, but we do not maintain any business interruption insurance or third-party liability insurance. The insurance policies for our equipment may only be sufficient to cover a portion of the total value of all equipment in the event that losses occur. Insurance companies in China currently do not offer as extensive an array of insurance products as insurance companies do in more developed economies. The occurrence of any events not covered by our limited insurance coverage may result in interruption of our operations and subject us to significant losses or liabilities. In addition, any losses or liabilities that are not covered by our current insurance policies or are not insured at all may have a material adverse effect on our business, financial condition and results of operations.

We face risks related to natural disasters, health epidemics and other outbreaks, which could significantly disrupt our operations.

We are vulnerable to natural disasters and other calamities. Fire, floods, typhoons, earthquakes, power loss, telecommunications failures, break-ins, war, riots, terrorist attacks or similar events may give rise to server interruptions, breakdowns, system failures, technology platform failures or internet failures, which could cause the loss or corruption of data or malfunctions of software or hardware as well as adversely affect our ability to provide services to our customers. If a nature disaster were to occur in the future that affected at any location where we have major operations, our operations could be materially and adversely affected due to loss of personnel and damages to property. In addition, a natural disaster affecting a larger, more developed area could also cause an increase in our costs resulting from the efforts to resurvey the affected area. Even if we are not directly affected, such a disaster could affect the operations or financial condition of our customers and suppliers, which could harm our results of operations.

Our independent registered public accounting firm, like other independent registered public accounting firms operating in China, is not permitted to be subject to inspection by the Public Company Accounting Oversight Board and, as such, you are deprived of the benefits of such inspection.

Our independent registered public accounting firm that issues the audit report included in our annual report filed with the U.S. Securities and Exchange Commission, or the SEC, as auditors of companies that are traded publicly in the United States and a firm registered with the U.S. Public Company Accounting Oversight Board, or the PCAOB, is required by the laws of the United States to undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and professional standards. Because our auditors are located in the PRC, a jurisdiction where the PCAOB is currently unable to conduct inspections without the approval of the Chinese authorities, our auditors are not currently inspected by the PCAOB. On December 7, 2018, the SEC and the PCAOB issued a joint statement highlighting continued challenges faced by the U.S. regulators in their oversight of financial statement audits of U.S.-listed companies with significant operations in China. The joint statement reflects a heightened interest in this issue that U.S. regulators have focused on in recent years. However, it remains unclear whether the SEC and PCAOB will take any further actions to address the issue.

Inspections of other firms that the PCAOB has conducted outside China have identified deficiencies in those firms' audit procedures and quality control procedures, which may be addressed as part of the inspection process to improve future audit quality. This lack of PCAOB inspections in China prevents the PCAOB from regularly evaluating our auditor's audits and its quality control procedures. As a result, investors may be deprived of the benefits of PCAOB inspections.

The inability of the PCAOB to conduct inspections of auditors in China makes it more difficult to evaluate the effectiveness of our auditor's audit procedures or quality control procedures as compared to auditors outside of China that are subject to PCAOB inspections. Investors may lose confidence in our reported financial information and procedures and the quality of our financial statements. As part of our continued efforts to ensure accuracy of our financial reporting, our audit committee periodically communicates with our independent auditor to oversee and evaluate the audit procedures and status. However, we cannot assure you that the measures our audit committee has taken or will take in the future will be effective.

On June 4, 2020, the U.S. President issued a memorandum ordering the President's Working Group on Financial Markets, or the PWG, to submit a report to the President within 60 days of the memorandum that includes recommendations for actions that can be taken by the executive branch and by the SEC or PCAOB to further protect investors in Chinese companies listed in the United States in response to the PCAOB's lack of access to the work of such companies' auditors. In August 2020, the PWG, released the Report on Protecting United States Investors from Significant Risks from Chinese Companies, which outlined the PWG's five recommendations to the SEC. In particular, the PWG recommends that the SEC work to enhance U.S. exchanges' listing standards to address the concern over the PCAOB's lack of access to audit work papers. This would require, as a condition to initial and continued exchange listing, PCAOB access to work papers of the principal audit firm for the audit of the listed company. The PWG proposed a concept under which companies that are unable to satisfy this standard as a result of governmental restrictions on access to audit work papers and practices in non-cooperating jurisdictions, or NCJs, may satisfy this standard by providing a co-audit from an audit firm with comparable resources and experience where the PCAOB determines it has sufficient access to audit work papers and practices to conduct an appropriate inspection of the co-audit firm. However, there is currently no legal framework where such a co-audit could be conducted in China. To reduce market disruption, the new listing standards could provide for a transition period until January 1, 2022 for currently listed companies. The report also recommends to require enhanced and prominent issuer disclosures of the risks of investing in NCJs such as China. After this transition period, if currently listed companies were unable to meet the enhanced listing standards, then they would become subject to securities exchange rules and processes that could lead to possible de-listing if not cured. The measures in the PWG report are presumably subject to the standard SEC rulemaking process before becoming effective. On August 10, 2020, the SEC announced that SEC Chairman Jay Clayton had directed the SEC staff to prepare proposals in response to the PWG report, and that the SEC was soliciting public comments and information with respect to these proposals.

As part of a continued regulatory focus in the United States on access to audit and other information currently protected by national law, in particular China's, U.S. President Donald J. Trump signed into law on December 18, 2020 the Holding Foreign Companies Accountable Act, which will require the SEC to propose rules within 90 days after its enactment to prohibit securities of any registrant from being listed on any of the U.S. securities exchanges or traded "over the counter" if the auditor of the registrant's financial statements is not subject to PCAOB inspection for three consecutive years after the law becomes effective. We could be delisted if we are unable to cure the situation to meet the PCAOB inspection requirement in time. A delisting of our ADSs would result in additional adverse effects on us, requiring repayment or redemption of, and causing other adverse consequences under, our outstanding shareholder instruments and debt securities.

Proceedings instituted recently by the SEC against five PRC-based accounting firms, including our independent registered public accounting firm, could result in our financial statements being determined to not be in compliance with the requirements of the Securities Exchange Act of 1934.

In late 2012, the SEC commenced administrative proceedings under Rule 102(e) of its Rules of Practice and also under the Sarbanes-Oxley Act of 2002 against the Chinese affiliates of the "big four" accounting firms, (including our auditors) and also against Dahua (the former BDO affiliate in China). The Rule 102(e) proceedings initiated by the SEC relate to these firms' inability to produce documents, including audit work papers, in response to the request of the SEC pursuant to Section 106 of the Sarbanes-Oxley Act of 2002, as the auditors located in the PRC are not in a position lawfully to produce documents directly to the SEC because of restrictions under PRC law and specific directives issued by the China Securities Regulatory Commission. The issues raised by the proceedings are not specific to our auditors or to us, but affect equally all audit firms based in China and all China-based businesses with securities listed in the United States.

In January 2014, the administrative judge reached an initial decision that the “big four” accounting firms should be barred from practicing before the Commission for six months. The “big four” accounting firms appealed the initial administrative law decision to the SEC in February 2014. In February 2015, each of the “big four” accounting firms agreed to a censure and to pay a fine to the SEC to settle the dispute and avoid suspension of their ability to practice before the SEC. The settlement requires the firms to follow detailed procedures to seek to provide the SEC with access to Chinese firms’ audit documents via China Securities Regulatory Commission. If the firms do not follow these procedures, the SEC could impose penalties such as suspensions, or it could restart the administrative proceedings.

In the event that the SEC restarts the administrative proceedings, depending upon the final outcome, listed companies in the United States with major PRC operations may find it difficult or impossible to retain auditors in respect of their operations in the PRC, which could result in financial statements being determined not to be in compliance with the requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, including possible delisting. Moreover, any negative news about the proceedings against these audit firms may cause investor uncertainty regarding China-based, United States-listed companies and the market price of our ADSs may be adversely affected.

If our independent registered public accounting firm were denied, even temporarily, the ability to practice before the SEC and we were unable to timely find another registered public accounting firm to audit and issue an opinion on our financial statements, our financial statements could be determined not to be in compliance with the requirements of the Exchange Act. Such a determination could ultimately lead to delisting of our ordinary shares from the Nasdaq Global Select Market or deregistration from the SEC, or both, which would substantially reduce or effectively terminate the trading of our ADSs in the United States.

Risks Related to Our Corporate Structure

If the PRC government finds that the arrangements that establish the structure for operating our business do not comply with PRC government restrictions on foreign investment in the telecommunications business or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.

The PRC government regulates telecommunications-related businesses through strict business licensing requirements and other government regulations. These laws and regulations also include limitations on foreign ownership of PRC companies that engage in telecommunications-related businesses. Specifically, foreign investors are not allowed to own more than a 50% equity interest in any PRC company engaging in value-added telecommunications businesses (except for e-commerce, domestic multi-party communications services, information storage and re-transmission services, and call center services), and the major foreign investor of a telecommunication business in China must also have experience and a sound track record in providing value-added telecommunications services overseas. See “Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Foreign Investment in Telecommunications Enterprises.”

Because we are a Cayman Islands company, we are classified as a foreign enterprise under PRC laws and regulations, and our wholly-owned PRC subsidiaries, 21Vianet Data Center Co., Ltd., or 21Vianet China, Joytone Infotech Co., Ltd., or SZ Zhuoaiyi, Abitcool (China) Broadband Inc., or aBitCool DG, and Shanghai Edge Connect Technology Co., Ltd., or SH Edge Connect, are foreign-invested enterprises, or FIEs. To comply with PRC laws and regulations, we conduct our business in China through contractual arrangements with our variable interest entities and their shareholders. These contractual arrangements provide us with effective control over our variable interest entities, and enable us to receive substantially all of the economic benefits of our consolidated affiliated entities in consideration for the services provided by our wholly-owned PRC subsidiaries, and have an exclusive option to purchase all of the equity interest in our variable interest entities when permissible under PRC laws. For a description of these contractual arrangements, see “Item 7.B—Related Party Transactions—Contractual Arrangements with Our Variable Interest Entities and Their Shareholders.”

The MIIT issued a circular in July 2006 requiring foreign investors to set up an FIE and obtain a value-added telecommunications business operating license, or the VAT License, in order to conduct any value-added telecommunications business in China. Pursuant to this circular, a domestic license holder is prohibited from leasing, transferring or selling the license to foreign investors in any form, and from providing any assistance, including resources, sites or facilities, to foreign investors that conduct value-added telecommunications business in China illegally. Furthermore, the relevant trademarks and domain names that are used in the value-added telecommunications business must be owned by the local license holder or its shareholder. The circular further requires each license holder to have the necessary facilities for its approved business operations and to maintain such facilities in the regions covered by its license. In addition, all value-added telecommunications service providers are required to maintain network and information security in accordance with the standards set forth under relevant PRC regulations. Companies in violation of the circular will be ordered by relevant authorities to take remedial actions within a specific period and licenses may be withdrawn if such remedial actions cannot be completed within the specific period. As of the date of this annual report, we have not been notified by relevant authorities regarding any violation of the circular when conducting our value-added telecommunications business.

We believe that we comply with the current applicable PRC laws and regulations. Han Kun Law Offices, our PRC legal counsel, based on its understanding of the relevant laws and regulations, is of the opinion that each of the contracts composing the contractual arrangements among us, our wholly-owned PRC subsidiaries, our variable interest entities and their shareholders is valid, legally binding and enforceable upon each party of such agreements under PRC laws and regulations, and will not result in any violation of PRC laws or regulations currently in effect. However, as there are substantial uncertainties regarding the interpretation and application of PRC laws and regulations, including the Regulations on Mergers and Acquisitions of Domestic Enterprises by Foreign Investors, or the M&A Rules, the telecommunications circular described above and the Telecommunications Regulations of the People's Republic of China, or the Telecom Regulations, and the relevant regulatory measures concerning the telecommunications industry, therefore, we cannot assure you that the PRC government that regulate providers of data center service and other telecommunication services and other participants in the telecommunications industry would agree that our corporate structure or any of the above contractual arrangements comply with PRC licensing, registration or other regulatory requirements, with existing policies or with requirements or policies that may be adopted in the future. PRC laws and regulations governing the validity of these contractual arrangements are uncertain and the relevant government authorities have broad discretion in interpreting these laws and regulations.

If our corporate and contractual structure is deemed by the MIIT, or other regulators having competent authority, to be illegal, either in whole or in part, we may lose control of our consolidated affiliated entities and have to modify such structure to comply with regulatory requirements. However, we cannot assure you that we can achieve this without material disruption to our business. Further, if our corporate and contractual structure is found to be in violation of any existing or future PRC laws or regulations, the relevant regulatory authorities would have broad discretion in dealing with such violations, including:

- revoking our business and operating licenses;
- levying fines on us;
- confiscating any of our income that they deem to be obtained through illegal operations;
- shutting down a portion or all of our networks and servers;
- discontinuing or restricting our operations in China;
- imposing conditions or requirements with which we may not be able to comply;
- requiring us to restructure our corporate and contractual structure;
- restricting or prohibiting our use of the proceeds from overseas offering to finance our PRC affiliated entities' business and operations; and
- taking other regulatory or enforcement actions that could be harmful to our business.

Furthermore, in connection with litigation, arbitration or other judicial or dispute resolution proceedings, assets under the name of any of record holder of equity interest in our variable interest entities, including such equity interest, may be put under court custody. As a consequence, we cannot be certain that the equity interest will be disposed pursuant to the contractual arrangement or ownership by the record holder of the equity interest. In addition, new PRC laws, rules and regulations may be introduced to impose additional requirements that may be applicable to our corporate structure and contractual arrangements. Occurrence of any of these events could materially and adversely affect our business, financial condition and results of operations. In addition, if the imposition of any of these penalties or requirement to restructure our corporate structure causes us to lose the rights to direct the activities of our variable interest entities or our right to receive their economic benefits, we would no longer be able to consolidate such variable interest entities. However, we do not believe that such actions would result in the liquidation or dissolution of our company, our wholly-owned subsidiaries in China or our variable interest entities or their subsidiaries. For the years ended December 31, 2018, 2019 and 2020, our consolidated affiliated entities contributed most of our total net revenues.

Our contractual arrangements with our variable interest entities may result in adverse tax consequences to us.

We could face material and adverse tax consequences if the PRC tax authorities determine that our contractual arrangements with our variable interest entities were not made on an arm's length basis and may adjust our income and expenses for PRC tax purposes by requiring a transfer pricing adjustment. A transfer pricing adjustment could adversely affect us by (i) resulting in a reduction of expense deductions recorded by our VIEs for PRC tax purposes, which could in turn increase their tax liabilities without reducing their respective tax expenses, which could further result in late payment fees and other penalties to our variable interest entities for underpaid taxes; or (ii) limiting the ability of our variable interest entities to obtain or maintain preferential tax treatments and other financial incentives.

We rely on contractual arrangements with our variable interest entities and their shareholders for our China operations, which may not be as effective as direct ownership in providing operational control.

We rely on contractual arrangements with our variable interest entities and their shareholders to operate our business in China. For a description of these contractual arrangements, see "Item 7.B—Related Party Transactions—Contractual Arrangements with Our Variable Interest Entities and Their Shareholders." Most of our revenues are attributed to our consolidated affiliated entities. These contractual arrangements may not be as effective as direct ownership in providing us with control over our variable interest entities. If our variable interest entities or their shareholders fail to perform their respective obligations under these contractual arrangements, our recourse to the assets held by our consolidated affiliated entities is indirect and we may have to incur substantial costs and expend significant resources to enforce such arrangements in reliance on legal remedies under PRC law. These remedies may not always be effective, particularly in light of uncertainties in the PRC legal system.

All of these contractual arrangements are governed by PRC law and provide for the resolution of disputes through arbitration in the PRC. Accordingly, these contracts would be interpreted in accordance with PRC laws and any disputes would be resolved in accordance with PRC legal procedures. The legal environment in the PRC is not as developed as in other jurisdictions, such as the United States. As a result, uncertainties in the PRC legal system could limit our ability to enforce these contractual arrangements. In the event that we are unable to enforce these contractual arrangements, or if we suffer significant time delays or other obstacles in the process of enforcing these contractual arrangements, it would be very difficult to exert effective control over our variable interest entities, and our ability to conduct our business and our financial conditions and results of operation may be materially and adversely affected. See "—Risks Related to Doing Business in China—Uncertainties with respect to the PRC legal system could limit legal protections available to you and us."

The shareholders of our variable interest entities may have potential conflicts of interest with us, which may materially and adversely affect our business and financial condition.

We conduct our operations in China through contractual arrangements among us, our wholly-owned PRC subsidiaries, our variable interest entities and their shareholders and we rely on the shareholders of our variable interest entities to abide by the obligations under such contractual arrangements. In particular, Beijing Yiyun Network Technology Co., Ltd., or 21Vianet Technology, is 70% owned by Mr. Sheng Chen, our executive chairman and 30% owned by Mr. Jun Zhang, our co-founder. Mr. Sheng Chen and Mr. Jun Zhang are also the ultimate shareholders of our company. The interests of Mr. Sheng Chen and Mr. Jun Zhang as the shareholders of 21Vianet Technology may differ from the interests of our company as a whole, as what is in the best interests of 21Vianet Technology may not be in the best interests of our company. We cannot assure that when conflicts of interest arise, any or all of these individuals will act in the best interests of our company or that conflicts of interest will be resolved in our favor. In addition, these individuals may breach or cause our variable interest entities and their subsidiaries to breach or refuse to renew the existing contractual arrangements with us.

Currently, we do not have arrangements to address potential conflicts of interest the shareholders of 21Vianet Technology may encounter, on one hand, and as a beneficial owner of our company, on the other hand; provided that we could, at all times, exercise our option under the optional share purchase agreement to cause them to transfer all of their equity ownership in 21Vianet Technology to a PRC entity or individual designated by us as permitted by the then applicable PRC laws. In addition, if such conflicts of interest arise, we could also, in the capacity of attorney-in-fact of the then existing shareholders of 21Vianet Technology as provided under the power of attorney, directly appoint new directors of 21Vianet Technology. We rely on the shareholders of our variable interest entities to comply with the laws of China, which protect contracts and provide that directors and executive officers owe a duty of loyalty to our company and require them to avoid conflicts of interest and not to take advantage of their positions for personal gains, and the laws of the Cayman Islands, which provide that directors have a duty of care and a duty of loyalty to act honestly in good faith with a view to our best interests. However, the legal frameworks of China and Cayman Islands do not provide guidance on resolving conflicts in the event of a conflict with another corporate governance regime. If we cannot resolve any conflicts of interest or disputes between us and the shareholders of our variable interest entities, we would have to rely on legal proceedings, which could result in disruption of our business and subject us to substantial uncertainty as to the outcome of any such legal proceedings.

If the chops of our PRC subsidiaries and our VIEs are not kept safely, are stolen or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised.

In China, a company chop or seal serves as the legal representation of the company towards third parties even when unaccompanied by a signature. Each legally registered company in China is required to maintain a company chop, which must be registered with the local Public Security Bureau. In addition to this mandatory company chop, companies may have several other chops which can be used for specific purposes. The chops of our PRC subsidiaries and VIEs are generally held securely by personnel designated or approved by us in accordance with our internal control procedures. To the extent those chops are not kept safely, are stolen or are used by unauthorized persons or for unauthorized purposes, the corporate governance of these entities could be severely and adversely compromised and those corporate entities may be bound to abide by the terms of any documents so chopped, even if they were chopped by an individual who lacked the requisite power and authority to do so. In addition, if the chops are misused by unauthorized persons, we could experience disruption to our normal business operations. We may have to take corporate or legal action, which could involve significant time and resources to resolve while distracting management from our operations.

Risks Related to Doing Business in China

Adverse changes in political and economic policies or political or social conditions of the PRC government could have a material adverse effect on the overall economic growth of China, which could reduce the demand for our services and adversely affect our competitive position.

Most of our operations are conducted in China and most of our sales are made in China. Accordingly, our business, financial condition, results of operations and prospects are affected significantly by economic, political and legal developments in China. The PRC economy differs from the economies of most developed countries in many respects, including the amount of government involvement, the level of development, the growth rate, the control of foreign exchange and allocation of resources. While the PRC economy has grown significantly over the past several decades, the growth has been uneven across different periods, regions and among various economic sectors of China. We cannot assure you that the PRC economy will continue to grow, or that if there is growth, such growth will be steady and uniform, or that if there is a slowdown, such a slowdown will not have a negative effect on our business.

The PRC government exercises significant control over China's economic growth through various measures, such as allocation of resources, controlling payment of foreign currency-denominated obligations, setting monetary policy and providing preferential treatment to particular industries or companies. Some of these measures benefit the overall PRC economy, but may also have a negative effect on us. For example, our financial condition and results of operations may be adversely affected by governmental control over capital investments or changes in tax regulations that are applicable to us.

It is unclear whether PRC economic policies will be effective in maintaining stable economic growth in the future. Any slowdown in China's economic growth could lead to reduced demand for our solutions, which could in turn materially and adversely affect our business, financial condition and results of operations. In addition, the increased global focus on social, ethical and environmental issues may lead to China's adoption of more stringent standards in these areas, which may adversely impact the operations of China-based companies including us.

Uncertainties with respect to the PRC legal system could limit legal protections available to you and us.

We conduct most of our business through our PRC subsidiaries and consolidated affiliated entities in China. Our operations in China are governed by PRC laws and regulations. Our PRC subsidiaries are FIEs and are subject to laws and regulations applicable to foreign investment in China and, in particular, laws applicable to FIEs.

The PRC legal system is a civil law system based on written statutes. Unlike the common law system, prior court decisions may be cited for reference but are not binding.

Since late 1970s, the PRC government has been developing a comprehensive system of laws and regulations governing economic matters in general. The overall effect of legislation over the past several decades has significantly enhanced the protections afforded to various forms of foreign investments in China. However, China has not developed a fully integrated legal system, and recently enacted laws and regulations may not sufficiently cover all aspects of economic activities in China. In particular, because these laws and regulations are relatively new, and because of the limited volume of published decisions and their nonbinding nature, the interpretation and enforcement of these laws and regulations involve uncertainties. In addition, the PRC legal system is based in part on government policies and internal rules, some of which may not be published on a timely basis or at all, and some of which may have a retroactive effect. As a result, we may not be aware of our violation of these policies and rules until sometime after the violation. Any administrative and court proceedings in China may be protracted, resulting in substantial costs and diversion of resources and management attention. However, since PRC administrative and court authorities have significant discretion in interpreting and implementing statutory and contractual terms, it may be more difficult to evaluate the outcome of administrative and court proceedings and the level of legal protection we enjoy than in more developed legal systems. These uncertainties may also impede our ability to enforce the contracts we have entered into. As a result, these uncertainties could materially and adversely affect our business and results of operations.

It may be difficult for overseas regulators to conduct investigations or collect evidence within China.

Shareholder claims or regulatory investigations that are common in the United States generally are difficult to pursue as a matter of law or practicality in China. For example, in China, there are significant legal and other obstacles to providing information needed for regulatory investigations or litigation initiated outside China. Although the authorities in China may establish a regulatory cooperation mechanism with the securities regulatory authorities of another country or region to implement cross-border supervision and administration, such cooperation with the securities regulatory authorities in the United States may not be efficient in the absence of a mutual and practical cooperation mechanism. Furthermore, according to Article 177 of the PRC Securities Law, or Article 177, which became effective in March 2020, no overseas securities regulator is allowed to directly conduct investigations or evidence collection activities within the territory of the PRC. While a detailed interpretation of, or implementing rules under Article 177 are yet to be promulgated, the inability of an overseas securities regulator to directly conduct investigations or evidence collection activities within China may further increase difficulties faced by you in protecting your interests.

Uncertainties exist with respect to the interpretation and implementation of the newly enacted PRC Foreign Investment Law and how it may impact the viability of our current corporate structure, corporate governance and business operations.

On January 1, 2020, the Foreign Investment Law, as well as the Regulations for Implementation of the Foreign Investment Law of the People's Republic of China, or the Implementation Regulations, came into effect and replaced the trio of existing laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations.

The Foreign Investment Law and the Implementation Regulations embody an expected PRC regulatory trend to rationalize its foreign investment regulatory regime in line with prevailing international practice and the legislative efforts to unify the corporate legal requirements for both foreign and domestic investments. However, since they are relatively new, uncertainties still exist in relation to their interpretation and implementation. For instance, under the Foreign Investment Law, "foreign investment" refers to the investment activities directly or indirectly conducted by foreign individuals, enterprises or other entities in China. Though it does not explicitly classify contractual arrangements as a form of foreign investment, there is no assurance that foreign investment via contractual arrangement would not be interpreted as a type of indirect foreign investment activities under the definition in the future. In addition, the definition contains a catch-all provision which includes investments made by foreign investors through means stipulated in laws or administrative regulations or other methods prescribed by the State Council. Therefore, it still leaves leeway for future laws, administrative regulations or provisions promulgated by the State Council to provide for contractual arrangements as a form of foreign investment. In any of these cases, it will be uncertain whether our contractual arrangements will be deemed to be in violation of the market access requirements for foreign investment under the PRC laws and regulations. The "variable interest entity" structure, or VIE structure, has been adopted by many PRC-based companies, including us, to obtain necessary licenses and permits in the industries that are currently subject to foreign investment restrictions in China. See "—Risks Related to Our Corporate Structure." and Item 4.C "—Organizational Structure."

Furthermore, if future laws, administrative regulations or provisions prescribed by the State Council mandate further actions to be taken by companies with respect to existing contractual arrangements, we may face substantial uncertainties as to whether we can complete such actions in a timely manner, or at all. Failure to take timely and appropriate measures to cope with any of these or similar regulatory compliance challenges could materially and adversely affect our current corporate structure, corporate governance and business operations.

We may rely on dividends paid by our operating subsidiaries to fund cash and financing requirements, and limitations on the ability of our operating subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business and fund our operations.

We are a holding company and conduct our business primarily through our operating subsidiaries and our consolidated affiliated entities, most of which are limited liability companies established in China. We may rely on dividends paid by our subsidiaries for our cash needs, including the funds necessary to pay dividends and other cash distributions to our shareholders, to service any debt we may incur and to pay our operating expenses. The payment of dividends by entities organized in China is subject to limitations. In particular, regulations in China currently permit payment of dividends only out of accumulated profits as determined in accordance with the PRC accounting standards and regulations. Our PRC subsidiaries are also required to set aside at least 10% of their after-tax profit based on PRC accounting standards each year to their statutory reserves until the accumulative amount of such reserves reaches 50% of their registered capital. These reserves are not distributable as cash dividends. Furthermore, any portion of its after-tax profits that a subsidiary has allocated to its staff welfare and bonus fund at the discretion of its board of directors is also not distributable as cash dividends. Moreover, if our operating subsidiaries incur any debt on their own behalf in the future, the instruments governing the debt may restrict their ability to pay dividends or make other distributions to us. Any limitation on the ability of our operating subsidiaries, including in particular 21Vianet China, to distribute dividends and other distributions to us could materially and adversely limit our ability to make investments or acquisitions that could be beneficial to our businesses, pay dividends or otherwise fund and conduct our business.

If we fail to acquire, obtain or maintain applicable telecommunications licenses, or are deemed by relevant governmental authorities to be operating without full compliance with the laws and regulations, our business would be materially and adversely affected.

Pursuant to the PRC Telecommunications Regulations promulgated in September 2000 and amended in July 2014 and February 2016, respectively, telecommunications businesses are divided into (i) basic telecommunications businesses, which provide public network infrastructure, public data transmission and basic voice communications services, and (ii) value-added telecommunications businesses which provide telecommunications and information services through the public network infrastructure. If the value-added telecommunications services cover two or more provinces, autonomous regions or municipalities, such services must be approved by the MIIT and the service provider is required to obtain a cross-regional value added telecommunications operation license, or the Cross-Regional VAT License.

Some of our subsidiaries and the key subsidiaries of our variable interest entities have obtained the Cross-Regional VAT Licenses issued by competent government agencies. See “Item 4. Information on the Company—B. Business Overview—Regulations — Regulations on Value-Added Telecommunications Business — Value-added Telecommunications Services.” However, we cannot assure you that PRC governmental authorities will continue to deem our hosting service and any of our newly developed technologies, network and services used in our business as a type of value-added telecommunications business covered under the Cross-Regional VAT Licenses issued and currently held by our subsidiaries and our variable interest entities’ subsidiaries. Furthermore, we cannot rule out the possibility that PRC legislators or governmental authorities will promulgate any new laws or regulations or update the current and existing laws and regulations which may clearly define or categorize our hosting service and any of our newly developed technologies, network and services used in our business as a type of basic telecommunication business, which is not covered by our VAT Licenses. As we expand our networks across China, it is also possible that the MIIT, in the future, may deem our operations to have exceeded the terms of our existing licenses. Further, we cannot assure you that our subsidiaries and our variable interest entities’ subsidiaries that currently hold the Cross-Regional VAT Licenses will be able to successfully renew their value added telecommunications business operation licenses upon the expiration, nor can we ensure that we will be able to obtain any other licenses necessary for us to carry out our business, or that our existing licenses will continue to cover all aspects of our operations upon their renewal. For example, we have learned that the MIIT will not approve any expansion of authorization by an internet data center operator to its subsidiaries, and that it will not allow any such subsidiary of an internet data center operator to renew its current authorization in the future. Instead, the MIIT will require such subsidiaries to apply for their own VAT Licenses to provide internet data center services. Beijing 21Vianet Broad Band Data Center Co., Ltd., or 21Vianet Beijing, which holds a Cross-Regional VAT License has authorized some of its subsidiaries to conduct internet data center business. As of this annual report, such policy is not supported by any published laws or regulations. However, we cannot assure you that the applicable subsidiaries will be able to obtain approvals from the MIIT for their own VAT Licenses for conducting internet data center business in a timely manner or at all, or obtain approvals from the MIIT for an expansion of authorization from 21Vianet Beijing under its Cross-Regional VAT Licenses to allow internet data center services to be provided by other subsidiaries, or that we will be able to renew such authorizations and expansions in due course.

The PRC government has adopted various regulations governing the internet access services provided by enterprises engaged in the internet data center, or IDC, and internet service provider, or ISP, services, including requirements related to capital, personnel, facility, equipment and licenses, as well as territorial and business scope. In addition, such regulations prohibit ISP service providers from providing internet access services to enterprises or individuals that have not obtained operation licenses or completed required filings. If any of our customers use our services without obtaining required licenses or completing required filings, we may be subject to penalties. In addition, new laws, regulations or government interpretations may also be promulgated from time to time to regulate the hosting service or any of our related technology or services, which may require us to obtain additional, or expand existing, operating licenses or permits. Any of these factors could result in our disqualification from carrying out our current business, causing significant disruption to our business operations which may materially and adversely affect our business, financial condition and results of operations.

Under the New PRC Enterprise Income Tax Law, we may be classified as a “resident enterprise” of China. Such classification could result in unfavorable tax consequences to us and our non-PRC holders of shares and ADSs.

Pursuant to the PRC Enterprise Income Tax Law, or the EIT Law, as recently amended on December 29, 2018, and its implementation rules, which became effective on January 1, 2008 and most recently amended on April 23, 2019, an enterprise established outside of China with “de facto management bodies” within China is considered a “resident enterprise,” meaning that it can be treated in a manner similar to a Chinese enterprise for enterprise income tax, or EIT, purposes. Under the implementation rules of the EIT Law, the term “de facto management body” is defined as the management body that exercises full and substantial control and overall management over the business, productions, personnel, accounts and properties of an enterprise. On April 22, 2009, the State Administration of Taxation issued the Notice Regarding the Determination of Chinese-Controlled Offshore Incorporated Enterprises as PRC Tax Resident Enterprises on the Basis of De Facto Management Bodies, or Circular 82, which was amended in 2013 and 2017, respectively. Circular 82 and its amendments sets out certain specific criteria and process for determining whether the “de facto management body” of a Chinese-controlled offshore incorporated enterprise is located in China.

We do not believe that we are a “resident enterprise” for PRC EIT purposes. However, the tax resident status of an enterprise is subject to determination by the PRC tax authorities and uncertainties remain with respect to the interpretation of the term “de facto management body.” If the PRC tax authorities determine that we are a “resident enterprise” for PRC EIT purposes, a number of unfavorable PRC tax consequences could follow: (i) we may be subject to EIT at a rate of 25% on our worldwide taxable income as well as PRC EIT reporting obligations; (ii) a 10% (or a lower rate under an applicable tax treaty, if any) withholding tax may be imposed on dividends we pay to non-PRC enterprise holders (20% for non-PRC individual holders) of our shares and ADSs; and (iii) a 10% PRC tax may apply to gains realized by non-PRC enterprise holders (20% for non-PRC individual holders) of our shares and ADSs from transferring our shares or ADSs, if such income is considered PRC-source income.

Similarly, such unfavorable tax consequences could apply to our Hong Kong, Cayman and BVI subsidiaries, if either of them is deemed to be a “resident enterprise” by the PRC tax authorities. Notwithstanding the foregoing provisions, the EIT Law also provides that the dividends paid between “qualified resident enterprises” are exempt from EIT. If our Hong Kong, Cayman and BVI subsidiaries are deemed “resident enterprises” for PRC EIT purposes, the dividends they receive from their PRC subsidiaries, including 21Vianet China, may constitute dividends between “qualified resident enterprises” and therefore qualify for tax exemption. However, the definition of “qualified resident enterprise” is unclear and the relevant PRC government authorities have not yet issued guidance with respect to the processing of outbound remittances to entities that are treated as resident enterprises for PRC EIT purposes. Even if such dividends qualify as “tax-exempt income,” we cannot guarantee that such dividends will not be subject to any withholding tax.

We and our non-tax resident investors face uncertainty with respect to indirect transfers of equity interests in PRC resident enterprises by their non-PRC holding companies.

On February 3, 2015, the State Administration of Tax issued the Notice on Certain Corporate Income Tax Matters on Indirect Transfer of Properties by Non-Tax Resident Enterprises, or Circular 7. Circular 7 extends its tax jurisdiction to not only indirect transfers but also transactions involving transfer of other taxable assets, through the offshore transfer of a foreign intermediate holding company. Circular 7 also brings challenges to both the foreign transferor and transferee (or other person who is obligated to pay for the transfer) of the taxable assets. Where a non-tax resident enterprise conducts an “indirect transfer” by transferring the taxable assets indirectly by disposing of the equity interests of an overseas holding company, the non-tax resident enterprise being the transferor, or the transferee, or the PRC entity which directly owned the taxable assets may report to the relevant tax authority such indirect transfer. Using a “substance over form” principle, the PRC tax authority may re-characterize such indirect transfer as a direct transfer of the equity interests in the PRC tax resident enterprise and other properties in China. As a result, gains derived from such indirect transfer may be subject to PRC enterprise income tax, and the transferee or other person who is obligated to pay for the transfer is obligated to withhold the applicable taxes, currently at a rate of up to 10% for the transfer of equity interests in a PRC resident enterprise. Nevertheless, Circular 7 has introduced safe harbors for internal group restructurings and the purchase and sale of equity through a public securities market.

On October 17, 2017, the State Administration of Tax issued the Announcement of the State Administration of Taxation on Issues Concerning the Withholding of Non-resident Enterprise Income Tax at Source, or SAT Bulletin 37, which came into effect on December 1, 2017 and was amended on June 15, 2018. The SAT Bulletin 37 further clarifies the practice and procedure of the withholding of non-tax resident enterprise income tax. Pursuant to Circular 7 and SAT Bulletin 37, both the transferor and the transferee may be subject to penalties under PRC tax laws if the transferee fails to withhold the taxes and the transferor fails to pay the taxes. However, as these rules and notices are relatively new and there is a lack of clear statutory interpretation, we face uncertainties on the reporting and consequences on future private equity financing transactions, share exchange or other transactions involving the transfer of shares in our company by investors that are non-PRC resident enterprises, or sale or purchase of shares in other non-PRC resident companies or other taxable assets by us. Our Cayman Islands holding company and other non-PRC resident enterprises in our group may be subject to filing obligations or may be taxed if our Cayman Islands holding company and other non-PRC resident enterprises in our group are transferors in such transactions, and may be subject to withholding obligations if our Cayman Islands holding company and other non-PRC resident enterprises in our group are transferees in such transactions. For the transfer of shares in our Cayman Islands holding company by investors that are non-PRC resident enterprises, our PRC subsidiaries may be requested to assist in the filing under Circular 7 and/or SAT Bulletin 37. As a result, we may be required to expend valuable resources to comply with these rules and notices or to request the relevant transferors from whom we purchase taxable assets to comply, or to establish that our Cayman Islands holding company and other non-tax resident enterprises in our group should not be taxed under Circular 7 and/or SAT Bulletin 37, which may have a material adverse effect on our financial condition and results of operations. There is no assurance that the tax authorities will not apply Circular 7 and/or SAT Bulletin 37 to our offshore restructuring transactions where non-PRC resident investors were involved if any of such transactions were determined by the tax authorities to lack reasonable commercial purpose. As a result, we and our non-PRC resident investors may be at risk of being taxed under Circular 7 and/or SAT Bulletin 37 and may be required to comply with or to establish that we should not be taxed under Circular 7 and/or SAT Bulletin 37, which may have a material adverse effect on our financial condition and results of operations or such non-PRC resident investors’ investments in us. We have conducted acquisition transactions in the past and may conduct additional acquisition transactions in the future. We cannot assure you that the PRC tax authorities will not, at their discretion, adjust any capital gains and impose tax return filing obligations on us or require us to provide assistance for the investigation of PRC tax authorities with respect thereto. Heightened scrutiny over acquisition transactions by the PRC tax authorities may have a negative impact on potential acquisitions we may pursue in the future.

Discontinuation of any of the preferential tax treatments available to us or imposition of any additional taxes could adversely affect our financial condition and results of operations.

The EIT Law and its implementation rules unified the previously-existing separate income tax laws for domestic enterprises and FIEs and adopted a unified 25% EIT rate applicable to all resident enterprises in China, except for certain entities established prior to March 16, 2007 that are eligible for their existing preferential tax incentives, adjusted by certain transitional phase-out rules promulgated by the State Council on December 26, 2007. In addition, certain enterprises may enjoy a preferential EIT rate of 15% under the EIT Law if they qualify as High and New Technology Enterprise, or HNTE, subject to various qualification criteria.

A number of our PRC subsidiaries and consolidated affiliated entities, including 21Vianet Beijing, Shanghai Blue Cloud Technology Co., Ltd., or SH Blue Cloud, and Shenzhen Diyixian Telecommunication Co., Ltd., or SZ DYX, are entitled to enjoy a preferential tax rate of 15% due to their qualification as HNTE. The qualification as a HNTE is subject to annual administrative evaluation and a three-year review by the relevant authorities in China. If 21Vianet Beijing, SH Blue Cloud and SZ DYX fail to maintain or renew their HNTE status, their applicable EIT rate may be increased to 25%, which could have a material adverse effect on our financial condition and results of operations.

In April 2011, 21Vianet (Xi'an) Information Outsourcing Industry Park Services Co., Ltd., or Xi'an Sub, a subsidiary of 21Vianet Beijing located in Shaanxi Province, was qualified for a preferential tax rate of 15% and started to apply this rate from then on. The preferential tax rate is awarded to companies that are located in West Regions of China which operate in certain encouraged industries. This qualification will need to be assessed on an annual basis. For the years ended December 31, 2018, 2019 and 2020, the tax rate assessed for Xi'an Sub was 15%, 15% and 15%, respectively.

For the year ended December 31, 2020, our other PRC subsidiaries would be subject to an EIT rate of 25%, unless they are qualified as Small Scale and Low Profit Enterprises which would be entitled to exempt fifty percent (50)% or twenty five percent (25)% of their income from tax, depending on their annual taxable income, and enjoy a reduced EIT rate of 20%.

The M&A Rules establish complex procedures for some acquisitions of Chinese companies by foreign investors, which could make it difficult for us to pursue growth through acquisitions in China.

The M&A Rules and other recently adopted regulations and rules concerning mergers and acquisitions established additional procedures and requirements that could make merger and acquisition activities by foreign investors more time consuming and complex. In addition, the Implementing Rules Concerning Security Review on the Mergers and Acquisitions by Foreign Investors of Domestic Enterprises, issued by the Ministry of Commerce, or MOFCOM, in August 2011, specify that mergers and acquisitions by foreign investors involved in “an industry related to national security” are subject to strict review by the MOFCOM, and prohibit any activities attempting to bypass such security review, including by structuring the transaction through a proxy or contractual control arrangement. We believe that our business is not in an industry related to national security, but we cannot preclude the possibility that the MOFCOM or other government agencies may publish explanations contrary to our understanding or broaden the scope of such security reviews in the future, in which case our future acquisitions in the PRC, including those by way of entering into contractual control arrangements with target entities, may be closely scrutinized or prohibited. Moreover, the Anti-Monopoly Law requires that the State Administration for Market Regulation of the PRC be notified in advance of any concentration of undertaking if certain filing thresholds are triggered. Part of our growth strategy includes acquiring complementary businesses or assets in China. Complying with the requirements of the laws and regulations mentioned above and other PRC regulations to complete such transactions could be time-consuming, and any required approval processes, including obtaining approval from the State Administration for Market Regulation of the PRC, may delay or inhibit our ability to complete such transactions, which could affect our ability to expand our business or maintain our market share. If any of our acquisitions were subject to the M&A Rule and were found not to be in compliance with the requirements of the M&A Rule in the future, relevant PRC regulatory agencies may impose fines and penalties on our operations in the PRC, limit our operating privileges in the PRC, or take other actions that could have a material adverse effect on our business, financial condition, results of operations, reputation and prospects.

In December 2020, the NDRC and the MOFCOM promulgated the Measures for the Security Review of Foreign Investment, which became effective on January 18, 2021. The NDRC and the MOFCOM will establish a working mechanism office in charge of the security review of foreign investment. Such measures define foreign investment as direct or indirect investment by foreign investors in the PRC, which includes (i) investment in new onshore projects or establishment of wholly foreign owned onshore companies or joint ventures with foreign investors; (ii) acquiring equity or asset of onshore companies by merger and acquisition; and (iii) onshore investment by and through any other means. Investment in certain key areas with bearing on national security, such as important cultural products and services, important information technology and internet services and products, key technologies and other important areas with bearing on national security which results in the acquisition of de facto control of investee companies, shall be filed with a specifically established office before such investment is carried out. What may constitute “onshore investment by and through any other means” or “de facto control” is not clearly defined under such measures, and could be broadly interpreted. It is likely that control through contractual arrangement be regarded as de facto control based on provisions applied to security review of foreign investment in the free trade zone. Failure to make such filing may subject such foreign investor to rectification within prescribed period, and will be recorded as negative credit information of such foreign investor in the relevant national credit information system, which would then subject such investors to joint punishment as provided by relevant rules. If such investor fails to or refuses to undertake such rectification, it would be ordered to dispose of the equity or asset and to take any other necessary measures so as to return to the status quo and to erase the impact to national security. As these measures are recently promulgated, official guidance has not been issued by the designated office in charge of such security review yet. At this stage, the interpretation of those measures remains unclear in many aspects and whether these measures may apply to foreign investment that is implemented or completed before the enactment of these new measures. As our business may be deemed to constitute the foregoing circumstances, we cannot assure you that our current business operations will remain fully compliant, or we can adapt our business operations to new regulatory requirements on a timely basis, or at all.

PRC regulation of loans and direct investment by offshore holding companies to PRC entities may delay or prevent us from using the proceeds from our overseas offerings to make loans or additional capital contributions to our PRC subsidiaries or consolidated affiliated entities, which could materially and adversely affect our liquidity and our ability to fund and expand our business.

In utilizing the proceeds we received from our overseas offerings or in other financing activities, as an offshore holding company, we may make loans to our PRC subsidiaries or our consolidated affiliated entities in the PRC, or we may make additional capital contributions to our PRC subsidiaries or consolidated affiliated entities. Any loans to our PRC subsidiaries or our consolidated affiliated entities in the PRC are subject to PRC regulations. For example, loans by us to our PRC subsidiaries, which are FIEs, to finance their activities cannot exceed a statutory cap and must be filed with the State Administration of Foreign Exchange, or SAFE, through the online filing system of SAFE after the loan agreement is signed and no later than three business days prior to the borrower withdraws any amount.

We may also decide to finance our PRC subsidiaries for operations in China by means of capital contributions. These capital contributions are subject to the registration with the State Administration for Market Regulation or its local counterpart and registration with a local bank authorized by SAFE. We cannot assure you that we will be able to obtain these government approvals or complete such registration on a timely basis, if at all, with respect to future capital contributions by us to our subsidiaries. If we fail to complete such registration or filing, our ability to use the proceeds from our overseas offerings and to capitalize our PRC operations may be negatively affected, which could adversely affect our liquidity and our ability to fund and expand our business.

Governmental control of currency conversion may limit our ability to receive and utilize our revenues effectively.

We earn most of our revenues and incur most of our expenses in Renminbi. However, Renminbi is not freely convertible at present.

The PRC government continues to regulate conversion between Renminbi and foreign currencies, despite the significant reduction in its control in recent years over trade transactions involving import and export of goods and services as well as other frequent routine foreign exchange transactions. These transactions are known as current account items. However, remittance of Renminbi by foreign investors into the PRC for the purposes of capital account items, such as capital contributions, is generally permitted upon obtaining specific approvals from, or completing specific registrations or filings with, the relevant authorities on a case-by-case basis and is subject to a strict monitoring system. Regulations in the PRC on the remittance of Renminbi into the PRC for settlement of capital account items are developing gradually. Currently, our PRC subsidiaries may purchase foreign currencies for settlement of current account transactions, including payments of dividends to us, without the approval of the SAFE. However, foreign exchange transactions by our PRC subsidiaries under the capital account continue to be subject to significant foreign exchange controls and require the approval of or need to register or file with PRC governmental authorities, including the SAFE. In particular, if our PRC subsidiaries borrow foreign currency loans from us or other foreign lenders, these loans must be filed with the SAFE after the loan agreement is signed and at least three business days before the borrower draws any amount from the foreign loan, and the accumulative amount of foreign currency loans borrowed by a PRC subsidiary may not exceed a statutory upper limit. If we finance our PRC subsidiaries by means of additional capital contributions, these capital contributions are subject to the registration with the State Administration for Market Regulation or its local counterpart and registration with a local bank authorized by SAFE. Any existing and future restrictions on currency exchange may affect the ability of our PRC subsidiaries or affiliated entities to obtain foreign currencies, limit our ability to meet our foreign currency obligations or otherwise materially and adversely affect our business.

In March 2015, SAFE promulgated the Circular on Reforming the Administration Approach Regarding the Foreign Exchange Capital Settlement of Foreign-invested Enterprises, or SAFE Circular No. 19, which was most recently amended on December 30, 2019. SAFE Circular No. 19 provides that, among other things, a foreign-invested enterprise may convert up to 100% of the foreign currency in its capital account into RMB on a discretionary basis according to the actual needs. On June 9, 2016, SAFE further issued the Circular of the State Administration of Foreign Exchange on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular No. 16, to further expand and strengthen such discretionary conversion reform under SAFE Circular No. 19. SAFE Circular No. 16 provides an integrated standard for conversion of foreign exchange under capital account items on a discretionary basis which applies to all enterprises registered in the PRC. Pursuant to SAFE Circular No. 16, in addition to foreign currency capital, the discretionary conversion policy expands to foreign currency debts borrowed by an enterprise (except financial institutions) and repatriated funds raised through overseas listing. In addition, SAFE Circular No. 16 has narrowed the scope of purposes for which an enterprise must not use the RMB funds so converted, which include, among others, (i) payment for expenditure beyond its business scope or otherwise as prohibited by the applicable laws and regulations; (ii) investment in securities or other financial products other than banks' principal-secured products; (iii) provision of loans to non-affiliated enterprises, except where it is expressly permitted in the business scope of the enterprise; and (iv) construction or purchase of non-self-used real properties, except for the real estate developer. On October 23, 2019, the SAFE issued the Circular on Further Advancing the Facilitation of Cross Border Trade and Investment, or SAFE Circular 28. SAFE Circular 28 provides, among others, that the foreign-invested enterprises can use RMB converted from foreign currency denominated capital for equity investment in China, provided that the equity investments are genuine and in compliance with the applicable foreign investment-related laws and regulations.

Pursuant to the Circular of the State Administration for Foreign Exchange on Optimizing Foreign Exchange Administration to Support the Development of Foreign-related Business promulgated and effective on April 10, 2020 by SAFE, the reform of facilitating the payments of incomes under the capital accounts shall be promoted nationwide. Under the prerequisite of ensuring true and compliant use of funds and compliance and complying with the prevailing administrative provisions on use of income from capital projects, enterprises which satisfy the criteria are allowed to use income under the capital account, such as capital funds, foreign debt and overseas listing, for domestic payment, without the need to provide proof materials for veracity to the bank beforehand for each transaction.

Fluctuation in exchange rates could have a material adverse effect on our results of operations and the value of your investment.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. The Renminbi has fluctuated against the U.S. dollar, at times significantly and unpredictably. The value of Renminbi against the U.S. dollar and other currencies is affected by changes in China's political and economic conditions and by China's foreign exchange policies, among other things. We cannot assure you that Renminbi will not appreciate or depreciate significantly in value against the U.S. dollar in the future. It is difficult to predict how market forces or PRC or U.S. government policy may impact the exchange rate between Renminbi and the U.S. dollar in the future.

As our costs and expenses are mostly denominated in RMB, any appreciation of the RMB against the U.S. dollar would increase our costs in U.S. dollar terms. In addition, as our operating subsidiaries and VIEs in China receive revenues in RMB, any significant depreciation of the RMB against the U.S. dollar may have a material and adverse effect on our revenues in U.S. dollar terms and financial condition, and the value of, and any dividends payable on, our ordinary shares. To the extent that we need to convert any portion of the proceeds denominated in U.S. dollars that we received from our securities issuances into Renminbi for capital expenditures and working capital and other business purposes, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the Renminbi amount we would receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, strategic acquisitions or investments or other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us. These and other effects on our financial data resulting from fluctuations in the value of the RMB against the U.S. dollar could have a material and adverse effect on the market price of our ADSs and your investment.

Very limited hedging options are available in China to reduce our exposure to exchange rate fluctuations. To date, we have not entered into any hedging transactions in an effort to reduce our exposure to foreign currency exchange risk. While we may decide to enter into hedging transactions in the future, the availability and effectiveness of these hedges may be limited and we may not be able to adequately hedge our exposure or at all. In addition, our currency exchange losses may be magnified by PRC exchange control regulations that restrict our ability to convert Renminbi into foreign currency. As a result, fluctuations in exchange rates may have a material adverse effect on your investment.

PRC regulations relating to the establishment of offshore special purpose vehicles by PRC residents may subject our PRC resident beneficial owners to personal liability and limit our ability to acquire PRC companies, to inject capital into our PRC subsidiaries, limit our PRC subsidiaries' ability to distribute profits to us, or otherwise materially and adversely affect us.

In October 2005, SAFE issued the Circular on the Relevant Issues in the Foreign Exchange Control over Financing and Return Investment Through Special Purpose Companies by Residents Inside China, or Circular 75, which is now replaced by the Circular on Relevant Issues Concerning Foreign Exchange Control on Domestic Residents' Offshore Investment and Financing and Roundtrip Investment through Special Purpose Vehicles, or Circular 37, issued by SAFE on July 4, 2014. According to Circular 37, PRC residents are required to register with local SAFE branches in connection with their direct establishment or indirect control of an offshore entity for the purposes of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in Circular 37 as a "special purpose vehicle." The term "control" under Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. Circular 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. On February 13, 2015, SAFE promulgated a Notice on Further Simplifying and Improving Foreign Exchange Administration Policy on Direct Investment, or SAFE Notice 13, which became effective on June 1, 2015. SAFE Notice 13 has delegated to the qualified banks the authority to register all PRC residents' investment in "special purpose vehicle" pursuant to the Circular 37, except that those PRC residents who have failed to comply with Circular 37 will remain to fall into the jurisdiction of the local SAFE branches and must make their supplementary registration application with the local SAFE branches.

Our current PRC resident beneficial owners, including our co-founders Sheng Chen and Jun Zhang, have filed the foreign exchange registration in connection with their respective overseas shareholding in our company in accordance with the Circular 37 on June 10, 2014. We cannot assure you when our co-founders can successfully complete their registrations. We have also requested other PRC residents who we know hold direct or indirect interest in our company to make the necessary applications, filings and amendments as required under Circular 37 and other related rules. We attempt to comply, and attempt to ensure that these PRC residents holding direct or indirect interest in our company comply, with the relevant requirements, and those persons holding direct or indirect interests in our securities whose identities and addresses we know and who are subject to Circular 37 and the relevant SAFE regulations have conducted the registration procedures prescribed by Circular 37 and will update such registration. However, we may not be informed of the identities of all the PRC residents holding direct or indirect interest in our company, and we cannot provide any assurances that these PRC residents will comply with our request to make or obtain any applicable registrations or comply with other requirements required by Circular 37 or the relevant SAFE regulations. The failure or inability of PRC residents, including our co-founders, to make any required registrations or comply with other requirements under Circular 37 and the relevant SAFE regulations may subject such PRC residents or our PRC subsidiaries to fines and legal sanctions and may also limit our ability to contribute additional capital into or provide loans to our PRC subsidiaries and our consolidated affiliated entities, limit our PRC subsidiaries' ability to pay dividends or otherwise distribute profits to us, or otherwise materially and adversely affect us.

Failure to comply with the registration requirements for employee share option plans may subject our equity incentive plan participants who are PRC residents or us to fines and other legal or administrative sanctions.

Since 2007, SAFE has implemented rules requiring PRC residents who participate in employee stock option plans of overseas publicly listed companies to register with SAFE or its local office and complete certain other procedures. Effective on February 15, 2012, SAFE promulgated the Circular on the Relevant Issues Concerning Foreign Exchange Administration for Domestic Individuals Participating in an Employees Share Incentive Plan of an Overseas-Listed Company, or SAFE Notice 7. Under SAFE Notice 7, PRC residents who participate in a share incentive plan of an overseas publicly listed company are required to register with SAFE and complete certain other procedures. PRC residents include directors, supervisors, management and employees of PRC domestic companies specified in the Administrative Regulations of the People's Republic of China on Foreign Exchange, regardless of nationality. SAFE Notice 7 further requires that an agent should also be designated to handle matters in connection with the exercise or sale of share options granted under the share incentive plan to participants. We and the PRC residents to whom we have granted stock options are subject to SAFE Notice 7. If we or our PRC optionees fail to comply with these regulations, we or our PRC optionees may be subject to fines and other legal or administrative sanctions.

Risks Related to Our ADS

The market price of our ADSs has fluctuated and may continue to be volatile, which could result in substantial losses to holders of our ADSs.

The trading prices of our ADSs are likely to be volatile and could fluctuate widely due to factors beyond our control. This may occur due to broad market and industry factors, such as the performance and fluctuation in the market prices or the underperformance or declining financial results of other companies based in China that have listed their securities in the United States in recent years. The securities of some of these companies have experienced significant volatility since their initial public offerings, including, in some cases, substantial price declines in the trading prices of their securities. The trading performances of other Chinese companies' securities after their offerings may affect the attitudes of investors toward Chinese companies listed in the United States, which consequently may impact the trading performance of our ADSs, regardless of our actual operating performance. The recent ongoing administrative proceedings brought by the SEC against five accounting firms in China, alleging that they refused to hand over documents to the SEC for ongoing investigations into certain China-based companies, occurs at a time when accounting scandals have eroded investor appetite for China-based companies. Any other negative news or perceptions about inadequate corporate governance practices or fraudulent accounting, corporate structure or matters of the Chinese companies may also negatively affect the attitudes of investors towards Chinese companies in general, including us, regardless of whether we have conducted any inappropriate activities. In addition, securities markets may from time to time experience significant price and volume fluctuations that are not related to our operating performance, which may have a material and adverse effect on the market price of our ADSs.

The trading price of our ADSs has fluctuated since we first listed our ADSs on the Nasdaq Global Select Market on April 21, 2011. In 2020, the trading prices of our ADSs have ranged from US\$7.64 to US\$34.86 per ADS, and the last reported closing price on April 27, 2021 was US\$30.41 per ADS. The market price for our ADSs may be highly volatile and subject to wide fluctuations in response to factors including the following:

- actual or anticipated fluctuations in our quarterly results of operations and changes or revisions of our expected results;

- changes in financial estimates or recommendations by securities analysts;
- conditions in the internet industry in China;
- changes in the performance or market valuations of other companies that provide hosting network services;
- fluctuations of exchange rates between the Renminbi and the U.S. dollar or other foreign currencies;
- announcements by us or our competitors of new products and service offerings, significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- detrimental negative publicity about us, our competitors or our industry;
- negative short seller allegations against us;
- additions or departures of executive officers;
- sales or perceived potential sales of additional ordinary shares or ADSs;
- litigation or administrative investigations; and
- general economic or political conditions in China; as well as political tensions between the United States and China.

Our directors and employees may face claims and lawsuits as a result of their position in other companies, which may also harm our reputation.

Our directors and employees may face additional exposure to claims and lawsuits as a result of their position in other public companies. For example, one of our directors, Mr. Sean Shao, an independent director and chairman of the audit committee of Jumei International Holding Limited, was named as a defendant in an ongoing securities class action lawsuit filed in the U.S. against Jumei International Holding Limited, a company formerly listed on the New York Stock Exchange, regarding an alleged omission and misrepresentation in that company's solicitation/recommendation statement filed with the SEC in connection with its privatization transaction. Mr. Shao was also an independent director and chairman of the audit committee of Luckin Coffee Inc. from May 2019 through July 2020 and was chairman of a special committee of the board which investigated accounting improprieties at Luckin Coffee Inc. during 2020. Luckin Coffee Inc. and its directors, including Mr. Shao, have been named as defendants in several lawsuits brought with respect to these accounting improprieties. The existence of litigation, claims, investigations and proceedings against our directors and employees, even if they do not involve our company, may harm our reputation and adversely affect the trading price of our ADSs.

Our triple-class voting structure will limit your ability to influence corporate matters and could discourage others from pursuing any change of control transactions that holders of our Class A ordinary shares and ADSs may view as beneficial.

Our ordinary share capital consists of Class A ordinary shares, Class B ordinary shares and Class C ordinary shares. In respect of matters requiring the votes of shareholders, holders of Class A ordinary shares are entitled to one vote per share, while (i) holders of Class B ordinary shares are entitled to ten votes per share and (ii) holders of Class C ordinary shares are entitled to one vote per share, except that we shall only proceed with the following matters with the written consent of the holders holding a majority of the issued and outstanding Class C ordinary shares or with the sanction of a special resolution passed at a separate meeting of the holders of the issued and outstanding Class C ordinary shares:

- any appointment or removal of directors other than the appointment or removal of directors that is made pursuant to a shareholder's right under the Investor Rights Agreement, dated January 15, 2015, among the Company, King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein, and the Share Subscription Agreement, dated May 23, 2016, between the Company and Tuspark Innovation Venture Limited;

- entry into any agreement by us or our subsidiaries with any shareholder who holds more than 10% of our issued and outstanding share capital or such shareholder's affiliate, other than agreements entered into in our ordinary course of business with a total contract amount below 10% of our consolidated total revenue in the most recent completed fiscal year; and
- any proposed amendments to our memorandum and articles of associations that will amend, alter, modify or change the rights attached to Class C ordinary shares.

Each Class B ordinary share and each Class C ordinary share is convertible into one Class A ordinary share at any time by the holder thereof, while neither Class A ordinary shares nor Class C ordinary shares are convertible into Class B ordinary shares or preferred shares under any circumstances, neither Class A ordinary shares nor Class B ordinary shares are convertible into Class C ordinary shares or preferred shares under any circumstances. Upon any transfer of Class B ordinary shares or Class C ordinary shares by a holder thereof to any person or entity which is not an affiliate of such holder, such Class B ordinary shares or Class C ordinary shares shall be automatically and immediately converted into the equal number of Class A ordinary shares.

Due to the disparate voting powers attached to these three classes, holders of our Class B ordinary shares or Class C ordinary shares have significant voting power over matters requiring shareholders' approval. This concentrated control will limit your ability to influence corporate matters and could discourage others from pursuing any potential merger, takeover or other change of control transactions that holders of Class A ordinary shares and ADSs may view as beneficial.

Future sales of a substantial number of our ADSs in the public market, or the perception that these sales could occur, could cause the price of our ADSs to decline.

In the future, we may issue additional ordinary shares or ADSs to raise capital, and our existing shareholders could sell substantial amounts of ADSs, including those issued upon the exercise of outstanding options, in the public market. We cannot predict the size of any future issuance of ordinary shares or ADSs or the effect that future sales of our ordinary shares or ADSs would have on the market price of our ADSs. Any future sales of a substantial number of our ordinary shares or ADSs in the public market, or the perception that these sales could occur, could cause the trading price of our ADSs to decline and impair our ability to raise capital through the sale of additional equity securities.

We have adopted share incentive plans, under which we have the discretion to grant a broad range of equity-based awards to eligible participants. In May 2020, we adopted the 2020 Plan. We intend to register all Class A ordinary shares issuable under the 2020 Plan and have registered the Class A ordinary shares issuable under our existing incentive plans. Once these Class A ordinary shares are registered, they can be freely sold in the public market in the form of ADSs.

If a large number of our Class A ordinary shares or securities convertible into our Class A ordinary shares are sold in the public market in the form of ADSs, the sales could reduce the trading price of our ADSs and impede our ability to raise future capital.

We are exempt from certain corporate governance requirements of Nasdaq and we intend to rely on certain exemptions.

Certain corporate governance practices in the Cayman Islands, which is our home country, are considerably different from the standards applied to U.S. domestic issuers. Nasdaq Marketplace Rules provide that foreign private issuers are exempt from certain corporate governance requirements of Nasdaq and may follow their home country practices, subject to certain exceptions and requirements to the extent that such exemptions would be contrary to U.S. federal securities laws and regulations. We currently follow our home country practice that: (i) does not require us to solicit proxies and hold meetings of our shareholders every year, (ii) does not restrict a company's transactions with directors, requiring only that directors exercise a duty of care and owe certain fiduciary duties to the companies for which they serve, (iii) does not require us to obtain shareholder approval for issuing additional securities exceeding 20% of our outstanding ordinary shares, and (iv) does not require us to seek shareholders' approval for amending our share incentive plans. As a result, our investors may not be provided with the benefits of certain corporate governance requirements for U.S. domestic companies listed on Nasdaq.

We are a foreign private issuer within the meaning of the rules under the U.S. Exchange Act, and as such we are exempt from certain provisions applicable to U.S. domestic public companies.

Because we qualify as a foreign private issuer under the U.S. Exchange Act, we are exempt from certain provisions of the securities rules and regulations in the United States that are applicable to U.S. domestic issuers, including:

- the rules under the U.S. Exchange Act requiring the filing with the SEC of quarterly reports on Form 10-Q and current reports on Form 8-K;
- the sections of the U.S. Exchange Act regulating the solicitation of proxies, consents, or authorizations in respect of a security registered under the U.S. Exchange Act;
- the sections of the U.S. Exchange Act requiring insiders to file public reports of their stock ownership and trading activities and liability for insiders who profit from trades made in a short period of time; and
- the selective disclosure rules by issuers of material nonpublic information under Regulation FD.

We are required to file an annual report on Form 20-F within four months of the end of each fiscal year. In addition, we intend to continue to publish our results on a quarterly basis as press releases, distributed pursuant to Nasdaq rules. Press releases relating to financial results and material events will also be furnished to the SEC on Form 6-K. However, the information we are required to file with or furnish to the SEC will be less extensive and less timely compared to that required to be filed with the SEC by U.S. domestic issuers. As a result, holders of our Class A ordinary shares and ADSs may be afforded less protection or information than they would under the U.S. Exchange Act rules applicable to U.S. domestic companies.

We may be classified as a passive foreign investment company for United States federal income tax purposes, which could result in adverse U.S. federal income tax consequences to U.S. holders of our ADSs or Class A ordinary shares.

Based on the market price of our ADSs and Class A ordinary shares, the value of our assets, and the composition of our assets and income, we believe that we were not a PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2020, and we do not expect to be a PFIC for our taxable year ended December 31, 2021. We must make a separate determination each year as to whether we are a PFIC (after the close of each taxable year). While we do not anticipate becoming a PFIC, no assurances regarding our PFIC status can be provided for any past, current or future taxable year. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis and the applicable law is subject to varying interpretation. Furthermore, because there are uncertainties in the application of the relevant rules, it is possible that the IRS may challenge our classification of certain income and assets as non-passive or our valuation of our tangible and intangible assets, each of which may result in our becoming a PFIC for the current taxable year or any future taxable years. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status for any prior, current or subsequent taxable year.

A non-U.S. corporation, such as our company, will be considered a PFIC for U.S. federal income tax purposes for any taxable year if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of the value of its assets (determined on the basis of a quarterly average) during such year produce or are held for the production of passive income (the “asset test”). Passive income generally includes dividends, interest, certain royalties and rents, annuities, net gains from the sale or exchange of property producing such income and certain net foreign currency gains. For this purpose, cash and assets readily convertible into cash are categorized as passive assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

Although the law in this regard is not entirely clear, we treat our variable interest entities as being owned by us for U.S. federal income tax purposes because we control their management decisions and we are entitled to substantially all of their economic benefits and, as a result, we consolidate their results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of our variable interest entities for United States federal income tax purposes, we would likely be treated as a PFIC for our taxable year ended December 31, 2020 and for subsequent taxable years.

If we were to be or become a PFIC, U.S. investors may incur significantly increased U.S. income tax on gain recognized on the sale or other disposition of our ADSs or Class A ordinary shares on the receipt of distributions on the our ADSs or Class A ordinary shares to the extent such gain or distribution is treated as an “excess distribution” under the U.S. federal income tax rules. For more information, see “Item 10.E. Additional Information—Taxation—U.S. Federal Income Tax Considerations—Passive Foreign Investment Company Considerations.”

You may not be able to participate in rights offerings, may experience dilution of your holdings and you may not receive certain distributions on Class A ordinary shares if it is impractical to make them available to you.

We may from time to time distribute rights to our shareholders, including rights to acquire our securities. Under the deposit agreement for the ADSs, the depositary will not offer those rights to ADS holders unless both the rights and the underlying securities to be distributed to ADS holders are either registered under the Securities Act or exempt from registration under the Securities Act with respect to all holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or underlying securities or to endeavor to cause such a registration statement to be declared effective. In addition, we may not be able to take advantage of any exemptions from registration under the Securities Act. Accordingly, holders of our ADSs may be unable to participate in our rights offerings and may experience dilution in their holdings as a result.

In addition, the depositary of our ADSs has agreed to pay to you the cash dividends or other distributions it or the custodian receives on our ordinary shares or other deposited securities after deducting its fees and expenses. You will receive these distributions in proportion to the number of Class A ordinary shares your ADSs represent. However, the depositary may, at its discretion, decide that it is unlawful or impractical to make a distribution available to any holders of ADSs. For example, the depositary may determine that it is not practicable to distribute certain property through the mail, or that the value of certain distributions may be less than the cost of mailing them. In these cases, the depositary may decide not to distribute such property and you will not receive such distribution.

You may be subject to limitations on transfer of your ADSs.

Your ADSs represented by the ADRs are transferable on the books of the depositary. However, the depositary may close its transfer books at any time or from time to time when it deems expedient in connection with the performance of its duties. In addition, the depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are closed, or at any time if we or the depositary deem it advisable to do so because of any requirement of law or of any government or governmental body, or under any provision of the deposit agreement, or for any other reason.

You may face difficulties in protecting your interests, and your ability to protect your rights through the U.S. federal courts may be limited, because we are incorporated under Cayman Islands law, conduct most of our operations in China and a majority of our officers and directors reside outside the United States.

We are incorporated in the Cayman Islands and substantially all of our assets are located outside of the United States. We conduct most of our operations in China through our wholly-owned subsidiaries in China. The majority of our officers and directors reside outside the United States and a substantial portion of the assets of those persons are located outside of the United States. As a result, it may be difficult for you to bring an action against us or against these individuals in the Cayman Islands or in China in the event that you believe that your rights have been infringed under U.S. securities laws or otherwise. Even if you are successful in bringing an action of this kind, the laws of the Cayman Islands and of China may render you unable to enforce a judgment against our assets or the assets of our directors and officers. In addition, there is uncertainty as to whether the courts of the Cayman Islands or the PRC would recognize or enforce judgments of U.S. courts against us or our directors and officers predicated upon the civil liability provisions of the securities laws of the United States or any state, and it is uncertain whether such Cayman Islands or PRC courts would be competent to hear original actions brought in the Cayman Islands or the PRC against us or our directors and officers predicated upon the securities laws of the United States or any state, on the ground that such provisions are penal in nature.

Our corporate affairs are governed by our memorandum and articles of association and by the Companies Act (As Revised) of the Cayman Islands and common law of the Cayman Islands. The rights of shareholders to take legal action against our directors and us, actions by minority shareholders and the fiduciary duties of our directors to us under Cayman Islands law are to a large extent governed by the common law of the Cayman Islands. The common law of the Cayman Islands is derived in part from comparatively limited judicial precedent in the Cayman Islands as well as from English common law, which has persuasive, but not binding, authority on a court in the Cayman Islands. The rights of our shareholders and the fiduciary duties of our directors under Cayman Islands law are not as clearly established as they would be under statutes or judicial precedents in the United States. In particular, the Cayman Islands has a less developed body of securities laws as compared to the United States, and provides significantly less protection to investors. In addition, Cayman Islands companies may not have standing to initiate a shareholder derivative action before the federal courts of the United States.

As a result of all of the above, our public shareholders may have more difficulty in protecting their interests through actions against our management, directors or major shareholders than they would as shareholders of a public company of the United States.

Our memorandum and articles of association contain anti-takeover provisions that could adversely affect the rights of holders of our ordinary shares and ADSs.

Our memorandum and articles of association contain certain provisions that could limit the ability of others to acquire control of our company, including our triple-class voting structure, and a provision that grants authority to our board of directors to establish from time to time one or more series of preferred shares without action by our shareholders and to determine, with respect to any series of preferred shares, the terms and rights of that series. These provisions could have the effect of depriving our shareholders of the opportunity to sell their shares at a premium over the prevailing market price by discouraging third parties from seeking to obtain control of our company in a tender offer or similar transactions.

We have incurred increased costs as a result of being a public company.

As a public company, we have incurred significant accounting, legal and other expenses that we did not incur as a private company. The Sarbanes-Oxley Act, as well as new rules subsequently implemented by the SEC and the Nasdaq Global Select Market, have detailed requirements concerning corporate governance practices of public companies including Section 404 of the Sarbanes-Oxley Act relating to internal controls over financial reporting. These new rules and regulations have increased our director and officer liability insurance, accounting, legal and financial reporting compliance costs and have made certain corporate activities more time-consuming and costly. Therefore, we have incurred additional costs associated with our public company reporting requirements, and we cannot predict or estimate the amount of additional costs we may further incur or the timing of such costs.

If securities or industry analysts do not actively follow our business, or if they publish unfavorable research about our business, our ADS price and trading volume could decline.

The trading market for our ADS depends in part on the research and reports that securities or industry analysts publish about us or our business. If one or more of the analysts who covers us downgrades our ADSs or publishes unfavorable research about our business, our ADS price would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, demand for our ADSs could decrease, which could cause our ADS price and trading volume to decline.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

We commenced our operations in 1999, and through a series of corporate restructurings, set up a holding company, AsiaCloud Inc., or AsiaCloud, in October 2009 under the laws of the Cayman Islands. AsiaCloud was formerly a wholly-owned subsidiary of aBitCool Inc., or aBitCool, a company incorporated under the laws of the Cayman Islands. In October 2010, AsiaCloud effected a restructuring whereby AsiaCloud repurchased all its outstanding shares held by aBitCool and issued ordinary shares and preferred shares to the same shareholders of aBitCool. In connection with the restructuring, AsiaCloud subsequently changed its name to 21Vianet Group, Inc.

Due to certain restrictions under the PRC laws on foreign ownership of entities engaged in data center and telecommunications value-added services, we conduct our operations in China through contractual arrangements among us, our wholly-owned PRC subsidiaries, our variable interest entities and their shareholders. As a result of these contractual arrangements, we control our variable interest entities and have consolidated the financial information of our consolidated affiliated entities in our consolidated financial statements in accordance with U.S. GAAP. We control: (i) 100% of the equity interests in 21Vianet Technology through our subsidiary, 21Vianet China, which was incorporated in October 2002; (ii) 100% of the equity interests of BJ iJoy following completion of our acquisition of 100% equity interests in iJoy in April 2013; (iii) 100% of the equity interests of WiFire Network through our subsidiary, aBitCool DG, which was incorporated in June 2014; and (iv) 100% of the equity interests of SH Zhiyan and its wholly-owned subsidiary, SH Blue Cloud, through our subsidiary, SH Edge Connect, which was incorporated in November 2020.

On April 21, 2011, our ADSs began trading on the Nasdaq Global Select Market under the ticker symbol "VNET." We issued and sold a total of 14,950,000 ADSs, representing 89,700,000 Class A ordinary shares, at an initial offering price of US\$15.00 per ADS.

From time to time, we have acquired companies that are complementary to our business, as well as made alternative investments and entered into strategic partnerships or alliances as we see fit, we have also divested part of our business as part of our efforts to adjust our business development strategy. For example, we are Microsoft's local partner for all of its three major cloud offerings: Microsoft Azure, Office 365, and Dynamics 365. In March 2017, we entered into an investment agreement with Warburg Pincus to establish a multi-stage joint venture and build a digital real estate platform in China, with an aim to form additional joint ventures to jointly develop IDC projects, and we reached agreements to restructure our partnership with Warburg Pincus in July 2019. In September 2017, we transferred 66.67% of the equity interest in six wholly-owned subsidiaries engaged in the CDN, hosting area network services and route optimization business, or WiFire Entities, for a nominal consideration of RMB1 for each of the WiFire Entities to Beijing TUS Yuanchuang Technology Development Co., Ltd., a wholly-owned subsidiary of Tsinghua Holdings Co., Ltd., or Tus-Holdings. Upon completion of such transfer, Tus-Holdings and us hold 66.7% and 33.3% equity interest in each of the WiFire Entities, respectively. WiFire Entities have been deconsolidated from our consolidated financial statements since then. In October 2019, we signed a memorandum of understanding with Alibaba to deploy IDC services in support of Alibaba's expansion throughout Eastern China.

In October 2019, we issued 60,000 newly created Class C ordinary shares to Personal Group Limited, a British Virgin Islands company wholly owned by Mr. Sheng Chen, the executive chairman of our board of directors, at a price of US\$1.35 per share, which is equal to the volume weighted average price of the Company's ADSs for the 30 trading days up to and including October 11, 2019, adjusted by the ADS-to-share ratio. This issuance of the newly created Class C ordinary shares is an initiative by us to enhance our ability to execute business strategies over the long term under the leadership of our board and senior management. Class C ordinary shares entitle the holders thereof the same rights as Class A ordinary shares except for veto right on certain corporate matters and conversion right.

On April 13, 2021, we repurchased from Tuspark Innovation Venture Limited ("Tuspark") 48,634,493 Class B ordinary shares for an aggregate purchase price of approximately US\$260 million. The repurchase price is at US\$5.346 per ordinary share, or US\$32.076 per ADS, which is the product of (i) the daily volume weighted average price of the ADSs for the consecutive thirty (30) trading days ended on March 22, 2021, multiplied by (ii) 88%. On the same day, Mr. Wenbin Chen, the director appointed by Tuspark resigned from our board of directors. Immediately following the consummation of the transaction, all of the remaining Class B ordinary shares held by Tuspark have been converted into the same number of Class A ordinary shares of the Company. We have been informed that Tuspark has also agreed to sell and transfer additional ordinary shares to Beacon Capital Group Inc., a company affiliated with Mr. Josh Sheng Chen, at the same price. If this additional share transfer is consummated, Tuspark will retain a small shareholding of less than 5% in the Company.

Our principal executive offices are located at Guanjie Building Southeast 1st Floor, 10# Jiuxianqiao East Road, Chaoyang District, Beijing, People's Republic of China, 100016. Our telephone number is +86(10) 8456-2121. Our registered office is located at Maples Corporate Services Limited, PO Box 309, Uglund House, Grand Cayman, KY1-1104, Cayman Islands. Our agent for service of process in the U.S. is Cogency Global Inc., located at 122 East 42nd Street, 18th Floor, New York, New York 10168.

See Item 4.C, "Organizational Structure" for a diagram illustrating our corporate structure as of the dated of this annual report.

SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC on www.sec.gov. You can also find information on our website <https://ir.21vianet.com/>.

B. Business Overview

We are a leading carrier-neutral and cloud-neutral data center services provider in China. We have one of the largest carrier-neutral data center networks in China with our 32 self-built data centers and 52 partnered data centers with an aggregate capacity of 53,553 cabinets under our management as of December 31, 2020. Our data centers are concentrated in tier-1 cities and their surrounding regions, which have favorable supply-demand dynamics, owing to dense internet traffic, scarce resources and high demand for data center facilities. We had a 10.6% market share in the carrier-neutral data center services market in terms of data center service revenues in 2019, according to Frost & Sullivan.

We are a pioneer in the carrier-neutral data center industry in China and commenced our operations in 1999. We are one of the first carrier-neutral data center services providers in China with infrastructure interconnected with various carrier networks, which connect and share data traffic to help scale the rapid development of the early internet industry in China. Based on our partnership with Microsoft to introduce Azure and Office 365 in China in 2013, we are also the first carrier-neutral data center services provider to offer global cloud services in China and our services have helped accelerate the digital transformation of our enterprise customers.

We offer managed hosting services to host our customers' servers and networking equipment and provide interconnectivity to improve the performance, availability and security of their internet infrastructure. We have adopted a "dual-core" strategy to address both retail and wholesale data center market opportunities. Our managed retail services provide different levels of services that are scalable to meet our customers' needs, from a single cabinet up to megawatt-scale deployments. Our managed wholesale services provide customers with new data center sites constructed and developed by us based on their specified standards. We believe that the scale of our data center footprint and networking assets as well as our carrier- and cloud-neutrality, position us well to capture the vast opportunities in the rapidly expanding market of internet and cloud computing infrastructure services in China.

In addition, we are a first mover among China's carrier-neutral data center service providers in offering cloud services through partnerships to cover public, private and hybrid cloud scenarios. We provide customized enterprise VPN services and solutions, including software-defined wide area network, or SD-WAN, to enterprises across various industries. These value-added services strengthen our capability to provide quality services and meet our customers' additional demands.

With a nationwide data center network and comprehensive service offerings, we have attracted a diversified and loyal customer base. As of December 31, 2020, we had approximately 1,300 customers for our managed hosting services and over 6,000 enterprise customers in total. We also enjoy long-standing relationships with our customers and have high customer retention, as evidenced by our low average monthly hosting churn rate for managed hosting services, which was 0.3%, 0.5% and 0.3% in 2018, 2019 and 2020, respectively.

Our Service Offerings

Through our quality data center network, we offer comprehensive hosting and related services, including:

- *Managed Hosting Services* consisting of managed retail services and managed wholesale services. Our managed retail services include (i) colocation services that dedicate data center space to house our customers' servers and networking equipment and provide tailored server administration services, (ii) interconnectivity services that allow customers to connect their servers with each other, internet backbones in China and other networks through our Border Gateway Protocol, or BGP, network, or our single-line, dual-line or multiple-line networks, and (iii) value-added services, including hybrid IT services, firewall services, server load balancing, data backup and recovery, data center management, server management, and backup server services. To address the wholesale IDC market opportunities, we established a "dual-core" strategy in 2019 to expand our services to managed wholesale services to China's internet giants and large-scale cloud computing service providers. We construct and deliver data centers based on these customers' required specifications and standards;
- *Cloud Services* that allow businesses to run their applications over the internet using our IT infrastructure rather than having the infrastructure on their own premises; and
- *VPN Services* that extend customers' private networks by setting up secure and dedicated connections through the public internet.

Our data centers host the servers of our customers and meet their needs to deploy computing, network, storage and IT infrastructure. Our services are scalable, allowing our customers to purchase space and power and upgrade connectivity and services as their requirements evolve. In addition, our customers benefit from our data centers' wide range of physical security features, including sensitive smoke detection systems, fire suppression systems, secured access, around-the-clock video camera surveillance and security breach alarms. Our data centers are fully-redundant and feature resilient power supplies, energy efficient design, connection with multiple network providers and 24/7 on-site support provided by our skilled engineers. As a result, we are able to provide service-level agreement for 99.99% uptime for power for our self-built data centers. As a carrier-neutral data center service provider, we provide high interconnectivity to our customers with our access to multiple carriers and service providers and the availability of multiple-provider bandwidth. By securing multiple suppliers for connectivity and using redundant hardware, we are able to guarantee 99.9% internet connectivity uptime for our self-built data centers.

Managed Hosting Services

We have been providing managed retail services since the inception of our operations in 1999 and started to provide managed wholesale services in 2019 to implement our “dual-core” strategy that we developed in 2019.

Managed Retail Services. Our managed retail services include colocation services, interconnectivity services, and value-added services.

- *Colocation Services* allow customers to lease partial or entire cabinets for their servers. Our customers have full control over their server(s) housed in our data centers. Depending on customer needs, we provide different levels of tailored server administration services, including operating system support and assistance with updates, server monitoring, server backup and restoration, server security evaluation, firewall services, and disaster recovery. Our customers’ servers are housed in our data centers providing redundant power sources and heating, ventilating and air conditioning systems. Our colocation services relieve customers from the daily pressures of IT infrastructure maintenance so that they can focus on their core businesses. Customers have the option to either place their servers and equipment in standard cabinets dedicated for their private use, or in cabinets shared with other customers. They can customize their cabinet space for their servers, network connections and equipment. Customers can elect to buy the hardware that they place within their cabinets from their chosen suppliers. In addition, customers can also lease power-enabled blank space, where they can place their own cabinets in our data centers or use our services to build their customized cabinet space.
- *Interconnectivity Services* are provided by us in the following ways:
 - *Border Gateway Protocol (BGP) Network Services.* We provide network services that use BGP routing protocol and policies, which allow the internet to become a decentralized system and thereby reduces traffic congestion and data transmission time;
 - *Single-line Network Services.* Some of our customers choose to connect their servers only to one telecommunication carrier in China. Based on their selections, we provide them with network connection to the major telecommunication carriers, including China Telecom, China Unicom and China Mobile; and
 - *Multiple-line Network Services.* As a carrier-neutral service provider, our data centers are connected to all carrier and non-carrier networks in China. Customers then may choose to connect their servers to two or multiple networks, which provides more cost-effective internet access and ensures better business continuity. Our interconnectivity services connect our customers with each other, connect our data centers with telecommunication carriers’ backbone network and other networks. We provide cross-connection services to our customers. Upon the request of the customers, we utilize single or multi-mode fibers to create links between the customers directly and privately.
- *Value-Added Services* are provided by us in the following ways:
 - *Hybrid IT Services.* Our hybrid IT services provide customers with a complete package of infrastructure service offerings, conveniently bundled to expedite the customer’s process to launch their applications and products to the extent possible. In conjunction with our infrastructure-as-a-service, or IaaS, platform, hybrid IT services combine colocation, servers, connectivity, storage and customer services to save IT infrastructure installation time, and provide a complete, reliable, and secured environment for customer’s IT demands. As more customers move their IT resources to the cloud, our cloud-neutral platform will enable our hybrid IT services to provide both private and public cloud services as well as their inter-linked connections;
 - *Private and Hybrid Cloud Services.* We provide private cloud, hybrid cloud and multi-cloud managed services to address enterprises’ needs in aspects of data sovereignty, cost of ownership, and customization through our proprietary technologies and technical integration with selected partners, such as VMWare, Redhat and ZStack; and
 - *Other Value-Added Services.* To complement our hosting services and enhance our customers’ experiences, we also provide other value-added services, including bare metal services, firewall services, server load balancing, data backup and recovery, data center management, server management, and backup server services. In addition, we also provide customers with traffic charts and analysis, gateway monitoring for servers, domain name system setup, defense mechanism against distributed denial of service (DDOS) attacks, basic setting of switches and routers, and virus protections.

Managed Wholesale Services. Our managed wholesale services started in 2019 and provide internet giants and large-scale cloud computing service providers with new data center sites constructed and developed by us. Based on the specific requirements of our customers, we source properties for new data center sites by acquiring or leasing green-field sites or existing industrial buildings from third parties, and then design and, through cooperation with developers, contractors, and suppliers, build the data center facilities with advanced design and high technical specifications. From October 2019 to June 2020, we signed seven memoranda of understandings with Alibaba to construct and deploy Alibaba's data center facilities in Eastern China. As of December 31, 2020, the total capacity commitment from our wholesale customers reached 170 megawatts. We believe our core competency and capabilities, acquired from decade of industry experience in the retail segment, are also applicable and critical when we expand our business into the wholesale segment and develop wholesale data centers.

- *Planning:* We engage with our clients from the site selection and planning stage and choose the sites for wholesale data centers at the strategic locations which fits into our clients' IT infrastructure deployment and provides great access to power and connectivity. Backed by multi-year experience and strong presence in key markets, we are able to conduct in-depth analysis and select the most suitable location based on clients' requirements by acquiring or leasing green-field sites or existing industrial buildings from third parties. Our team works closely with local government authorities to obtain necessary permits and approvals and with electric utilities to obtain sufficient power supply. We also actively cooperate with telecommunication carriers to ensure multi-carrier connectivity to our wholesale data centers.
- *Design:* Leveraging our technological know-how from our internal design teams and a comprehensive data center product portfolio, developing and accumulating through the designs and construction of retail data centers, we are dedicated to ensuring that each of our wholesale data centers meets the specific requirements of our clients and achieves industry leading energy efficiency and operating performance. Our technology strengths, such as advanced cooling technology and power management technology, are integrated due to close collaboration among our internal design team, research and development team and external design institutes.
- *Construction:* We believe our well-established relationships with high quality contractors and suppliers, combined with our specialized construction team consisting of experienced professionals, help us to ensure fast delivery and cost effectiveness in data center construction. As opposed to retail data centers, typically the wholesale data centers are built to suit and customized to fulfill our clients' different technical requirements. Furthermore, our clients require us to deliver wholesale data centers in large volumes within a prescribed construction period.
- *Operations:* We are one of the first carrier neutral data center services providers in China and commenced operations in 1999. Since then, we haven't encountered any disastrous accident over the last 20 years, demonstrating our strong operational expertise. We are able to provide service-level agreement for 99.99% uptime for power and 99.9% uptime for network connectivity for our self-built data centers. Our operational excellence to deliver wholesale data centers with high reliability, availability, security and manageability are sought by our wholesale clients. As a result, operations and management expertise becomes an increasingly important criteria when they select their data center partners.

Cloud Services

We started providing public cloud services in 2013 through our cooperation with Microsoft. Under our cooperation arrangement with Microsoft, we provide Microsoft's cloud services, including Azure, Office 365, Dynamics 365 and Power Platform, to customers in mainland China by entering into service agreements with such end customers.

We provide IaaS, platform-as-a-service, and software-as-a-service, or SaaS, to our enterprise and individual end customers on the public cloud. Microsoft Azure provides our customers with a one-stop shop to purchase a portion of the pooled computing resources, control the applications uploaded to the virtual servers and/or access to the applications run by various operators on the cloud infrastructure, and pay on an on-demand basis. Through Office 365 services, we provide our customers with not only the complete Office applications, but also business-class email, file sharing and HD video conferencing, all working together and connected in the public cloud so that customers can have access to everything they need to run their business from anywhere.

The total customer billing amounts are divided between Microsoft and us and we retain a portion of the total customer billing amounts based on the agreed-upon metrics. All sales amounts from our services to customers are deposited into an escrow account which are jointly administered by Microsoft and us and we settle the payments to Microsoft on a monthly basis. In addition, we are entitled to receive incentive payments from Microsoft upon the completion of certain sales or services conditions. Our current agreement with Microsoft has a term of ten years till 2027.

VPN Services

We offer VPN services, primarily through Dermot Holdings Limited and its subsidiaries, or Dermot Entities, which we acquired in August 2014. Dermot Entities offer customers best-in-class, enterprise-grade network services in numerous cities throughout Greater China and the wider Asia-Pacific region. Dermot Entities provide enterprise network solutions including Multiprotocol Label Switching (MPLS) and Software-Defined WAN (SD-WAN), internet access and network security solutions and are starting to add Cloud & SaaS solutions into the product portfolio. We provide fully managed network enabling connectivity with over 70 POPs across Asia. We are among the first official members of the China Cross-border Data Telecommunications Industry Alliance for being recognized as legally compliant by China's Communications Administration. Additionally, we have been appointed as one of the SD-WAN Services Standard Drafting Units of China Communications Standards Association ("CCSA"). We are among the first ICT service providers in Greater China to obtain several ISO international certifications including ISO/IEC 27001: 2013, ISO/IEC 20000-1: 2018, and ISO 9001: 2015 for information security, IT service management, and quality management, respectively. We also obtained the SD-WAN Ready certificate for overall solutions issued by China Academy of Information and Communications Technology in 2020.

Our Infrastructure

Our infrastructure, which consists of our data centers and data transmission network, is the foundation upon which we provide services to our customers. As of December 31, 2020, we operate 32 self-built data centers and 52 partnered data centers located in tier-1 and their surrounding cities, including all of China's major internet hubs, with 53,553 cabinets under management. Our extensive network, consisting of 165 POPs, is a "high-speed internet railway" that connects our data centers with each other and links them to China's telecommunication backbones.

Our Data Centers

We operate two types of data centers: self-built and partnered. We define "self-built" data centers as those with our owned cabinets, and data center equipment housed in buildings we owned, leased from third parties, or we purchased from third parties. We define "partnered" data centers as the data center space and cabinets we leased from China Telecom, China Unicom and other third parties through agreements. As of December 31, 2020, we operate 32 self-built data centers housing 49,876 cabinets and 52 partnered data centers housing 3,677 cabinets.

The table below sets forth the number of data centers and cabinets under our management as of December 31, 2018, 2019 and 2020, respectively.

	As of December 31,		
	2018	2019	2020
Data Centers			
Self-built	20	26	32
Partnered	38	51	52
Total	58	77	84
Cabinets			
Self-built	25,711	32,047	49,876
Partnered	4,943	4,244	3,677
Total	30,654	36,291	53,553

Our data centers are located in over 20 cities as of the date of this annual report. Our nationwide network of data centers not only enables us to serve customers in extended geographic areas, but also establishes a national data transmission network that sets up connections among carriers and service providers in various locations.

The table below sets forth our portfolio of self-built data centers in service as of December 31, 2020.

	As of December 31, 2020	
	Number of Self-built Data Centers	Cabinets Housed
Beijing	13	Approximately 22,900
Shanghai and Hangzhou	7	Approximately 9,800
Greater Bay Area	5	Approximately 9,300
Satellite cities ⁽¹⁾	2	Approximately 4,350
Others	5	Approximately 3,500
Total	32	Approximately 49,850

⁽¹⁾ Refer to smaller cities that are adjacent to Beijing, Shanghai, Hangzhou and Greater Bay Area.

We build and operate our data centers in compliance with high industry standards in order to provide our customers with secure and reliable environments that are necessary for optimal internet interconnectivity. Our data centers generally feature:

- *Resilient Power*—Redundant, high-capacity and stable power supplies, backed by uninterruptible power supply, or UPS, high-performance batteries and diesel generators;
- *Physical Security*—Round-the-clock monitoring by on-site personnel, which includes verification of all persons entering the building, security barriers, video camera surveillance and security breach alarms;
- *Controlled Access*—Access to the buildings, data floors and individual areas designated for particular customers via individually-programmed access cards and visual identification;
- *Fire Detection and Suppression*—Sensitive smoke detectors linked to building management systems provide early detection to help avoid fire, loss and business disruption. These are complemented by an environmentally-friendly gas-based or water mist fire suppression system to put out fires;
- *Air Conditioning*—To ensure optimal performance and avoid equipment failure, all data center floors are managed to make sure that customers' equipment is maintained at a controlled temperature and humidity; and
- *24/7 Support*—We staff our data centers with capable and experienced service teams and we believe we were the first data center service provider in China to offer 24/7 customer service.

These features minimize chances of interruption to the servers housed in our data centers and ensure the business continuity of our customers. In addition, we believe we were the first data center service provider in China to receive both the ISO 9001 quality system certification by the American Registrar Accreditation Board and a certification by the United Kingdom Accreditation Service.

In March 2017, we signed an investment agreement with Warburg Pincus to establish a multi-stage joint venture and build a digital real estate platform in China. The cooperation was expected to allow us to reduce capital expenditures as Warburg Pincus will take primary responsibilities to build new wholesale data centers. In July 2019, we reached a supplemental agreement with Warburg Pincus to restructure the partnership. Pursuant to the agreed restructuring arrangement, one of the joint ventures has distributed its assets and projects to us and to Princeton Digital Group (PDG), a Warburg Pincus-backed company, on a pro rata basis in principle, respectively. After distribution, we obtained 100% ownership of a project under development in the Shanghai Waigaoqiao Free Trade Zone, as well as a certain amount of cash. In addition, we and Warburg Pincus have (i) adjusted the existing holding structure for operating the current projects, and (ii) jointly established an additional holding vehicle for sourcing and developing new projects in China. All the projects under our cooperation with Warburg Pincus are operated at our self-built data centers.

Our Network

Our network transmits data and directs internet traffic, forming an internet highway system that is linked to the networks of major carriers, non-carriers and ISPs and enhances communications among our data centers, our customers and end users located throughout China and around the world. As of December 31, 2018, 2019 and 2020, our network connected 172, 165 and 165 POPs throughout China.

Our network also features numerous interfaces with four telecommunication carriers in China, which are China Telecom, China Unicom, China Mobile and China Education Network. Our network is not only connected to the headquarters of each carrier, but also with their local networks throughout China.

Due to our high-quality data center infrastructure, extensive data transmission network and proprietary smart routing technologies, we are able to deliver high-performance hosting and related services that can effectively meet our customers' business needs, improve interconnectivity among service providers and end users, and effectively address the issue of inadequate network interconnectivity in China.

Customers and Customer Support

Our Customers

We serve a diversified and loyal base of customers, depending on the different types of services provided by us, our customers include (i) enterprise customers for our hosting and related services, and (ii) individual customers who signed up for the Microsoft Azure, Office 365, Dynamics 365 and Power Platform services. As of December 31, 2020, we had over 6,000 enterprise customers, of which approximately 1,300 customers are using our managed hosting services. Our enterprise customers represent a variety of industry verticals with different business scale, ranging from information technology and cloud services, telecommunication carriers, communications and social networking, online education, gaming and entertainment, consumer retail to financial services and government agencies, as well as from blue-chip enterprises to small- to mid-sized enterprises.

We have a loyal customer base, as evidenced by our low churn rate. Our average monthly hosting churn rate, based on our core IDC business, was 0.3%, 0.5%, and 0.3% in 2018, 2019 and 2020, respectively. Our average monthly recurring revenue from our top 20 customers were RMB105.9 million, RMB110.3 million, RMB140.3 million (US\$21.5 million) in 2018, 2019 and 2020, respectively.

Our experience in serving market leaders in various sectors also provides us with industry knowledge, operational expertise and credibility that we can leverage in cross-selling additional services to our existing and potential customers.

Customer Support

We devote significant resources to provide customers support and services through our dedicated customer service team. We offer service level agreements on most of our services to our customers. Such agreements set the expectations on service level between our customers and us and drive our internal process to meet or exceed the customer's expectations. We believe we were the first data center service provider in China to offer 24/7 customer services. Our network operation center is staffed with skilled engineers trained in network diagnostics and engineering. We require our staff to respond to calls or request from customers within 15 minutes. For major customers, we have a dedicated team to offer specialized services tailored to their specific needs. Areas of customer support include design and improvement of our customers' IT infrastructure and network optimization.

Our customers may directly contact the customer service team to seek assistance or inquire about the status of a reported incident. The team actively follows up with our operations team to help ensure that the problems are addressed in an effective and timely manner. Each of our customers is assigned a service manager who is responsible for ensuring that all our services are performed in a satisfactory manner.

Technologies and Intellectual Property

Innovative Solutions and Services

We offer a comprehensive suite of solutions with cutting-edge technologies for customers, and continually expand our service offerings to provide full stack solutions consisting of interconnectivity, colocation or data center managed hosting services and cloud services. Examples of our innovative products and services include:

- *Hybrid IT service:* We are the first among data center services providers in China to provide hybrid IT services since March 2015. Our hybrid IT services are designed to be connected to customers' existing operating systems and achieve real-time response to customers' IT requests. Our hybrid IT services cover computing and storage of data, facility management and maintenance, as well as operation support, which can effectively meet the growing IT outsourcing demand of enterprise customers due to the increasing complexity of IT requirements resulting from new technologies and applications;

- *Bare metal services:* We developed our proprietary bare metal services technology in August 2018. Our bare metal services can be integrated with high-quality BGP, VPN and other services provided by us. Our bare metal services are based on automated operation and maintenance technologies and can be delivered to customers through the cloud platform on a fully automated basis without manual operations. It is equipped with security modules and network functions which can be integrated with other cloud services and network services provided by us; and
- *Hybrid cloud management platform:* In order to provide superior cloud management services under various cloud scenarios to its customers, we developed a proprietary cloud management platform in June 2019. This platform can manage major public clouds and private clouds on a centralized basis and connect to our self-developed bare metal services, hybrid IT services, SD-WAN and other services to achieve one-stop multi-cloud management service capability. Our hybrid cloud management platform enables the customers to manage all the services, products and resources provided by us, including private cloud, public cloud, enterprise virtual data centers, enterprise hosted private cloud, bare metal services, as well as underlying data center and network connectivity services, on a centralized basis. Data analytics can be performed based on the information collected, which we believe can realize the value of customers' data assets.

Technologies for Data Centers

We have implemented many technologies in designing and constructing our data centers, such as power transfer switch, cooling, lighting and energy recycling technologies, to improve the electricity power consumption and energy efficiency of our data centers. We are the first data center services provider that passed the ISO50001: 2011 Energy Management System Certification in 2017. One of our data centers in Beijing, M6 data center, is among the first national green data centers named by Chinese Institute of Electronics in 2018. We also apply heat recovery technologies at certain of our data centers to recover the waste heat from the exhaust of data centers to generate domestic hot water, which have improved our data center's energy efficiency.

With the vision to build artificial intelligence defined data centers, we intend to develop artificial intelligence for IT operations platform which utilizes big data, modern machine learning and other advanced analytics technologies to enhance IT operation functions for our data centers. Such platform can collect a variety of data from various IT operations tools and device to aggregate data (such as that in monitoring systems and job logs) and then applies machine learning and advanced analytics on such data in order to automatically spot and react to issues. For example, our analytical data warehouse can analyze the working condition of data centers' cooling systems to build a model which provides optimization solutions enabling us to lower operating costs and achieve environmentally friendly operations.

Research and Development and Intellectual Property

Our strong research and development capabilities support and enhance our service offerings. We have an experienced research and development team and devote significant resources to our research and development efforts, focusing on improving customer experience, increasing operational efficiency and bringing innovative solutions to the market quickly.

We have made continual investments and trainings for research and development to drive our growth in both mature and emerging businesses. We incurred RMB92.1 million, RMB88.8 million and RMB112.9 million (US\$17.3 million) in research and development expenses for the years ended December 31, 2018, 2019 and 2020, respectively. As of December 31, 2020, our experienced research and development team consisted of 125 engineers, many of whom have more than 10 years of relevant industry experience.

Our research and development efforts have yielded 75 patents, 80 patent applications and 161 software copyright registrations as of December 31, 2020, all in China and focused on the areas including (i) energy saving technology, (ii) data center design and facility maintenance and operations, (iii) network operation and maintenance management, (iv) cloud-related technologies, and (v) edge computing and blockchain.

We rely on a combination of copyright, patent, trademark, trade secret and other intellectual property laws, nondisclosure agreements and other protective measures to protect our intellectual property rights. We generally control access to and use of our proprietary software and other confidential information through the use of internal and external controls, including physical and electronic security, contractual protections, and intellectual property law. We have implemented a strict security and information technology management system, including the prohibition of copying and transferring of codes. We educate our staff on the need to, and require them to, comply with such security procedures. We also promote protection through contractual prohibitions, such as requiring our employees to enter into confidentiality and non-compete agreements.

Sales and Marketing

We actively market our services and solutions through our direct sales force and we use a mix of horizontal and vertical segmentation strategies to divide the market into groups with similar characteristics. Horizontal segmentation is used for products or solutions such as retail colocation, interconnection, bare metal services, and generic hybrid cloud managed services which are applicable to most of the enterprise customers. For more industry specific solutions, we employ vertical segmentation for wholesale build-outs, wholesale colocation as well as customized hybrid cloud managed services. Our teams focus on key customers within each of the focus industries, including public cloud, financial, media and online education. Our sales and marketing teams are primarily based in Beijing, Shanghai, Shenzhen, Guangzhou, Hangzhou, Xi'an, Hong Kong and Taiwan. Aside from standard products, we are also leveraging and embedding our ecosystem's offerings to provide turnkey hybrid cloud solutions for our key customers.

Our strong brand recognition, neutrality positioning, and large customer installed base have proven to be the important driving force for our sales. To strengthen our brand, we focus our marketing efforts on sponsoring seminars, conferences and special events to raise our profile with potential customers. In addition, we collaborate with various partners either on solution integration or "go to market" alignment to accelerate customers' digital transformation. Our sales and marketing staffs are not just focused on demand generation but also equally focus on providing high quality customer services to proactively retain existing customers.

Competition

We face competition from a wide range of data center service providers and other value-added service providers, including:

- *Carriers.* We face competition from state-owned telecommunication carriers, including China Telecom and China Unicom. According to Frost & Sullivan, carrier-operated data centers took a share of 44.1% of the data center services market in 2019. In addition, both carriers operate their own networks. Competition is primarily focused on pricing, quality of services and geographic coverage. We believe we are well-positioned to compete with major carriers. Unlike China Telecom and China Unicom, which construct data centers primarily to promote the sales of bandwidth, we provide connectivity to multiple networks in each of our carrier-neutral data centers, providing superior choice and performance. Our private network provides enhanced connectivity among different networks. In comparison, data centers operated by China Telecom and China Unicom generally provide access only to their own network and are often constrained by their networks' coverage. Due to inadequate interconnectivity among China's carriers' networks and among the same carrier's networks in different provinces, interconnectivity bottlenecks remain a major problem, contributing to slow transmission speeds across services and applications.
- *Carrier-neutral service providers.* We face competition from other carrier-neutral service providers, such as SINNET and GDS. Competition is primarily focused on pricing and the quality and breadth of service offerings. We distinguish ourselves by our superior interconnectivity, extensive data transmission network, large number of high-quality data centers, and superior operations, maintenance and other customer services. Due to the unique nature of data center services, where relocation of customer servers and equipment is operationally difficult, customers are highly selective in choosing their data center service provider. Our strong brand, superior reputation and extensive operating experience and expertise remain the key differentiator in attracting and retaining our customers.
- *In-house data centers.* Businesses may choose to house and maintain their own IT hardware, such as Baidu and Alibaba, and other large enterprises, particularly in the financial services sector. Due to their in-house capabilities, these customers may outsource fewer services to other third-party data center services providers including us, if at all. However, we believe our data centers, coupled with our superior network services, offer a unique combination of hosting services that would make us attractive to businesses with in-house data centers.
- *Cloud service providers.* Cloud services are a new and emerging market and therefore, we face competition from various market players who have entered into or plan to enter into the new market. In partnership with Microsoft, we offer cloud services, including Microsoft Azure, Office 365, Dynamics 365 and Power Platform, in China. We compete with domestic Chinese cloud service providers, such as Alibaba Cloud and Tencent Cloud, as well as international cloud services which are operated by other data center service providers in China, such as AWS. We believe our partnerships with Microsoft will make us attractive to potential customers, especially enterprise and government entity customers that have a strong demand for cloud services.

- *Other value-added service providers.* We face competition from other value-added telecommunications service providers including VPN service providers, such as Citic Telecom CPC. As one of the leading service providers in each one of these value-added service markets, we believe our offerings not only complement our core hosting services, but also position us to capture additional growth opportunities.

We do not currently compete with data center service providers located in Hong Kong and overseas, but we may compete with them if we expand our service offerings beyond China. We believe that there are currently no foreign competitors with a significant presence in the data center services market in China, partly due to the regulatory barriers in China's telecommunications sector. As China represents a potentially lucrative market for foreign competitors, some foreign providers may seek to enter the Chinese market. In addition, as we expand our service offerings, such as cloud services, we expect to face more competition in those areas as well.

Our Environmental, Social and Governance (ESG) Initiatives

As a leading carrier-neutral and cloud-neutral data center services provider in China, we are committed to corporate social responsibility and meeting society's changing needs despite the challenging economic environment. We focus on environmental, social and governance communications and management mechanism to improve working environment of our employees. We also explore multi-dimensional use cases for our technology, to empower traditional industries with our capabilities and to promote a healthier lifestyle and the long-term sustainability of our society.

Green Data Centers

We are a strong supporter of green data centers. We have set PUE target for each of our data centers. Through the use of natural sources, conversion equipment, independent dehumidifiers, and heat recovery systems, we implement our environmentally sustainable policies and initiatives. Moreover, we are dedicated to reducing carbon footprint generated by our data centers by sourcing renewable energy. As a result of these measures, we achieved an average PUE reduction of 2% in 2020 compared to that in 2019. Three of our data centers are named as national green data and are among the first few data centers in China to obtain such certification.

Corporate Behavior

We have been making continuous efforts to comply with all applicable laws and regulations affecting our business. To set up an effective risk prevention and control mechanism, we have established three lines of defense for risk management to clarify specific control procedures of various risks. We have also formulated a series of anti-corruption policies, including management measures on integrity talk and integrity inspection, and letter of commitment to anti-commercial bribery, to guide our employees. To encourage reporting of any non-compliant behaviors, we have established a complete anonymous reporting system and anti-corruption training programs. For the year ended December 31, 2020, 85.8% of our employees have completed anti-corruption related trainings and 99% of our suppliers have signed our letter of commitment to anti-commercial bribery.

Organizational Development

Our employees are our most important asset. We provide our employees with career development programs including training course for new joiners, entry level employee and middle level team leaders. In 2020, more than two thousand of our employees have participated in our training programs, recording a total of approximately 50,000 training hours. In addition, we encourage and support employees to obtain external certificates to improve their skills and competitiveness.

We also care about our employees' wellbeing. We provide a multitude of benefits to our employees and their family members, such as supplementary medical insurance, maternity rooms for female employees and regular sports activities.

Data Privacy and Data Security

As a reputable company serving a large community of users, we consider data privacy a crucial part of our service quality. We comply with the privacy protection requirement of ISO27018 Protection of Personally Identifiable Information in Public Cloud and have adopted a series of measures to keep track of personally identifiable information. We utilize a set of technologies to protect our customers' data, such as remote data recovery, encrypted transmission and firewall application. For the year ended December 31, 2020, we did not report any data leaking incidents.

Social Responsibility

We strive to utilize our advantages and resources to the society we live in. During the COVID-19 pandemic, we donated anti-epidemic materials to front-line doctors to minimize virus infection. We also provide donations and essential daily supplies to charities and education funds to make our community a better place.

Regulations

This section sets forth a summary of the most significant rules and regulations that affect our business activities in China.

Regulations on Foreign Investment

Investment activities in China by foreign investors are principally governed by the Catalog of Industries for Encouraging Foreign Investment, or the Encouraging Catalog, and the Special Management Measures (Negative List) for the Access of Foreign Investment, or the Negative List which were promulgated and are amended from time to time by the Ministry of Commerce, or MOFCOM, and the National Development and Reform Commission, or NDRC, and together with the PRC Foreign Investment Law, or the Foreign Investment Law, and their respective implementation rules and ancillary regulations. The Encouraging Catalog and the Negative List lay out the basic framework for foreign investment in China, classifying businesses into three categories with regard to foreign investment: “encouraged”, “restricted” and “prohibited.” Industries not listed in the Catalog are generally deemed as falling into a fourth category “permitted” unless specifically restricted by other PRC laws.

On June 23, 2020, the MOFCOM and the NDRC jointly published the Special Administrative Measures for Market Access of Foreign Investment 2020, which became effective on July 23, 2020 and replaced the negative list that was published by the MOFCOM and the NDRC on June 30, 2019 and became effective on July 30, 2019. On December 27, 2020, the MOFCOM and the NDRC jointly published the Catalog of Industries for Encouraging Foreign Investment (2020 Version), which became effective on January 27, 2021 and replaced the previous encouraging catalog that was published by the MOFCOM and the NDRC on June 30, 2019 and became effective on July 30, 2019.

On January 1, 2020, the Foreign Investment Law, as well as the Regulations for Implementation of the Foreign Investment Law of the PRC, or the Implementation Regulations, came into effective, which replaced the trio of prior laws regulating foreign investment in China, namely, the Sino-foreign Equity Joint Venture Enterprise Law, the Sino-foreign Cooperative Joint Venture Enterprise Law and the Wholly Foreign-invested Enterprise Law, together with their implementation rules and ancillary regulations, and became the principal regulations governing foreign investment in China.

Pursuant to the Foreign Investment Law, “foreign investment” refer to investment activities directly or indirectly conducted by one or more natural persons, business entities, or otherwise organizations of a foreign country (collectively referred to as “foreign investor”) within China, and the investment activities include the following situations: (i) a foreign investor, individually or collectively with other investors, establishes a foreign-invested enterprise within China; (ii) a foreign investor acquires stock shares, equity shares, shares in assets, or other like rights and interests of an enterprise within China; (iii) a foreign investor, individually or collectively with other investors, invests in a new project within China; and (iv) investments in other means as provided by laws, administrative regulations, or the State Council. According to the Foreign Investment Law, the State Council will publish or approve to publish a catalogue for special administrative measures, or the “negative list.” The Foreign Investment Law grants national treatment to foreign invested entities, except for those foreign invested entities that operate in industries deemed to be either “restricted” or “prohibited” in the “negative list.” The Foreign Investment Law provides that foreign invested entities operating in foreign restricted or prohibited industries will require market entry clearance and other approvals from relevant PRC governmental authorities. Furthermore, the Foreign Investment Law provides that foreign invested enterprises established according to the existing laws regulating foreign investment may maintain their structure and corporate governance within five years after January 1, 2020.

The Implementation Regulations further provides, among other, that (i) if a foreign-invested enterprise incorporated prior to January 1, 2020 fails to adjust its corporate governance structure and other matters to be in compliance with the Companies Law of the PRC or the Partnership Enterprises Law of the PRC, as the case may be, and complete registration for amendments before January 1, 2025, the relevant governmental authority may no longer accept any other registration matters of such foreign-invested enterprise; and (ii) as for any foreign-invested enterprise incorporated prior to January 1, 2020, the provisions regarding equity interest transfer and distribution of profits, as agreed in its joint venture contracts, may remain effective and binding after its adjustment of corporate governance structure and other matters in accordance with the Companies Law of the PRC or the Partnership Enterprises Law of the PRC, as the case may be.

The NDRC and the MOFCOM jointly promulgated the Measures for the Security Review of Foreign Investment, on December 19, 2020, which became effective on January 18, 2021. Pursuant to the Measures for the Security Review of Foreign Investment, the NDRC and the MOFCOM will establish a working mechanism office in charge of the security review of foreign investment, and any foreign investment which has or would possibly have an impact on the national security shall be subject to security review by such working mechanism office. The Measures for the Security Review of Foreign Investment further requires that a foreign investor or its domestic affiliate shall apply for clearance of national security review with the working mechanism office before they conduct any investment into any of the following fields: (i) investment in the military industry or military-related industry, and investment in areas in proximity of defense facilities or military establishment; and (ii) investment in any important agricultural product, important energy and resources, critical equipment manufacturing, important infrastructure, important transportation services, important cultural products and services, important information technologies and internet products and services, important financial services, critical technologies and other important fields which concern the national security where actual control over the invested enterprise is obtained.

Regulations on Value-Added Telecommunications Business

Value-added Telecommunications Services

Pursuant to the PRC Telecommunications Regulations, or the Telecom Regulations, implemented on September 25, 2000, as amended on July 29, 2014 and February 6, 2016, telecommunications service providers are required to procure operation licenses prior to their commencement of operations. The Telecom Regulations distinguish “basic telecommunications services” from “value-added telecommunications services.” Value-added telecommunications services are defined as telecommunications and information services provided through public networks. A “Catalog of Telecommunications Business”, or the Catalog, was issued as an attachment to the Telecom Regulations to categorize telecommunications services as either basic or value-added. Pursuant to the currently effective Catalog, which was most recently amended in June 2019, value-added telecommunications services are divided into type I value-added telecommunications services (i.e. services “mainly based on facilities and resources”) and type II value-added telecommunications services (i.e. services “mainly based on public platforms”) and they will be regulated accordingly. For example, value-added telecommunications services (e.g. internet data center services (“IDC Service”), content distribution network services (“CDN Service”), domestic internet protocol virtual private network services, and internet access services (“ISP Service”) which are primarily provided to enterprise users, closely attached to basic infrastructure and telecom resources, and have significant importance to national information security and public order, are categorized as type I value-added telecommunications services. Value-added telecommunications services (e.g. online data processing and transaction processing services and information services), which are mainly provided to the general public, have significant economic benefits, and are closely related to consumer rights and privacy protection are categorized as type II value-added telecommunications services.

Pursuant to the Telecom Regulations, value-added telecommunications services covering two or more provinces, autonomous regions, and/or municipalities directly administered by the central government shall be approved by the Ministry of Industry and Information Technology, or the MIIT, and the providers of such cross-regional value-added telecommunications services are required to obtain the cross-regional value added telecommunications business operation licenses, or the Cross-Regional VAT Licenses. Value-added telecommunications services covering certain area within one province, autonomous region, and/or municipality directly administered by the central government shall be approved by the local telecommunications administration authority of such region and the providers of such value-added telecommunications services are required to obtain value-added telecommunications business operating licenses, or the VAT Licenses. Pursuant to the Administrative Measures for Telecommunications Business Operating Licenses effective on July 3, 2017 and as amended from time to time, promulgated by the MIIT, Cross-Regional VAT licenses shall be approved and issued by the MIIT with five-year terms.

As of the date of this annual report, all of our principal operating entities that are required to obtain Cross-Regional VAT License, pursuant to applicable PRC laws and regulations, have obtained such licenses.

For example, pursuant to the Cross-Regional VAT License issued to 21Vianet Beijing, by the MIIT on January 17, 2012 (which was most recently updated on March 18, 2020) with a term effective until January 23, 2022, 21Vianet Beijing is permitted to carry out its(i) full data center business under the first category of “value-added telecommunications business” across two province-level municipalities and four cities in China; (ii) data center business (excluding internet resources coordination service) under the first category of “value-added telecommunications business” across two province-level municipalities and 20 cities in China; (iii) VPN services under the first category of “value-added telecommunications business” across China; (iv) internet access service under the first category of “value-added telecommunications business” across 13 province-level municipalities and provinces in China, and internet access service (solely providing services for website users) under the first category of “value-added telecommunications business” across six provinces in China; (v) domestic multi-party communications services under the second category of “value-added telecommunications business” across China; and (vi) domestic data transmission services through fixed network under the second category of “basic telecommunications business” across China.

Pursuant to the Cross-Regional VAT License issued to BJ iJoy by the MIIT on October 23, 2019 with a term effective until May 6, 2024, BJ iJoy is permitted to carry out its (i) data center business (excluding internet resources coordination service) under the first category of “value-added telecommunications business” across two province-level municipalities and one city in China; (ii) VPN services under the first category of “value-added telecommunications business” across three province-level municipalities and provinces in China; (iii) internet access service under the first category of “value-added telecommunications business” across three province-level municipalities and provinces in China; and (iv) information service business (excluding internet information service) under the second category of “value-added telecommunications business” across China. In addition, pursuant to the VAT License issued to BJ iJoy by Beijing Communications Administration on November 20, 2019 with a term effective until October 8, 2023, BJ iJoy is permitted to carry out the information service business (limited to internet information service) under the second category of “value-added telecommunications business.”

Pursuant to the Cross-Regional VAT License issued to 21Vianet Technology by the MIIT on June 11, 2020 with a term effective until June 20, 2023, 21Vianet Technology is permitted to carry out its internet access service under the first category of “value-added telecommunications business” across three province-level municipalities and provinces in China.

Pursuant to the Cross-Regional VAT License issued to SZ DYX by the MIIT on September 18, 2013 (which was updated on July 17, 2019) with a term effective until June 4, 2023, SZ DYX is permitted to carry out (i) VPN services under the first category of “value-added telecommunications business” in China; (ii) call center business under the second category of “value-added telecommunications business” across China; (iii) data center business under the first category of “value-added telecommunications business”, which covers the services in Beijing, Shanghai and Shenzhen; (iv) data center business (solely providing internet resources coordination service) under the first category of “value-added telecommunications business”, which covers the services in six cities in China; (v) internet access service under the first category of “value-added telecommunications business” across three province-level municipalities and provinces in China; and (vi) internet access service (solely providing services for website users) under the first category of “value-added telecommunications business” across 28 province-level municipalities and provinces in China.

Pursuant to the VAT License issued to SH Blue Cloud by Shanghai Communications Administration on October 20, 2017 (which was updated on October 25, 2019 to revise the categories of permitted business) with a term effective until October 20, 2022, SH Blue Cloud is permitted to carry out (i) information service business (limited to internet information service) under the second category of “value-added telecommunications business”; (ii) online data processing and transaction processing service (solely providing for e-commerce services) under the second category of “value-added telecommunications business”; and (iii) internet domain name resolution service under the second category of “value-added telecommunications business” in Shanghai. In addition, SH Blue Cloud obtained the Cross-Regional VAT License issued by the MIIT on July 10, 2020 with a term effective until January 21, 2025, pursuant to which SH Blue Cloud is permitted to carry out (i) fixed network domestic data transmission business under the second category of “basic telecommunications business” across China; (ii) data center business under the first category of “value-added telecommunications business” in Beijing and Shanghai; (iii) CDN service under the first category of “value-added telecommunications business” in Beijing and Shanghai; (iv) VPN services under first category of “value-added telecommunications business” in Beijing and Shanghai; (v) internet access service under the first category of “value-added telecommunications business” in Beijing and Shanghai; (vi) domestic multi-party communications services under the second category of “value-added telecommunications business” across China; and (vii) information service business (excluding internet information service) under the second category of “value-added telecommunications business” across China.

Internet Access Services

The MIIT promulgated the Circular on Further Regulating Market Access of IDC Service and ISP Service in 2012, or the Circular 552, which further stipulates the detailed requirements on capital, personnel, facility and equipment for conducting IDC Service and ISP Service business. On January 17, 2017, the MIIT further promulgated the Circular on Clearing Up and Regulatory the Internet Access Service Market, which emphasizes the requirements as specified under Circular 552 and prohibits business operation without licenses, business operation beyond permitted territorial scope and business scope set forth on the licenses and “multi-level sublease” in the market with respect to IDC Service, ISP Service and CDN Service. The IDC and ISP service providers shall not sublease the IP addresses, bandwidth or other network access resources they have obtained from basic telecommunication operators in the PRC to other enterprises for operating businesses of IDC Service, ISP Service or other business. In addition, enterprises engaged in the businesses of IDC Service, ISP Service or CDN Service shall conduct comprehensive self-inspection, rectify violations of the relevant regulations in a timely manner to ensure their business operations are in compliance with the applicable laws and regulations and the network facilities and network access resources are used in a compliant manner. The regulatory authorities shall urge enterprises in violation of the relevant regulations to make rectifications in a timely manner and take stern actions in accordance with the laws against the enterprises that refuse to make such rectifications, and such enterprises may fail to pass the annual inspection, may be included in the enterprise list of bad credit record, or the licenses or permits of such enterprises may not be renewed upon expiration and their cooperation with the basic telecommunications operators may be adversely affected under serious circumstances.

Pilot Scheme for Broadband Access Business

The MIIT initiated a periodical pilot scheme for broadband access business by issuing the Notice on Liberalizing the Broadband Access Market to Private Capital on December 25, 2014, pursuant to which, the qualified private sector enterprises are encouraged, but not required, to apply to participate in the pilot scheme in broadband access business and the pilot scheme lasts for 3 years commencing on March 1, 2015. From 2015 to 2017, MIIT issued a series of notices in succession to expand the pilot scheme to all cities in nine provinces and several designated on June 19, 2018 to extend the effective period of the pilot scheme to December 31, 2020 and further expand the pilot scheme to all cities in fourteen provinces and several designated cities in other provinces. As of the date of this annual report, we are qualified to provide broadband access services in Beijing.

Energy Conservation of Internet Data Centers

On January 21, 2019, the MIIT, National Government Office Administration and National Energy Administration jointly published the Guidance on Promotion of Green Data Center, pursuant to which authorities encourage data centers to adhere to certain average levels of energy conservation and aim to reach several goals including, among others, maintaining the power usage effectiveness (PUE) of newly constructed large and extra-large data centers at or below 1.4 from the year 2022 onward. On September 6, 2018, the General Office of the People's Government of Beijing Municipality, or the GOPGB, issued the Beijing Municipality's Catalogue for the Prohibition and Restriction of Newly Increased Industries (2018 Edition), or the 2018 Catalogue, which is a revised edition of the catalogue GOPGB issued in 2015. The 2018 Catalogue prohibits new construction or expansion within Beijing's certain areas of (i) data centers which are involved in providing Internet data services or information processing and storage support services, except for cloud computing data centers with PUE lower than 1.4, and (ii) call centers. Furthermore, new construction or expansion of data centers which are involved in providing Internet data services or information processing and storage support services with PUE lower than 1.4 is also prohibited within the boundaries of Beijing's Dongcheng District, Xicheng District, Chaoyang District, Haidian District, Fengtai District, Shijingshan District and Tongzhou New Town. On January 2, 2019, Shanghai Municipal Commission of Economy and Information and Shanghai Municipal Development and Reform Commission jointly published the Guidance on Strengthening the Coordinated Construction of the Internet Data Center in Shanghai Municipality, pursuant to which, authorities encourage to effectively control the construction scale and energy consumption gross of Internet data centers and aim to reach several goals including, among others, the PUE of newly constructed Internet data center shall be strictly controlled below 1.3, and the PUE of reconstructed Internet data center shall be strictly controlled below 1.4, from the year 2020 onward.

Regulations on Foreign Investment in Telecommunications Enterprises

The PRC government imposes limitations on the foreign ownership of PRC companies that engage in telecommunications-related business. Pursuant to the Administrative Rules for Foreign Investments in Telecommunications Enterprises, or the Foreign Investment Telecommunications Rules, issued by the PRC State Council on December 11, 2001 and effective on January 1, 2002, which was further amended on February 6, 2016, a foreign investor is currently prohibited from owning more than 50% of the equity interest in a PRC company that engages in value-added telecommunications business, and the major foreign investor of a telecommunication business in China must also have experience and a sound track record in providing value-added telecommunications services overseas. Although the Guidance Catalog of Industries for Foreign Investment, as amended in 2017, and the Special Administrative Measures for Market Access of Foreign Investment 2020 allow a foreign investor to own more than 50% of the total equity interest in e-commerce business, domestic multi-party communications services, information storage and re-transmission services, and call center services, other requirements provided by the Foreign Investment Telecommunications Rules (such as the track record and experience requirement for a major foreign investor) still apply. Foreign investors that meet these requirements must obtain approvals from the MIIT, which retain considerable discretion in granting approvals.

The Circular on Strengthening the Administration of Foreign Investment in and Operation of Value-Added Telecommunications Business issued by the MIIT on July 13, 2006, among others, requires a foreign investor to set up a foreign investment enterprise and obtain an operating permit in order to carry out any value-added telecommunications business in China. Under this circular, a domestic value-added telecommunications service operator that holds a VAT license is prohibited from leasing, transferring or selling such license to foreign investors, and from providing any assistance in the form of resources, sites or facilities to foreign investors that conduct value-added telecommunications business illegally in China. Furthermore, the relevant trademarks and domain names that are used in the value-added telecommunications business of domestic operators must be owned by such domestic operators or their shareholders. The circular further requires each VAT license holder to have the necessary facilities for its approved business operations and to maintain such facilities in the regions covered by its VAT license. In addition, all value-added telecommunications service operators are required to maintain network and information security in accordance with the standards set forth under relevant PRC regulations.

On January 12, 2017, the State Council issued the Notice on Several Measures for Expansion of Opening-up Policy and Active Use of Foreign Capital, or the Notice No. 5, which purports to relax restrictions on foreign investment in sectors including services, manufacturing and mining. Specifically, the Notice No. 5 proposes to gradually open up telecommunication, Internet, culture, education and transportation industries to foreign investors. However, there are still substantial uncertainties with respect to the implementing rules and regulations of Notice No. 5.

In February 2019, the State Council published its approval of Fully Promoting the Comprehensive Pilot Program for Expanding the Opening Up of Service Industry in Beijing, pursuant to which Beijing will lift foreign ownership limits on internet access service industry (only the service of providing users with internet access) in certain pilot zones in Beijing. Nevertheless, since this approval is recently published and the local authorities in Beijing has not promulgated any implementing rules or guidelines as of the date of this annual report, it remains uncertain as to the interpretation and implementation of this new policy in many aspects, such as whether the abovementioned requirements provided by the Foreign Investment Telecommunications Rules for a major foreign investor and the MIIT approval will still apply in Beijing.

Regulations on Internet Security

On November 7, 2016, the Standing Committee of the National People's Congress promulgated the Cyber Security Law of the PRC, which became effective on June 1, 2017. Pursuant to the Cyber Security Law, internet operators must comply with applicable laws and regulations and fulfill their obligations to safeguard network security in conducting business and providing services. Internet operators must take technical and other necessary measures as required by laws and regulations to safeguard the operation of networks, respond to network security effectively, prevent illegal and criminal activities, and maintain the integrity, confidentiality and usability of network data. In addition, the Cyber Security Law requires internet operators to formulate contingency plans for cyber security incidents, and initiate relevant contingency plans, take corresponding remedial measures and report to the competent departments upon occurrence of any incident endangering cyber security.

In September 2016, the General Office of the MIIT issued a Trial Administrative Measures on the Use and Operation Maintenance of Internet Information Security Management System, which, among others, regulates the operation and maintenance of the information security management system established or used by an operator of telecommunication business such as IDC Service, CDN Service or ISP Service. Pursuant to these administrative measures, the relevant telecommunication operator is obligated to monitor the information transmitted through its internet information security management system and take timely measures to deal with information that is prohibited to be published or transmitted. Moreover, it must preserve access log record with the internet information security management system according to relevant laws and industry standards, and provide the record for examination upon request from the authorities. It must also take necessary measures to maintain and safeguard the normal operation of its internet information security management system.

In November 2017, MIIT promulgated the Circular on Regulating the Use of Domain Names for Internet Information Services, which became effective on January 1, 2018. Pursuant to this circular, the ISP service provider must verify the identity of each internet information service provider. If the internet information service provider fails to provide its true and accurate identity information, the ISP service provider is prohibited from providing ISP Services to it. In addition, the ISP service provider is required to regularly check the status of domain names used by the internet information service providers, and if relevant domain name is invalid and the real identity information of the user is absent, it should cease providing ISP Services.

Regulations on Intellectual Property Rights

Patent Law

According to the PRC Patent Law (2008 Revision), the State Intellectual Property Office is responsible for administering patent law in China. The patent administration departments of the provincial, autonomous region, or municipal governments are responsible for administering patent law within their respective jurisdictions. The PRC patent system adopts a first-to-file principle, which means that when more than one person files different patent applications for the same invention, only the person who files the application first is entitled to obtain a patent of the invention. To be patentable, an invention or a utility model must meet three criteria: novelty, inventiveness, and practicability. A patent is valid for twenty years in the case of an invention and ten years in the case of utility models and designs.

Regulations on Copyright

The PRC Copyright Law, which became effective on June 1, 1991 and was amended in 2001 and in 2010, provides that Chinese citizens, legal persons, or other organizations own copyright in their copyrightable works, whether published or not, which include, among others, works of literature, art, natural science, social science, engineering technology, and computer software. Copyright owners enjoy certain legal rights, including right of publication, right of authorship, and right of reproduction. The Copyright Law as revised in 2010 extends copyright protection to Internet activities, products disseminated over the Internet, and software products. In addition, the Copyright Law provides for a voluntary registration system administered by the China Copyright Protection Center. Pursuant to the Copyright Law, an infringer of copyrights is subject to various civil liabilities, which include ceasing infringement activities, apologizing to the copyright owners, and compensating the loss of the copyright owners. Infringers of copyright may also be subject to fines and/or administrative or criminal liabilities in severe situations.

Pursuant to the Computer Software Copyright Protection Regulations promulgated by the State Council on December 20, 2001 and amended on January 30, 2013, the software copyright owner may go through the registration formalities with a software registration authority recognized by the State Council's copyright administrative department. The software copyright owner may authorize others to exercise that copyright and is entitled to receive remuneration.

Trademark Law

Trademarks are protected under the PRC Trademark Law, which was adopted on August 23, 1982 and subsequently amended in 1993, 2001, 2013, and 2019, respectively, and the Implementation Regulations of the PRC Trademark Law adopted by the State Council in 2002 and most recently amended on April 29, 2014. The Trademark Office under the State Administration for Market Regulation (formally known as the State Administration for Industry and Commerce) handles trademark registrations. The Trademark Office grants a ten-year term to registered trademarks and the term may be renewed for another ten-year period upon request by the trademark owner. A trademark registrant may license its registered trademarks to another party by entering into trademark license agreements, which must be filed with the Trademark Office for the record. As with patents, the Trademark Law has adopted a first-to-file principle with respect to trademark registration. If a trademark applied for is identical or similar to another trademark which has already been registered or subject to a preliminary examination and approval for use on the same or similar kinds of products or services, such a trademark application may be rejected. Any person applying for the registration of a trademark may not injure existing trademark rights first obtained by others, nor may any person register in advance a trademark that has already been used by another party and has already gained a "sufficient degree of reputation" through such party's use.

Regulations on Domain Names

MIIT promulgated the Measures on Administration of Internet Domain Names on August 24, 2017, which became effective on November 1, 2017. Pursuant to these measures, MIIT is in charge of the administration of PRC internet domain names. The domain name registration follows a first-to-file principle. Applicants for registration of domain names must provide the true, accurate, and complete information of their identities to domain name registration service institutions. The applicants will become the holder of such domain names upon the completion of the registration procedure.

Regulations on Taxation

Enterprise Income Tax

On March 16, 2007, the National People's Congress promulgated the PRC Enterprise Income Tax Law, which was amended on February 24, 2017 and December 29, 2018. On December 6, 2007, the State Council enacted the Regulations for the Implementation of the Enterprise Income Tax Law, which became effective on January 1, 2008 and amended on April 23, 2019. Under the Enterprise Income Tax Law and the relevant implementation regulations, both resident enterprises and non-resident enterprises are subject to tax in China. Resident enterprises are defined as enterprises that are established in China in accordance with PRC laws, or that are established in accordance with the laws of foreign countries but are actually or in effect controlled from within China. Non-resident enterprises are defined as enterprises that are organized under the laws of foreign countries and whose actual management is conducted outside China, but have established institutions or premises in China, or have no such established institutions or premises but have income generated from inside China. Under the Enterprise Income Tax Law and relevant implementing regulations, a uniform corporate income tax rate of 25% is applied. However, if non-resident enterprises have not formed permanent establishments or premises in China, or if they have formed permanent establishment or premises in China but there is no actual relationship between the relevant income derived in China and the established institutions or premises set up by them, enterprise income tax is set at the rate of 10% with respect to their income sourced from inside the PRC.

Value-Added Tax

On March 23, 2016, the Ministry of Finance, or the MOF and the State Taxation Administration of the PRC, or the SAT jointly issued the Circular on the Pilot Program for Overall Implementation of the Collection of Value Added Tax Instead of Business Tax, or Circular 36, which took effect on May 1, 2016. Pursuant to the Circular 36, all of the companies operating in construction, real estate, finance, modern service or other sectors which were required to pay business tax are required to pay VAT, in lieu of business tax. The VAT rate is 6%, except for rate of 11% for real estate sale, land use right transferring and providing service of transportation, postal sector, basic telecommunications, construction, real estate lease; rate of 17% for providing lease service of tangible property; and rate of zero for specific cross-bond activities.

On April 4, 2018, MOF and SAT jointly promulgated the Circular of the Ministry of Finance and the State Administration of Taxation on Adjustment of Value-Added Tax Rates, or Circular 32, according to which, (i) for VAT taxable sales or importation of goods originally subject to value-added tax rates of 17% and 11% respectively, such tax rates shall be adjusted to 16% and 10%, respectively; (ii) for purchase of agricultural products originally subject to deduction rate of 11%, such deduction rate shall be adjusted to 10%; (iii) for purchase of agricultural products for the purpose of production and sales or consigned processing of goods subject to tax rate of 16%, the input VAT will be calculated at a 12% deduction rate; (iv) for exported goods originally subject to tax rate of 17% and export tax refund rate of 17%, the export tax refund rate shall be adjusted to 16%; and (v) for exported goods and cross-border taxable acts originally subject to tax rate of 11% and export tax refund rate of 11%, the export tax refund rate shall be adjusted to 10%. Circular 32 became effective on May 1, 2018 and shall supersede any previously existing provisions in the case of any inconsistency.

Further, On March 20, 2019, MOF, SAT and the General Administration of Customs jointly issued the Announcement on Policies for Deepening the VAT Reform, or Announcement 39, to further slash value-added tax rates. According to the Announcement 39, (i) for general VAT payers' sales activities or imports that are subject to VAT at an existing applicable rate of 16% or 10%, the applicable VAT rate is adjusted to 13% or 9% respectively; (ii) for the agricultural products purchased by taxpayers to which an existing 10% deduction rate is applicable, the deduction rate is adjusted to 9%; (iii) for the agricultural products purchased by taxpayers for production or commissioned processing, which are subject to VAT at 13%, the input VAT will be calculated at a 10% deduction rate; (iv) for the exportation of goods or labor services that are subject to VAT at 16%, with the applicable export refund at the same rate, the export refund rate is adjusted to 13%; and (v) for the exportation of goods or cross-border taxable activities that are subject to VAT at 10%, with the export refund at the same rate, the export refund rate is adjusted to 9%. The Announcement 39 came into effect on April 1, 2019 and shall prevail in case of any conflict with existing provisions.

Dividend Withholding Tax

The Enterprise Income Tax Law provides that since January 1, 2008, an income tax rate of 10% will normally be applicable to dividends declared to non-PRC resident investors that do not have an establishment or place of business in China, or that have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such dividends are derived from sources within China.

Pursuant to the Arrangement Between the Mainland of China and the Hong Kong Special Administrative Region for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital, and other applicable PRC laws, if a Hong Kong resident enterprise is determined by the competent PRC tax authority to have met the relevant conditions and requirements under this arrangement and other applicable laws, the 10% withholding tax on the dividends the Hong Kong resident enterprise receives from a PRC resident enterprise may be reduced to 5%. However, based on the Notice of the State Administration of Taxation on the Issues concerning the Application of the Dividend Clauses of Tax Agreements issued on February 20, 2009, if the relevant PRC tax authorities determine, in their discretions, that a company benefits from such reduced income tax rate due to a structure or arrangement that is primarily tax-driven, such PRC tax authorities may adjust the preferential tax treatment. Pursuant to the Circular on Several Questions regarding the "Beneficial Owner" in Tax Treaties, which was issued on February 3, 2018 by the SAT and became effective on April 1, 2018, when determining the applicant's status as the "beneficial owner" regarding tax treatments in connection with dividends, interests, or royalties in the tax treaties, several factors, including, without limitation, whether the applicant is obligated to pay more than 50% of his or her income in twelve months to residents in third country or region, whether the business operated by the applicant constitutes the actual business activities, and whether the counterparty country or region to the tax treaties does not levy any tax or grant any tax exemption on relevant incomes or levy tax at an extremely low rate, will be taken into account, and such factors will be analyzed according to the actual circumstances of the specific cases. This circular further provides that an applicant who intends to prove his or her status as the "beneficial owner" must submit the relevant documents to the relevant tax bureau pursuant to the Announcement on Issuing the Measures for the Administration of Non-Resident Taxpayers' Enjoyment of the Treatment under Tax Agreements.

Regulations on Employment and Social Welfare

Labor Contract Law

The PRC Labor Contract Law, which became effective on January 1, 2008 and amended on December 28, 2012, primarily aims at regulating rights and obligations of employer and employee relationships, including the establishment, performance, and termination of labor contracts. Pursuant to the Labor Contract Law, labor contracts must be executed in writing if labor relationships are to be or have been established between employers and employees. Employers are prohibited from forcing employees to work above certain time limits and employers must pay employees for overtime work in accordance with national regulations. In addition, employee wages must not be lower than local standards on minimum wages and must be paid to employees in a timely manner.

Social Insurance

Enterprises in China are required by PRC laws and regulations to participate in certain employee benefit plans, including social insurance funds, namely a pension plan, a medical insurance plan, an unemployment insurance plan, a work-related injury insurance plan and a maternity insurance plan, and a housing provident fund, and contribute to the plans or funds in amounts equal to certain percentages of salaries, including bonuses and allowances, of the employees as specified by the local government from time to time at locations where they operate their businesses or where they are located. According to the Social Insurance Law, an employer that fails to make social insurance contributions may be ordered to pay the required contributions within a stipulated deadline and be subject to a late fee. If the employer still fails to rectify the failure to make social insurance contributions within the stipulated deadline, it may be subject to a fine ranging from one to three times the amount overdue. On July 20, 2018, the General Office of the State Council issued the Plan for Reforming the State and Local Tax Collection and Administration Systems, which stipulated that the SAT will become solely responsible for collecting social insurance premiums.

Housing Fund

In accordance with the Regulations on the Administration of Housing Funds, which was promulgated by the State Council in 1999 and amended in 2002 and 2019, employers must register at the designated administrative centers and open bank accounts for depositing employees' housing funds. Employers and employees are also required to pay and deposit housing funds, with an amount no less than 5% of the monthly average salary of the employee in the preceding year in full and on time.

Regulations on Foreign Exchange Registration of Overseas Investment by PRC Residents

According to the Operation Guidance for the Issues Concerning Foreign Exchange Administration over Round-trip Investment regarding the procedures for SAFE registration under the State Administration of Foreign Exchange, or SAFE, or the Circular 37, PRC residents are required to register with local SAFE branches in connection with their direct establishment or indirect control of an offshore entity for the purposes of overseas investment and financing, with such PRC residents' legally owned assets or equity interests in domestic enterprises or offshore assets or interests, referred to in Circular 37 as a "special purpose vehicle." The term "control" under Circular 37 is broadly defined as the operation rights, beneficiary rights or decision-making rights acquired by the PRC residents in the offshore special purpose vehicles or PRC companies by such means as acquisition, trust, proxy, voting rights, repurchase, convertible bonds or other arrangements. Circular 37 further requires amendment to the registration in the event of any changes with respect to the basic information of the special purpose vehicle, such as changes in a PRC resident individual shareholder, name or operation period; or any significant changes with respect to the special purpose vehicle, such as increase or decrease of capital contributed by PRC individuals, share transfer or exchange, merger, division or other material event. If the shareholders of the offshore holding company who are PRC residents do not complete their registration with the local SAFE branches, the PRC subsidiaries may be prohibited from distributing their profits and proceeds from any reduction in capital, share transfer or liquidation to the offshore company, and the offshore company may be restricted in its ability to contribute additional capital to its PRC subsidiaries. Moreover, failure to comply with SAFE registration and amendment requirements described above could result in liability under PRC law for evasion of applicable foreign exchange restrictions. On February 13, 2015, SAFE promulgated the Notice on Further Simplifying and Improving the Administration of the Foreign Exchange Concerning Direct Investment, or the SAFE Notice 13, which took effect on June 1, 2015. SAFE Notice 13 has delegated to the qualified banks the authority to register all PRC residents' investment in "special purpose vehicle" pursuant to the Circular 37, except that those PRC residents who have failed to comply with Circular 37 will remain to fall into the jurisdiction of the local SAFE branches and must make their supplementary registration application with the local SAFE branches.

Regulations on Employee Stock Option Granted by Listed Companies

On December 25, 2006, the People's Bank of China issued the Administration Measures on Individual Foreign Exchange Control, which became effective on February 1, 2007 and the Implementation Rules of the Administrative Measures on Individual Foreign Exchange Control was issued by SAFE on January 5, 2007 and was amended on May 29, 2016. Under these regulations, all foreign exchange matters involved in employee share ownership plans, share option plans and other equity incentive plans participated by PRC individuals shall be transacted upon the approval from the SAFE or its authorized branch.

On February 15, 2012, the SAFE promulgated the Notice of Issues Related to the Foreign Exchange Administration for Domestic Individuals Participating in Stock Incentive Plan of Overseas Listed Company, or the SAFE Notice 7, replacing the Application Procedure of Foreign Exchange Administration for PRC Residents Participating in Employee Stock Holding Plan or Stock Option Plan of Overseas-Listed Company promulgated in March 2007. The SAFE Notice 7 is applicable to domestic directors, supervisors, senior management and other employees of an overseas-listed domestic company, PRC subsidiaries or branches of an overseas-listed company and any PRC entities which are directly or indirectly controlled by an overseas-listed company, or Domestic Company, including PRC citizens and foreign citizens who have resided in the PRC for one year or more, or PRC Residents. Under the SAFE Notice 7, PRC Residents who participate in a share incentive plan of an overseas publicly listed company are required, through the Domestic Company or a PRC agent, or Domestic Agent, to complete certain procedures and transactional foreign exchange matters under the stock incentive plan upon the examination by, and the approval of, SAFE or its authorized local counterparts; the Domestic Agent is required to register relevant information of the stock incentive plan with the authorized local counterparts of SAFE within three business days of each quarter and is also required to complete foreign exchange cancellation procedures within twenty business days after termination of the stock incentive plan.

Regulations on Foreign Currency Exchange

Pursuant to applicable PRC regulations on foreign currency exchange, Renminbi is freely convertible only to the extent of current account items, such as trade-related receipts and payments, interest and dividends. Capital account items, such as direct equity investments, loans and repatriation of investment, unless expressly exempted by laws and regulations, require the prior registration at the designated foreign exchange banks for conversion of Renminbi into a foreign currency, such as U.S. dollars. Payments for transactions that take place within the PRC must be made in Renminbi. Domestic companies or individuals can repatriate foreign currency payments received from abroad, or deposit these payments abroad subject to the requirement that such payments shall be repatriated within a certain period of time. Foreign-invested enterprises may retain foreign exchange in accounts with designated foreign exchange banks. Foreign currencies received for current account items can be either retained or sold to financial institutions that have foreign exchange settlement or sales business without prior approval from the SAFE, subject to certain regulations. Foreign exchange income under capital account can be retained or sold to financial institutions that have foreign exchange settlement and sales business, with prior approval from the SAFE, unless otherwise provided.

In addition, in March 2015, SAFE promulgated the Circular on Reforming the Administration Approach Regarding the Foreign Exchange Capital Settlement of Foreign-invested Enterprises, or the SAFE Circular No. 19, which was amended on December 30, 2019. The SAFE Circular No. 19 provides that, among other things, a foreign-invested enterprise may convert up to 100% of the foreign currency in its capital account into RMB on a discretionary basis according to the actual needs. On June 9, 2016, SAFE further issued the Circular of the State Administration of Foreign Exchange on Reforming and Regulating Policies on the Control over Foreign Exchange Settlement of Capital Accounts, or SAFE Circular No. 16, to further expand and strengthen such discretionary conversion reform under SAFE Circular No. 19. SAFE Circular No. 16 provides an integrated standard for conversion of foreign exchange under capital account items on a discretionary basis which applies to all enterprises registered in the PRC. Pursuant to SAFE Circular No. 16, in addition to foreign currency capital, the discretionary conversion policy expands to foreign currency debts borrowed by an enterprise (except financial institutions) and repatriated funds raised through overseas listing. In addition, SAFE Circular No. 16 has narrowed the scope of purposes for which an enterprise must not use the RMB funds so converted, which include, among others, (i) payment for expenditure beyond its business scope or otherwise as prohibited by the applicable laws and regulations; (ii) investment in securities or other financial products other than banks' principal-secured products; (iii) provision of loans to non-affiliated enterprises, except where it is expressly permitted in the business scope of the enterprise; and (iv) construction or purchase of non-self-used real properties, except for the real estate developer.

In November 2012, SAFE promulgated the Circular of Further Improving and Adjusting Foreign Exchange Administration Policies on Foreign Direct Investment, as most recently amended on December 30, 2019, which substantially amends and simplifies the current foreign exchange procedure. Pursuant to this circular, the opening of various special purpose foreign exchange accounts (e.g. pre-establishment expenses account, foreign exchange capital account, guarantee account), the reinvestment of lawful incomes derived by foreign investors in the PRC (e.g. profit, proceeds of equity transfer, capital reduction, liquidation and early repatriation of investment), and purchase and remittance of foreign exchange as a result of capital reduction, liquidation, early repatriation or share transfer in an foreign investment enterprise no longer require SAFE approval, and multiple capital accounts for the same entity may be opened in different provinces, which was not possible before. In addition, SAFE promulgated the Circular on the Provisions on Foreign Exchange Administration over Domestic Direct Investment by Foreign Investors and the Supporting Documents in May 2013, as most recently amended on December 30, 2019, which specifies that the administration by SAFE or its local branches over direct investment by foreign investors in the PRC shall be conducted by way of registration and banks shall process foreign exchange business relating to the direct investment in the PRC based on the registration information provided by SAFE and its branches. In addition, SAFE Notice 13 delegates the authority to enforce the foreign exchange registration in connection with the inbound and outbound direct investment under relevant SAFE rules to certain banks and therefore further simplifies the foreign exchange registration procedures for inbound and outbound direct investment.

On October 23, 2019, the SAFE issued the Circular on Further Advancing the Facilitation of Cross Border Trade and Investment, or SAFE Circular 28. SAFE Circular 28 provides, among others, that the foreign-invested enterprises can use RMB converted from foreign currency denominated capital for equity investment in China, provided that the equity investments are genuine and in compliance with the applicable foreign investment-related laws and regulations. In addition, SAFE Circular 28 further provides that qualified enterprises in certain pilot areas may use the capital income from their registered capital, foreign debt or overseas listing for domestic payments, without providing authenticity certifications to the relevant banks in advance for those domestic payments.

Pursuant to the Circular of the State Administration for Foreign Exchange on Optimizing Foreign Exchange Administration to Support the Development of Foreign-related Business promulgated and effective on April 10, 2020 by SAFE, the reform of facilitating the payments of incomes under the capital accounts shall be promoted nationwide. Under the prerequisite of ensuring true and compliant use of funds and compliance and complying with the prevailing administrative provisions on use of income from capital projects, enterprises which satisfy the criteria are allowed to use income under the capital account, such as capital funds, foreign debt and overseas listing, for domestic payment, without the need to provide proof materials for veracity to the bank beforehand for each transaction.

Regulations on Dividend Distribution

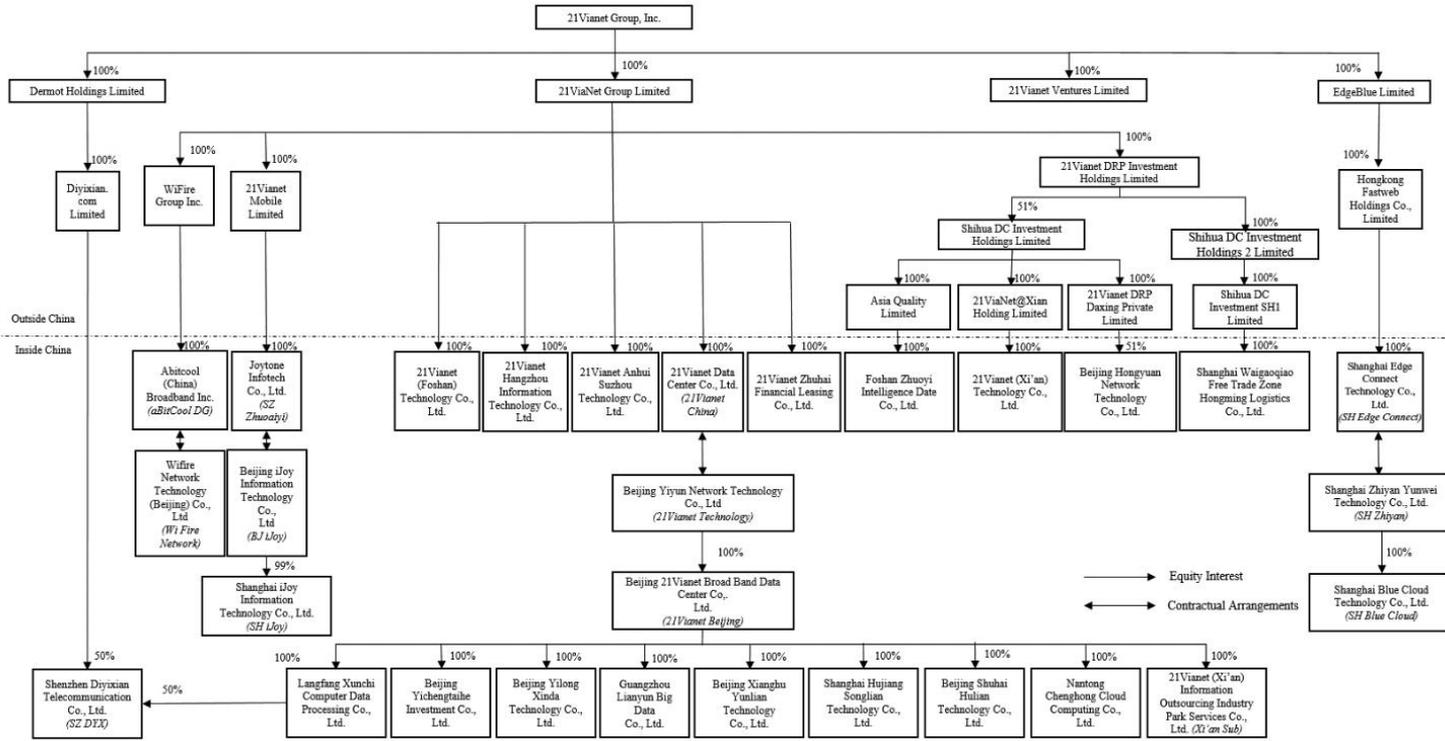
Under applicable PRC laws and regulations, foreign investment enterprises in China may pay dividends only out of their accumulated profits, if any, determined in accordance with PRC accounting standards and regulations. In addition, foreign investment enterprises in China are required to allocate at least 10% of their respective accumulated profits each year, if any, to fund statutory reserve funds unless these reserves have reached 50% of the registered capital of the respective enterprises. These reserves are not distributable as cash dividends.

C. Organizational Structure

We commenced operations in 1999, and through a series of corporate restructurings, established a holding company, AsiaCloud, in October 2009 under the laws of the Cayman Islands. AsiaCloud was formerly a wholly-owned subsidiary of aBitCool, a company incorporated under the laws of the Cayman Islands. In October 2010, AsiaCloud effected a repurchase and cancellation of all its outstanding shares held by aBitCool and the issuance of ordinary shares and preferred shares to the shareholders of aBitCool so that they maintained their respective ownership interests in AsiaCloud directly. In connection with the restructuring, AsiaCloud changed its name to 21Vianet Group, Inc.

Due to restrictions under PRC law on foreign ownership of entities engaged in data center and telecommunications value-added services, we conduct our operations in China through contractual arrangements among us, our wholly-owned PRC subsidiaries, our variable interest entities and their shareholders. As a result of these contractual arrangements, we control our variable interest entities and have consolidated the financial statements of our consolidated affiliated entities in our consolidated financial statements.

The following diagram illustrates our current corporate structure of our principal operating entities:



Contractual Arrangements with Our Variable Interest Entities and Their Shareholders

We conduct our business in China through our subsidiaries, including the variable interest entities. Due to legal restrictions and prohibitions on foreign ownership in Chinese companies providing, among other things, telecommunications value-added businesses, we conduct our business in China through contractual arrangements with the variable interest entities and the respective VIE equity holders.

As we are a Cayman Islands company, we are classified as a foreign enterprise under PRC laws and regulations and our wholly-owned PRC subsidiaries, 21Vianet China, SZ Zhuoaiyi, aBitCool DG and SH Edge Connect, are considered as wholly foreign owned enterprises (the “WFOEs”, each a “WFOE”). The VIEs consolidated in our financial statements include 21Vianet Technology, Beijing iJoy, WiFire Network and SH Zhiyan. The VIE equity holders are founders, directors, executive officers, employees or shareholders of our Company or entities ultimately controlled by our founders. For the three fiscal years ended December 31, 2020, our consolidated affiliated entities contributed most of our total net revenues.

The contractual arrangements enable us to: (a) collectively exercise effective control over the variable interest entities and their subsidiaries; (b) receive substantially all of the economic benefits of our variable interest entities and their subsidiaries in consideration for the services provided by our WFOEs; and (c) have an exclusive option to purchase all or part of the equity interests in our variable interest entities when and to the extent permissible under PRC laws. As a result of the contractual arrangements, we bear the risks of, and enjoy the rewards associated with, and therefore are the primary beneficiary of these variable interest entities.

Our contractual arrangements with our variable interest entities and their shareholders are described in further detail as follows. For the purpose of this section and unless the context specifies otherwise, “us,” “we,” and “our” refer to our company and/or the corresponding subsidiaries.

Agreements that Provide Us Effective Control

Share Pledge Agreements

On February 23, 2011, 21Vianet China entered into a share pledge agreement with 21Vianet Technology and each of its shareholders. Pursuant to the share pledge agreement, each of the shareholders pledged his shares in 21Vianet Technology to 21Vianet China in order to secure the shareholders’ payment obligations under the loan agreement. Each shareholder also agreed not to transfer or create any other security or restriction on the shares of 21Vianet Technology without the prior consent of 21Vianet China. 21Vianet China, at its own discretion, is entitled to acquire each shareholder’s equity interests in 21Vianet Technology as permitted by PRC laws. We have registered the pledges of the equity interests in 21Vianet Technology with the local branch of the State Administration for Industry and Commerce of the PRC (currently known as State Administration for Market Regulation of the PRC).

Irrevocable Power of Attorney

Each shareholder of 21Vianet Technology has executed an irrevocable power of attorney. Pursuant to the irrevocable power of attorney, each shareholder of 21Vianet Technology appointed 21Vianet China or a person designated by 21Vianet China as his/her attorney-in-fact to attend shareholders’ meeting of 21Vianet Technology, exercise all the shareholder’s voting rights, including but not limited to, sale transfer, pledge or dispose of his/her equity interests in 21Vianet Technology. The power of attorney remains valid and irrevocable from the date of execution, so long as each shareholder remains the shareholder of 21Vianet Technology. The above irrevocable power of attorney was subsequently assigned to the Company by 21Vianet China.

Optional Share Purchase Agreements

The optional share purchase agreement is entered into among 21Vianet China, 21Vianet Technology, 21Vianet Beijing and the shareholders of 21Vianet Technology on December 19, 2006. Pursuant to the agreement, the shareholders irrevocably grant 21Vianet China or its designated persons the sole option to acquire from the shareholders or 21Vianet Technology all or any part of the equity interests in 21Vianet Technology and 21Vianet Beijing when permissible under PRC laws. 21Vianet Technology and 21Vianet Beijing made certain covenants to maintain the value of the equity interests, including but not limited to, engage in the ordinary course of business and refrain from making loans and entering into agreements exceeding the value of RMB200,000 with the exception of transactions made in the ordinary course of business. The initial term of 10 years has expired on December 18, 2016. The parties to this agreement have entered into a supplemental agreement on December 19, 2016, pursuant to which the term of this agreement is extended for 10 years and will be automatically renewed at the end of each 10-year term, unless otherwise terminated at the option of 21Vianet China with a 30-day advance written notice.

Agreements that Transfer Economic Benefits from our Variable Interest Entity to Us or Absorb Losses

Loan Agreements and Financial Support Letter

21Vianet China and the shareholders of 21Vianet Technology entered into a loan agreement on January 28, 2011. Pursuant to the agreements, 21Vianet China has provided interest-free loan facilities of RMB7.0 million and RMB3.0 million, respectively, to the shareholders of 21Vianet Technology, Mr. Sheng Chen and Mr. Jun Zhang, which was used to provide capital to 21Vianet Technology to develop our data center and telecommunications value-added business and related businesses. There is no fixed term for the loan. To repay the loans, the shareholders of 21Vianet Technology are required to transfer their shares in 21Vianet Technology to 21Vianet China or any entity or person designated by 21Vianet China, as permitted under PRC laws. The shareholders of 21Vianet Technology also undertake not to transfer all or part of their equity interests in 21Vianet Technology to any third party, or to create any encumbrance, without the written permission from 21Vianet China. In addition, we will provide unlimited financial support to 21Vianet Technology for its operations and agreed to forego the right to seek repayment in the event 21Vianet Technology is unable to repay such funding.

Exclusive Technical Consulting and Services Agreements

On July 15, 2003, 21Vianet China and 21Vianet Technology entered into an exclusive service agreement, which was superseded by a new exclusive technical consulting and service agreement entered into among 21Vianet China, 21Vianet Technology and 21Vianet Beijing on December 19, 2006. 21Vianet China agreed to provide 21Vianet Technology and 21Vianet Beijing with exclusive technical consulting and services, including internet technology services and management consulting services. 21Vianet Technology and 21Vianet Beijing agreed to pay an hourly rate of RMB1,000 and the rate is subject to adjustment at the sole discretion of 21Vianet China. 21Vianet Technology and 21Vianet Beijing agreed that they will not accept similar or comparable service arrangements that may replace the services provided by 21Vianet China without prior written consent of 21Vianet China. 21Vianet China is entitled to have sole and exclusive ownership of all rights, title and interests to any and all intellectual property rights arising from the provision of services. The initial term of 10 years has expired on December 18, 2016. The parties to this agreement have entered into a supplemental agreement on December 19, 2016, pursuant to which the term of this agreement is extended for 10 years and will be automatically renewed at the end of each 10-year term, unless otherwise terminated at the option of 21Vianet China with a 30-day advance written notice.

In April 2013, we completed acquisition of 100% equity interests in iJoy Holding Limited, or iJoy BVI, and its subsidiaries (collectively known as “iJoy”). In June 2014, we established aBitCool DG, which controls 100% of the equity interests in WiFire Network through contractual arrangements entered into in July 2014. In 2017, we disposed of 66.67% of the equity interest in the WiFire Entities, which was previously controlled as to 100% by us through the contractual arrangement between WiFire Network and us. In November 2020, we established SH Edge Connect which controls 100% of the equity interests in SH Zhiyan and its wholly subsidiaries SH Blue Cloud through contractual arrangements entered into in December 2020. We have entered into contractual arrangements in relation to the each of BJ iJoy, WiFire Network and SH Zhiyan. Such contractual arrangements have similar terms as those in relation to 21Vianet Technology, and has the same effect of allowing us to receive the economic benefits from its operations, obtain effective control over the variable interest entity and its subsidiaries, and allow the financial results of that VIE entity and its subsidiaries to be consolidated into our consolidated financial statements.

Han Kun Law Offices, our PRC legal counsel, is of the opinion that:

- (a) the ownership structures of the VIE Entities and our corresponding subsidiaries in China do not and will not violate any applicable PRC laws and regulations currently in effect;
- (b) each of the contractual arrangements entered into by the VIE Entities, the corresponding subsidiaries and the respective VIE equity holders governed by PRC laws and regulations is valid, legal and binding, and does not and will not violate any applicable PRC laws and regulations or their respective articles of association currently in effect; and
- (c) each of the contractual arrangements entered into by the VIE Entities, the corresponding subsidiaries and the respective VIE equity holders governed by PRC laws and regulations will not be deemed as “concealment of illegal intentions with a lawful form” and void under the PRC Contract Law.

Additionally, we have been advised by our PRC Legal Adviser, however, that there are substantial uncertainties regarding the interpretation and application of current and future PRC laws and regulations. Accordingly, there can be no assurance that the PRC regulatory authorities, in particular the MIIT, which regulates providers of telecommunications value-added services and other participants in the PRC telecommunications industry, and the MOFCOM, will not in the future take a view that is contrary to the above opinion of our PRC Legal Adviser. Our PRC Legal Adviser has further advised that, if the PRC government is of the view that the agreements establishing the structure for operating our value-added services in China are in violation of PRC law restrictions on foreign investment in the telecommunications industry, we could be subject to severe penalties including being prohibited from continuing our operations. See “Risk Factors — Risks Related to Our Corporate Structure — If the PRC government finds that the arrangements that establish the structure for operating our business do not comply with PRC government restrictions on foreign investment in the telecommunications business or if these regulations or the interpretation of existing regulations change in the future, we could be subject to severe penalties or be forced to relinquish our interests in those operations.”

D. Property, Plants and Equipment

Our headquarters are located at Guanjie Building Southeast, 1st Floor, 10# Jiuxianqiao East Road, Chaoyang District, Beijing, the People’s Republic of China. We lease facilities for our office space in Beijing, Shanghai, Guangzhou, Shenzhen, Xi’an, Ningbo, Foshan, Dongguan, Hangzhou, Suzhou, Hong Kong and Taiwan. Our office leases generally have terms ranging from one to ten years and may be renewed upon expiration of the lease terms. As of December 31, 2020, our leased offices occupied an aggregate of 28,826 square meters.

We had also leased the following facilities for our self-built data centers:

Location	Total Lease Area as of December 31, 2020
Beijing	143,422 square meters
Shenzhen	4,867 square meters
Shanghai	42,196 square meters
Hangzhou	11,020 square meters
Guangzhou	52,264 square meters
Ningbo	1,200 square meters

We own and occupy several buildings, primarily located in Beijing, Shanghai, Anhui, Xi’an and Foshan, with a total floor area of approximately 223,092 square meters, some of which are built into our data centers.

ITEM 4A. UNRESOLVED STAFF COMMENTS

Not applicable.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

You should read the following discussion and analysis of our financial condition and results of operations in conjunction with our consolidated financial statements and the related notes included elsewhere in this annual report on Form 20-F. This discussion may contain forward-looking statements based upon current expectations that involve risks and uncertainties. Our actual results may differ materially from those anticipated in these forward-looking statements as a result of various factors, including those set forth under “Item 3. Key Information—D. Risk Factors” or in other parts of this annual report on Form 20-F.

A. Operating Results

Overview

We are a leading carrier-neutral and cloud-neutral data center services provider in China. We have one of the largest carrier-neutral data center networks in China with our 32 self-built data centers and 52 partnered data centers with an aggregate capacity of 53,553 cabinets under our management as of December 31, 2020.

We offer managed hosting services to host our customers’ servers and networking equipment and provide interconnectivity to improve the performance, availability and security of their internet infrastructure. We also provide cloud services through partnerships to cover public, private and hybrid cloud scenarios. In addition, we provide customized enterprise VPN services and solutions, including SD-WAN, to enterprises across various industries. These value-added services strengthen our capability to provide quality services and meet our customers’ additional demands.

We historically provided managed network services, consisting of CDN services, hosting area network services, route optimization and last-mile broadband services. In September 2017, we disposed of 66.67% of the equity interests in six wholly-owned subsidiaries engaged in the managed network services business, collectively referred to as the WiFire Entities. In September and December 2017, we disposed of all of our equity interests and shares in Sichuan Aipu Network Co., Ltd. and its affiliates, collectively referred to as the Aipu Group, engaged in the last-mile broadband business. As a result of these transactions, we deconsolidated the financial results related to the managed network services business from our consolidated statements of operations starting from the fourth quarter of 2017.

Our total net revenues generated from providing hosting and related services increased from RMB3,401.0 million in 2018 to RMB3,789.0 million in 2019 and further to RMB4,829.0 million (US\$740.1 million) in 2020, representing a CAGR of 19.2% from 2018 to 2020. The total number of cabinets under our management increased from 30,654 as of December 31, 2018, 36,291 as of December 31, 2019 and further to 53,553 as of December 31, 2020. Our average monthly recurring net revenues from hosting and related services increased from RMB275.4 million in 2018 to RMB289.1 in 2019 and further to RMB374.0 million (US\$57.3 million) in 2020. We recorded a net loss of RMB186.7 million, RMB181.2 million and RMB2,680.3 million (US\$410.8 million) in 2018, 2019 and 2020, respectively, which reflected share-based compensation expenses of RMB59.5 million, RMB43.9 million and RMB136.8 million (US\$21.0 million), respectively. Our results of operations also reflect the effects of our acquisitions and dispositions during the respective periods.

Factors Affecting Our Results of Operations

Our business and results of operations are generally affected by the development of China's data center services market, which has grown rapidly in recent years. According to Frost & Sullivan, the total revenue of China's data center services market increased from RMB47.3 billion in 2015 to RMB75.3 billion in 2019, representing a CAGR of 12.3%, and is expected to grow at a CAGR of 9.5% from 2019 to 2024, reaching RMB118.8 billion by 2024. However, any adverse changes in the data center services market in China may harm our business and results of operations.

While our business is generally influenced by factors affecting the data center services market in China, we believe that our results of operations are more directly affected by company-specific factors, including the number of cabinets under management and cabinet utilization rate, monthly recurring revenues and churn rate, pricing, growth in complementary markets and optimization of our cost structure.

Number of Cabinets under Management and Cabinet Utilization Rate

Our revenues are directly affected by the number of cabinets under management and the utilization rates of these cabinet spaces. We had 30,654, 36,291 and 53,553 cabinets under management as of December 31, 2018, 2019 and 2020, respectively. Our annualized average monthly cabinet utilization rates were 70.6%, 66.0% and 61.2% in 2018, 2019 and 2020, respectively. We calculate the average monthly cabinet utilization rate in a given period by dividing the sum of the number of billable cabinets as of the end of each month during the period by the sum of the number of cabinet capacity as of the end of each month during the same period. Our average monthly cabinet utilization rate fluctuates due to the continuous changes in both the amount of our billable cabinets and average cabinet capacity. Our future results of operations and growth prospects will largely depend on our ability to increase the number of cabinets under management while maintaining optimal cabinet utilization rate.

With the rapid growth of China's internet industry, demand for cabinet spaces has increased significantly and we do not always have sufficient self-built data center capacity to meet such demand. It usually takes twelve to eighteen months to build a data center together with cabinets and equipment installed. To meet our customers' immediate demand, we partner with China Telecom, China Unicom or other parties and lease cabinets from them. Due to the time needed to build data centers and the long-term nature of these investments, if we overestimate the market demand for cabinets, it will lower our cabinet utilization rate and negatively affect our results of operations.

Monthly Recurring Revenues and Churn Rate

Our average monthly recurring revenues and churn rate directly affect our results of operations. Our hosting and related services are based on a recurring revenue model. We consider these services recurring as we generally bill our customers and recognize revenues on a fixed and recurring basis each month during the terms of our service contracts with them, generally ranging from one to three years. Our non-recurring revenues are primarily comprised of fees charged for installation services, additional bandwidth used by customers beyond the contracted amount and other value-added services. These services are considered to be non-recurring as they are billed and recognized over the period of the customer service agreement.

We use “monthly recurring revenues” to measure the revenues we recognize from our managed hosting services on a recurring basis each month. In 2018, 2019 and 2020, our recurring revenues were consistently over 90% of our net revenues. Our average monthly recurring revenues from hosting and related services were RMB275.4 million, RMB289.1 million and RMB374.0 million (US\$57.3 million) in 2018, 2019 and 2020. Our average monthly recurring revenues per cabinet for managed retail services was RMB8,258, RMB8,747 and RMB8,984 (US\$1,377) for the year ended December 31, 2018 and 2019 and 2020.

We use the churn rate to measure the reduction of monthly revenues that is attributable to the termination of customer contracts as a percentage of total monthly recurring revenues of the previous month. Our average monthly churn rate for our managed hosting services was 0.3% in 2018, 0.5% in 2019 and 0.3% in 2020.

Pricing

Our results of operations also depend on the price level of our services. Due to the quality of our services and our optimized interconnectivity among carriers and networks, we are generally able to command premium pricing for our services. Nonetheless, because we are generally regarded as a premium data center and network service provider, many customers only place their mission critical servers and equipment, but not other non-critical functions, in our data centers. As we try to acquire more business from new and existing customers, expand into new markets, or try to adapt to changing market conditions, we may need to lower our prices or provide other incentives to compete effectively.

Growth in New and Complementary Markets

Our results of operations also depend on the growth of our cloud service business and VPN service business that complement our core managed hosting service business.

Cloud services, largely through our partnerships with Microsoft and other cloud service providers, have continually contributed to our results of operations since 2013. While our cloud computing platforms are now supporting a significant number of customers, we believe the cloud computing market in China is still in its early stages. Key factors for growth in this market include signing up services from new customers, improving utilization rates of cloud computing resources with existing customers introducing well-developed applications to improve cloud computing adoption rates, and partnering with more cloud providers to offer a comprehensive cloud-neutral platform.

As one of the largest enterprise VPN service providers in the Asia Pacific region, we have experienced and expect continual growth in this market to meet customers’ growing demand for enterprise-grade VPN services with secure, dedicated connections. Key growth drivers include adding new customers, increasing the number of connections with existing customers and realizing revenue synergies with our other business groups.

Our Cost Structure

Our ability to maintain and improve our gross margins depends on our ability to effectively manage our cost of revenues, which consist of telecommunications costs and other data center related costs. Telecommunications costs consist of (i) expenses associated with acquiring bandwidth and related resources from carriers for our data centers, and (ii) rentals, utilities and other costs in connection with the cabinets we lease from our partnered data centers. Other data center related costs include utilities and rental expenses for our self-built data centers, employee payroll, depreciation and amortization of our property and equipment, and other related costs. The changes in these costs usually reflect the changes in the number of cabinets under management and our headcount.

The mix of self-built data centers and partnered data centers also affects our cost structure. The gross margin for cabinets located in our partnered data centers is generally lower than that of cabinets located in our self-built data centers. This is because telecommunication carriers who lease cabinet spaces to us for our partnered data centers typically demand a profit on top of their costs in connection with the leasing of cabinet spaces to us. We plan to continue to lease data centers from such carriers or purchase data center facilities to meet the immediate market demand while building new or expanding existing our self-built data centers in Beijing, Shanghai, Shenzhen, Guangzhou, Yangtze Delta, and the Greater Bay Area. If we cannot effectively manage the market demand and increase the number of cabinets located in self-built data centers relative to partnered data centers, we may not be able to improve our gross margins.

Impact of the COVID-19 Pandemic on Our Business

The COVID-19 pandemic has not interrupted or affected the operation of our existing data centers or ability to provide our data center services to our customers. We had temporary suspensions of our sales and marketing activities, construction activities and business travel to ensure the safety and health of our employees in January and February of 2020. Since March 2020, these activities began returning to normal levels, and by the end of the second quarter of 2020 had largely returned to normal levels. If the COVID-19 pandemic resurges or results in governmental or other measures that affect logistics, travel and construction activity, any measures we may be required to adopt may impact our construction and development activities with respect to data centers under construction and under development, and our ability to increase our capacity according to schedule could be negatively affected. See “Item 3. Key Information—D. Risk Factors — Risks Relating to Our Business and Industry—The ongoing COVID-19 pandemic could materially and adversely affect our business, results of operations and financial condition.” We have experienced slower cash collection for administrative reasons as a result of the COVID-19 pandemic, unrelated to our customers’ ability to pay, which has resulted in an increase in our accounts receivable. See “Item 5. Operating and Financial Review and Prospectus — Financial Information — Liquidity and Capital Resources—Operating Activities.” While the COVID-19 pandemic has not materially or adversely affected our business, results of operations or financial condition, whether the pandemic will have any such material or adverse impact on us going forward will depend on future developments, which are highly uncertain and cannot be predicted. As of the date of this document, we are not aware of any material or adverse effect on our financial condition as a result of the COVID-19 pandemic.

Key Components of Results of Operations

Starting in 2016, we began reporting our operating results in two operating segments, namely hosting and related services and managed network services. CDN services, which were previously offered as part of our hosting and related services business segment, were moved to our managed network services business segment in the fourth quarter of 2016. Our consolidated statements of operations for the year ended December 31, 2016 as presented in this annual report were modified to reflect this new presentation for consistency purposes.

In September 2017, we completed the disposal of the managed network services business segment, including CDN services, hosting area network services, route optimization business and last-mile broadband business, and deconsolidated the financial results related to the managed network services business segment in our consolidated financial statements starting from the fourth quarter of 2017.

Net Revenues

The following table sets forth our net revenues for the years presented:

	For the Years Ended December 31,			
	2018	2019		2020
	RMB	RMB	RMB	USD
	(in thousands, except percentages)			
Net revenues	3,401,037	3,788,967	4,829,019	740,080

We provide retail managed hosting services to house our customers’ servers and networking equipment in our data centers, and wholesale managed hosting services to deliver customized data center sites to our customers based on their unique requirements. We also provide cloud services and VPN services as part of our hosting and related services business. Since the completion of the disposal of the managed network services in September 2017, we have generated all of our revenues from the hosting and related services business.

The contracts with our wholesale customers generally have terms ranging from eight to ten years. The contracts with our retail customers generally have terms ranging from one to three years and most of these contracts have an automatic renewal provision. Our customers are generally billed on a monthly basis according to the services used in the previous month.

Cost of Revenues

Our cost of revenues primarily consists of telecommunications cost, and other costs. The following table sets forth, for the periods indicated, our cost of revenues, in absolute amounts and as a percentage of our total net revenues:

	For the Years Ended December 31,						
	2018		2019		2020		
	RMB	%	RMB	%	RMB	USD	
	(in thousands, except percentages)						
Cost of revenues:							
Telecommunications costs	1,332,280	39.2	1,570,825	41.5	2,092,887	320,749	43.3
Others	1,123,886	33.0	1,278,693	33.7	1,660,121	254,425	34.4
Total cost of revenues	2,456,166	72.2	2,849,518	75.2	3,753,008	575,174	77.7

Telecommunications costs refer to expenses incurred in acquiring telecommunication resources from carriers for our data centers, including bandwidth and cabinet leasing costs. Cabinet leasing costs cover rentals, utilities and other costs associated with the cabinets we lease from our partnered data centers. Our other costs of revenues include utilities costs for our self-built data centers, depreciation and amortization, employee payroll and other compensation costs and other miscellaneous items related to our service offerings.

We expect that our cost of revenues of hosting and related services will continue to increase as our business expands, both organically and as a result of acquisitions.

Operating Expenses

Our operating expenses consist of sales and marketing expenses, general and administrative expenses and research and development expenses. The following table sets forth our operating expenses, both as an absolute amount and as a percentage of total net revenues for the periods indicated.

	For the Years Ended December 31,						
	2018		2019		2020		
	RMB	% Net of Revenues	RMB	% Net of Revenues	RMB	USD	
	(in thousands, except percentages)						
Operating expenses:							
Sales and marketing expenses ⁽¹⁾	172,176	5.1	206,309	5.4	235,012	36,017	4.9
Research and development expenses ⁽¹⁾	92,109	2.7	88,792	2.3	112,891	17,301	2.3
General and administrative expenses ⁽¹⁾	462,637	13.5	415,277	11.0	535,111	82,009	11.1
Reversal/(allowance) for doubtful debt	(598)	(0.0)	1,557	0.0	2,393	367	0.1
Changes in the fair value of contingent purchase consideration payable	(13,905)	(0.4)	—	—	—	—	—
Impairment of receivables from equity investees	—	—	52,142	1.4	—	—	—
Impairment of long-lived assets	—	—	—	—	81,619	12,509	1.7
Other operating income	(5,027)	(0.1)	(6,862)	(0.1)	(7,619)	(1,168)	(0.2)
Total Operating Expenses ⁽¹⁾	707,392	20.8	757,215	20.0	959,407	147,035	19.9

Note:

(1) Includes share-based compensation expense as follows:

	For the Years Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Allocation of share-based compensation expenses:				
Sales and marketing expenses	2,139	354	38,247	5,862
Research and development expenses	1,385	1,177	634	97
General and administrative expenses	53,346	40,501	82,672	12,670
Total share-based compensation expenses	56,870	42,032	121,553	18,629

Sales and Marketing Expenses

Our sales and marketing expenses primarily consist of compensation and benefit expenses for our sales and marketing staff, including share-based compensation expenses, as well as advertisement and agency service fees. Our sales and marketing expenses also include office-related expenses and business development expenses associated with our sales and marketing activities. To a lesser extent, our sales and marketing expenses include depreciation of equipment used associated with our selling and marketing activities.

Research and Development Expenses

Our research and development expenses primarily include salaries, employee benefits, share-based compensation expenses and other expenses incurred in connection with our technological innovations, such as our proprietary smart routing technology and cloud computing infrastructure service technologies. We anticipate that our research and development expenses will continue to increase as we devote more resources to develop and improve technologies, improve operating efficiencies and enhance our service offerings.

General and Administrative Expenses

Our general and administrative expenses primarily consist of compensation and benefits paid to our management and administrative staff, including share-based compensation expenses, the cost of third-party professional services, and depreciation and amortization of property and equipment used in our administrative activities. Our general and administrative expenses, to a lesser extent, also include office rent, office-related expenses, and expenses associated with training and team building activities. We expect that our other general and administrative expense items, such as salaries paid to our management and administrative staff as well as professional services fees, will increase as we expand our business, both organically and as a result of acquisitions.

Share-Based Compensation Expenses

We recorded share-based compensation expenses in connection with share options and RSUs granted under our 2010 Plan, 2014 Plan and 2020 Plan. As of April 13, 2021, options to purchase 492,864 ordinary shares and 4,344,504 RSUs have been granted to our employees, directors and consultants. We recorded share-based compensation expenses in the amount of RMB56.9 million, RMB42.0 and RMB121.6 million (US\$18.6 million) for the year ended December 31, 2018, 2019 and 2020, respectively, in connection with our share-based incentive grants.

Taxation

The Cayman Islands

The Cayman Islands currently does not levy taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to our company levied by the government of the Cayman Islands, except for stamp duties that may be applicable on instruments executed in, or after execution brought within the jurisdiction of, the Cayman Islands. The Cayman Islands is not a party to any double taxation treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands. Additionally, upon payments of dividends by our company to the shareholders, no Cayman Islands withholding tax will be imposed.

The British Virgin Islands

The Company and all dividends, interest, rents, royalties, compensation and other amounts paid by the Company to persons who are not resident in the BVI and any capital gains realized with respect to any shares, debt obligations, or other securities of the Company by persons who are not resident in the BVI are exempt from all provisions of the Income Tax Ordinance in the BVI.

No estate, inheritance, succession or gift tax, rate, duty, levy or other charge is payable by persons who are not resident in the BVI with respect to any shares, debt obligation or other securities of the Company.

All instruments relating to transfers of property to or by the Company and all instruments relating to transactions in respect of the shares, debt obligations or other securities of the Company and all instruments relating to other transactions relating to the business of the Company are exempt from payment of stamp duty in the BVI. This assumes that the Company does not hold an interest in real estate in the BVI.

There are currently no withholding taxes or exchange control regulations in the BVI applicable to the Company or its members.

Hong Kong

Subsidiaries in Hong Kong are subject to Hong Kong profits tax rate of 16.5% for the years ended December 31, 2018, 2019 and 2020. They may be exempted from income tax on their foreign-derived income and there are no withholding taxes in Hong Kong on remittance of dividends.

Taiwan

DYX Taiwan branch is incorporated in Taiwan and is subject to Taiwan profits tax rate of 20%, 20% and 20% for the years ended December 31, 2018, 2019 and 2020, respectively.

The PRC

The Company's PRC subsidiaries are incorporated in the PRC and subject to the statutory rate of 25% on the taxable income in accordance with the Enterprise Income Tax Law, or the EIT Law, which was effective on January 1, 2008 and amended on December 29, 2018, except for certain entities eligible for preferential tax rates.

Dividends, interests, rent or royalties payable by the Company's PRC subsidiaries to any non-PRC resident enterprise and proceeds from any such non-PRC resident enterprise investor's disposition of assets (after deducting the net value of such assets) are subject to a 10% withholding tax, unless the corresponding non-PRC resident enterprise's jurisdiction of incorporation has a tax treaty or arrangement with China that provides a reduced withholding tax rate or an exemption from withholding tax.

21Vianet Beijing was qualified as a High and New Technology Enterprise, or HNTE, since 2008 and is eligible for a 15% preferential tax rate. In October 2014, 21Vianet Beijing obtained a new certificate and renewed the certificate in October 2017 and 2020, with a validity term of three years. In accordance with the PRC Income Tax Law, an enterprise awarded with the HNTE certificate may enjoy a reduced EIT rate of 15%. For the years ended December 31, 2018, 2019 and 2020, the tax rate for 21Vianet Beijing was 15%, 15% and 15%, respectively.

In April 2011, Xi'an Sub, a subsidiary of 21Vianet Beijing located in Shaanxi Province, was qualified for a preferential tax rate of 15% and started to apply this rate from then on. The preferential tax rate is awarded to companies that are located in West Regions of China which operate in certain encouraged industries. For the years ended December 31, 2018, 2019 and 2020, the tax rate assessed for Xi'an Sub was 15%, 15% and 15%, respectively.

In 2013, BJ iJoy was qualified as a software enterprise, which makes it eligible for exemption of the enterprise income tax for the years ended December 31, 2013 and 2014 and a half-reduced enterprise income tax for the years ended December 31, 2015, 2016 and 2017. For the years ended December 31, 2018, 2019 and 2020 and BJ iJoy was subject to the statutory rate of 25% for the taxable income.

In October 2015, SH Blue Cloud, a subsidiary located in Shanghai, was qualified for a HNTE and became eligible for a 15% preferential tax rate. The HNTE certificate has been renewed in November 2018, with a validity term of three years. For the years ended December 31, 2018, 2019 and 2020, SH Blue Cloud enjoyed a preferential tax rate of 15%.

In November 2016, SZ DYX, a subsidiary located in Guangdong Province, was qualified for a HNTE and became eligible for a 15% preferential tax rate effective for three consecutive years. The HNTE certificate has been renewed in November 2019, with a validity term of three years. For the years ended December 31, 2018, 2019 and 2020, SZ DYX enjoyed a preferential tax rate of 15%.

The EIT Law also provides that enterprises established under the laws of foreign countries or regions and whose “place of effective management” is located within the PRC are considered PRC tax resident enterprises and subject to PRC income tax at the rate of 25% on worldwide income. The definition of “place of effective management” refers to an establishment that exercises, in substance, overall management and control over the production and business, personnel, accounting, properties, etc. of an enterprise. As of December 31, 2020, the administrative practice associated with interpreting and applying the concept of “place of effective management” is unclear. If the Company is deemed as a PRC tax resident, it will be subject to PRC income tax at the rate of 25% on its worldwide income under the EIT Law, meanwhile the dividends it receives from another PRC tax resident company will be exempted from 25% PRC income tax. The Company will continue to monitor changes in the interpretation or guidance of this law.

PRC VAT. In November 2011, the Ministry of Finance and the State Administration of Taxation jointly issued two circulars setting out the details of the pilot value-added tax, or VAT, reform program, which changed the charge of sales tax from business tax to VAT for certain pilot industries. The pilot VAT reform program initially applied only to the pilot industries in Shanghai, and was expanded to eight additional regions, including, among others, Beijing and Guangdong province, in 2012. In August 2013, the program was further expanded nationwide. In May 2016, the program was expanded to cover additional industry sectors such as construction, real estate, finance and consumer services. In November 2017, PRC State Counsel issued State Counsel Order 691 to abolish business tax, and issued the amendment to Interim Regulations of PRC Value Added Taxes, or the VAT Regulation, pursuant to which enterprises and individuals that (i) sell goods or labor services of processing, repair or replacement of goods, (ii) sell services, intangible assets, or immovables, or (iii) import goods within the territory of the PRC are subject to VAT.

Effective from September 2012, all services provided by 21Vianet China and certain services provided by 21Vianet Technology and 21Vianet Beijing were subject to a VAT of 6%.

Effective from June 2014, all value-added telecommunication services provided in mainland China were subject to a VAT of 6% whereas basic telecommunication services are subject to a VAT of 11%. Effective from May 2018, the VAT rate on basic telecommunication services was replaced by a new rate of 10%, and has been further replaced by the rate of 9% effective from April 2019. On March 20, 2019, the Ministry of Finance, the State Administration of Taxation and the General Administration of Customs jointly issued the Notice of Strengthening Reform of VAT Policies, or the Announcement No. 39. Pursuant to the Announcement No. 39, the generally applicable VAT rates are simplified to 13%, 9%, 6%, and nil, which became effective on April 1, 2019. In addition, a general VAT taxpayer is allowed to offset its qualified input VAT paid on taxable purchases against the output VAT chargeable on the telecommunication services and modern services provided by it.

Critical Accounting Policies

Our discussion and analysis of our financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with U.S. GAAP. The preparation of our consolidated financial statements requires us to make estimates and judgments that affect the reported amounts in our consolidated financial statements. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities. Although actual results have historically been reasonably consistent with management’s expectations, actual results may differ from these estimates or our estimates may be affected by different assumptions or conditions.

Some of our accounting policies require higher degrees of judgment than others in their application. When reviewing our consolidated financial statements, you should consider (i) our selection of critical accounting policies, (ii) the judgment and other uncertainties affecting the application of such policies and (iii) the sensitivity of reported results to changes in conditions and assumptions. We consider the policies discussed below to be critical to an understanding of our consolidated financial statements as their application places significant demands on the judgment of our management. We believe the following critical accounting policies are the most significant to the presentation of our financial statements and some of which may require the most difficult, subjective and complex judgments and should be read in conjunction with our consolidated financial statements, the risks and uncertainties described under “Risk Factors” and other disclosures included in this annual report.

Revenue Recognition

We provide hosting and related services including hosting of customers' servers and networking equipment, connecting customers' servers with internet backbones ("Hosting services"), virtual private network services providing encrypted secured connection to public internet ("VPN services") and other value-added services and public cloud service through strategic partnership with Microsoft.

On January 1, 2018, we adopted ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASC 606"), which supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition* ("ASC 605"), using the modified retrospective transition method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts have not been adjusted and continue to be reported in accordance with historic accounting under ASC 605. The impact of adopting the new revenue standard was not material to consolidated financial statements and there was no adjustment to beginning retained earnings on January 1, 2018.

Under ASC 606, an entity recognizes revenue as it satisfies a performance obligation when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price, including variable consideration, if any; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. We only apply the five-step model to contracts when it is probable that the entity will collect the consideration to which it is entitled in exchange for the goods or services it transfers to the customer.

Once a contract is determined to be within the scope of ASC 606 at contract inception, we review the contract to determine which performance obligations we must deliver and which of these performance obligations are distinct. We recognize revenue based on the amount of the transaction price that is allocated to each performance obligation when that performance obligation is satisfied or as it is satisfied.

We are a principal and records revenue on a gross basis when we are primarily responsible for fulfilling the service, has discretion in establish pricing and controls the promised service before transferring that service to customers. Otherwise, we record revenue at the net amounts as commissions.

Our revenue recognition policies effective on the adoption date of ASC 606 are as follows:

Hosting services are services that we dedicate data center space to house customers' servers and networking equipment and provides tailored server administration services including operating system support and assistance with updates, server monitoring, server backup and restoration, server security evaluation, firewall services, and disaster recovery. We also provide interconnectivity services to connect customers with each other, internet backbones in China and other networks through Border Gateway Protocol, or BGP, network, or single-line, dual-line or multiple-line networks. Hosting services are typically provided to customers for a fixed amount over the contract service period and the related revenues are recognized on a straight-line basis over the term of the contract. For certain contracts where considerations are based on the usage of the Hosting services, the related revenues are recognized based on the consumption at the predetermined rate as the services are rendered throughout the contract term. We are a principal and records revenue for Hosting service on a gross basis.

VPN services are services that we extend customers' private networks by setting up secure and dedicated connections through the public internet. VPN services are provided to customers for a fixed amount over the contract service period and revenue are recognized on a straight-line basis over the term of the contract. We are a principal and records revenue for VPN service on a gross basis.

We partner with Microsoft to provide cloud services that allow enterprise and individual customers to run their applications over the internet using the IT infrastructure. Cloud services are generally charged by us to the end customers for a fixed amount or based on the actual usage of the cloud resources at predetermined rates over the subscription period, which in general is one year. We fulfil our performance obligation of facilitating Microsoft to provide the cloud services to the end customers by providing, but not limited to, contract processing management, billing, payment collection, maintenance, help desk supports and certain IT infrastructure services. These are considered as a series of distinct services that are substantially the same and have the same pattern of transfer to the customer; therefore, they are accounted for as a single performance obligation that is satisfied over time. The corresponding consideration that we are entitled to is recognized as revenue using a time-based method since this best depicts the pattern of the control transfer. Revenue from cloud services consists of monthly incentive revenues received from Microsoft upon completion of certain conditions and gross billing amount received from end customers net of considerations remitted by us to Microsoft. When the contract is modified to add distinct services to the single performance obligation for additional fees, such changes are accounted for prospectively as a termination of the old contract and the creation of a new contract.

For certain arrangements, customers are required to pay us before the services are delivered. When either party to a revenue contract has performed, we recognize a contract asset or a contract liability in the consolidated balance sheets, depending on the relationship between our performance and the customer's payment. Contract liabilities were mainly related to fee received for Hosting services to be provided over the contract period, which were presented as deferred revenue on the consolidated balance sheets.

Deferred revenue represented our obligation to transfer the goods or services to a customer for which we have received consideration (or an amount of consideration is due) from the customer. As of December 31, 2019 and 2020, we have deferred revenue amounting up to RMB57.6 million and RMB63.2 million (US\$9.7 million), respectively. Revenue recognized from opening deferred revenue balance was RMB46.7 million (US\$7.2 million) for the year ended December 31, 2020.

Our certain hosting service contains lease and non-lease components. We elected to adopt the practical expedient which allows lessors to combine lease and non-lease components and account for them as one component if (i) the timing and pattern of transfer of the lease component and non-lease component is the same; and (ii) the lease component should be classified as an operating lease if it were accounted for separately. The combined component is accounted for in accordance with the current lease accounting guidance ("ASC 842") if the lease component is predominant, and in accordance with the ASC 606 if the non-lease component is predominant. We have determined that the non-lease component is the predominant component in hosting service. Therefore, we have accounted for the combined component in accordance with ASC 606.

We do not disclose the value of unsatisfied performance obligations as our revenue contracts are (i) contracts with an original expected length of one year or less or (ii) contracts for which we recognize revenue at the amount to which we have the right to invoice for services performed.

Fair Value of Financial Instruments

Our financial instruments include cash and cash equivalents, restricted cash, short-term investments, accounts receivable and payable, other receivables and payables, bonds payable, short-term and long-term borrowings, available-for-sale investments, liability classified restricted share units ("RSU") and convertible promissory notes. Other than the bonds payable, long-term borrowings and convertible promissory notes the carrying values of these financial instruments approximate their fair values due to their short-term maturities.

The carrying amounts of bonds payable and long-term borrowings approximate their fair values since they bear interest rates which approximate market interest rates. We carry the bonds payable at face value less unamortized debt discount and issuance cost on its consolidated balance sheets and measures the fair value for disclosure purposes only. We elected the fair value option of convertible promissory notes when it initially recognized as financial liability as the fair value better represents the value of the underlying liabilities. The contingent purchase considerations in both cash and shares and share-settled bonus are initially measured at fair value on the acquisition dates of the acquired businesses and the date of grant, respectively, and subsequently remeasured at the end of each reporting period with an adjustment for fair value recorded to the current period income/(expense). Convertible promissory notes are measured at fair value in accordance with ASC 825 Financial Instruments on the issuance date and subsequently remeasured at the end of each reporting period with an adjustment for fair value recorded to the current period income/(expense), however, any fair value changes related to instrument-specific credit risk are recorded to other comprehensive income/(loss).

Consolidation of Variable Interest Entities

PRC laws and regulations currently restrict foreign ownership of PRC companies that engage in value-added telecommunications services, including content and application delivery services. To comply with the foreign ownership restriction, we conduct our businesses in the PRC through our variable interest entities using contractual arrangements entered into by us, 21Vianet China, 21Vianet Technology and its respective shareholders. See “—C. Organizational Structure”. 21Vianet Beijing, subsidiary of 21Vianet Technology, holds a Cross-Regional VAT licenses to carry out the full data center business across two province-level municipalities and four cities in China and data center business (excluding internet resources coordination service) across two province-level municipalities and 18 cities in China. We exercise effective control over 21Vianet Technology through a series of contractual arrangements, including: (i) an irrevocable power of attorney, under which each shareholder of 21Vianet Technology appointed 21Vianet China or a person designated by 21Vianet China as his/her attorney-in-fact to attend shareholders’ meeting of 21Vianet Technology and exercise all the shareholder’s voting rights, such power of attorney has been subsequently assigned to 21Vianet Group; (ii) a loan agreement and a financial support letter pursuant to which we agree to give unlimited financial support to 21Vianet Technology; and (iii) an exclusive technical consulting and services agreement, where we receive substantially all of the economic benefits of 21Vianet Technology in consideration for the services provided by 21Vianet China and we are considered the primary beneficiary of 21Vianet Technology. Accordingly, 21Vianet Technology is our variable interest entity under U.S. GAAP and we consolidate its result in our consolidated financial statements. Similar contractual arrangements had been entered into (i) amongst iJoy BVI, SZ Zhuoaiyi, BJ iJoy and its shareholder; (ii) amongst WiFire Group, aBitCool DG, WiFire Network and its shareholders; and (iii) Hongkong Fastweb Holding Co, Limited, SH Edge Connect and SH Zhiyan and its shareholder, and similar conclusion has been reached respect to the variable interest entity structure with respect to BJ iJoy, WiFire Network, and SH Zhiyan. We have confirmed with Han Kun Law Offices, our PRC legal counsel, on the compliance and validity of each of the contractual agreements under PRC laws and regulations. However, any change in PRC laws and regulations may affect our ability to effectively control the variable interest entities and preclude us from consolidating the variable interest entities in the future.

Long-term Investments

Our long-term investments primarily consist of equity investments without readily determinable fair value, equity method investments.

Pursuant to ASC Topic 321, *Investments—Equity Securities* (“ASC 321”), equity investments, except for those accounted for under the equity method and those that result in consolidation of the investee and certain other investments, are measured at fair value, and any changes in fair value are recognized in earnings. For equity securities without readily determinable fair value and do not qualify for the existing practical expedient in ASC Topic 820, *Fair Value Measurements and Disclosures* (“ASC 820”), to estimate fair value using the net asset value per share (or its equivalent) of the investment, we elected to use the measurement alternative to measure those investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. Equity securities with readily determinable fair value are measured at fair values, and any changes in fair value are recognized in earnings.

For equity investments measured at fair value with changes in fair value recorded in earnings, we do not assess whether those securities are impaired. For those equity investments that we elect to use the measurement alternative, we make a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the entity has to estimate the investment’s fair value in accordance with the principles of ASC 820. If the fair value is less than the investment’s carrying value, the entity has to recognize an impairment loss in net income equal to the difference between the carrying value and fair value.

Investments in equity investees represent investments in entities in which we can exercise significant influence but does not own a majority equity interest or control are accounted for using the equity method of accounting in accordance with ASC Subtopic 323-10, *Investments-Equity Method and Joint Ventures: Overall* (“ASC 323-10”). we apply the equity method of accounting that is consistent with ASC 323-10 in limited partnerships in which we hold a three percent or greater interest. Under the equity method, we initially record our investment at cost and prospectively recognizes its proportionate share of each equity investee’s net profit or loss into its consolidated statements of operations. The difference between the cost of the equity investee and the amount of the underlying equity in the net assets of the equity investee is recognized as equity method goodwill included in equity method investments on the consolidated balance sheets. We evaluate our equity method investments for impairment under ASC 323-10. An impairment loss on the equity method investments is recognized in the consolidated statements of operations when the decline in value is determined to be other-than-temporary.

Accounts Receivable and Allowance for Doubtful Debt

Prior to adopting ASC 326, *Financial Instruments-Credit Losses* (“ASC326”), accounts receivable are carried at net realizable value. An allowance for doubtful debt is recorded in the period when loss is probable based on an assessment of specific evidence indicating troubled collection, historical experience, accounts aging and other factors in accordance with ASC 310, *Receivables*. An accounts receivable is written off after all collection effort has ceased.

On January 1, 2020, we adopted ASC326 using modified-retrospective transition approach. Following the adoption of this guidance, a cumulative-effect adjustment in accumulated deficit of RMB2.7 million was recognized as of January 1, 2020. For the year ended December 31, 2020, we recorded credit losses of RMB2.4 million (US\$0.4 million).

Pursuant to ASC 326, an allowance for credit losses for financial assets, including accounts receivable, carried at amortized cost to present the net amount expected to be collected as of the balance sheet date. Such allowance is based on credit losses expected to arise over the life of the asset’s contractual term, which includes consideration of prepayments. Assets are written off when we determine that such financial assets are deemed uncollectible and are recognized as a deduction from the allowance for credit losses. Expected recoveries of amounts previously written off, not to exceed the aggregate of the amount previously written off, are included in determining the necessary reserve at the balance sheet date. We pool financial assets based on similar risk characteristics to estimate expected credit losses. We estimate expected credit losses on financial assets individually when those assets do not share similar risk characteristics. We closely monitor our accounts receivable including timely account reconciliations, detailed reviews of past due accounts, updated credit limits, and monthly analysis of the adequacy of their reserve for credit losses.

We utilize a loss rate approach to determine lifetime expected credit losses for its financial assets. This method is used for calculating an estimate of losses based primarily on our historical loss experience. In determining loss rates, we evaluate information related to historical losses, adjusted for current conditions and further adjusted for the period of time that we can reasonably forecast. We have concluded that we can reasonably support a forecast period for the contractual life of our financial assets. Qualitative and quantitative adjustments related to current conditions and the reasonable and supportable forecast period consider the following: the customer or vendor’s creditworthiness, changes in the policy and procedures to establish customer credit limits, changes in the payment terms of receivables, existence and effect of any concentration of credit and changes in the level of such concentrations, and the effects of other external forces such as the current and forecasted direction of the economic and business environment.

Leases

Effective January 1, 2019, we adopted ASC Topic 842, *Lease* (“ASC 842”) using the modified retrospective method and did not restate the comparable periods. We determine if an arrangement is a lease at inception. Leases are classified as operating or finance leases in accordance with the recognition criteria in ASC 842-20-25. Our leases do not contain any material residual value guarantees or material restrictive covenants.

We have elected the package of practical expedients, which allows us not to reassess (1) whether any expired or existing contracts as of the adoption date are or contain a lease, (2) lease classification for any expired or existing leases as of the adoption date and (3) initial direct costs for any expired or existing leases as of the adoption date. We have lease agreements with lease and nonlease components, which are generally accounted for separately. Lastly, we elected the short-term lease exemption for all contracts with lease term of 12 months or less.

At the commencement date of a lease, we determine the classification of the lease based on the relevant factors present and records a right-of-use (“ROU”) asset and lease liability for operating lease, and records property and equipment and finance lease liability for finance lease. ROU assets and property and equipment acquired through lease represent the right to use an underlying asset for the lease term, and operating lease liabilities and finance lease liabilities represent the obligation to make lease payments arising from the lease. ROU assets and lease liabilities are calculated as the present value of the lease payments not yet paid. If the rate implicit in our leases is not readily available, we use an incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. This incremental borrowing rate reflects the fixed rate at which we could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. ROU assets include any lease prepayments and are reduced by lease incentives. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term. Lease terms are based on the non-cancelable term of the lease and may contain options to extend the lease when it is reasonably certain that we will exercise that option.

Leases with an initial lease term of 12 months or less are not recorded on the consolidated balance sheet. Lease expense for these leases is recognized on a straight-line basis over the lease term.

Income Taxes

We account for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities using enacted tax rates that will be in effect in the period in which the differences are expected to reverse. The carrying amount of deferred tax assets is reviewed on an entity-by-entity basis and is reduced by a valuation allowance to the extent that it is more-likely-than-not that the benefits of the deferred tax assets will not be realized in future years. The valuation allowance is determined based on the weight of positive and negative evidences including future reversals of existing taxable temporary differences, the adequacy of future taxable income exclusive of reversing temporary differences, and verifiable tax planning. The estimated future taxable income involves significant assumptions of forecasted revenue growth that take into consideration of our historical financial results, our plan of expanding operating capacity as well as current industry trends. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date of the change in tax rate. All deferred income tax assets and liabilities are classified as non-current on the consolidated balance sheets.

We apply ASC Topic 740, *Accounting for Income Taxes* (“ASC 740”) to account for uncertainty in income taxes. ASC 740 prescribes a recognition threshold a tax position is required to meet before being recognized in the financial statements.

We have elected to classify interest and penalties related to unrecognized tax benefits, if and when required, as part of “income tax benefits (expenses)” in the consolidated statements of operations.

Share-based Compensation

Share options and Restricted Share Units (“RSUs”) granted to employees are accounted for under ASC Topic 718, *Compensation—Stock Compensation* (“ASC 718”), which requires that share-based awards granted to employees be measured based on the grant date fair value and recognized as compensation expense over the requisite service period and/or performance period (which is generally the vesting period) in the consolidated statements of operations. We account our forfeitures as we occur.

We have elected to recognize compensation expense using the straight-line method for share-based awards granted with service conditions that have a graded vesting schedule. For share-based awards granted with performance conditions, we recognize compensation expense using the accelerated method. We commence recognition of the related compensation expense if it is probable that the defined performance condition will be met. To the extent that we determine that it is probable that a different number of share-based awards will vest depending on the outcome of the performance condition, the cumulative effect of the change in estimate is recognized in the period of change. For share-based awards with market conditions, the probability to achieve market conditions is reflected in the grant date fair value. We recognized the related compensation expenses when the requisite service is rendered using the accelerate method.

On November 26, 2016, the Board approved a new incentive program to certain individuals with a new bonus scheme which will be settled by issuing a variable number of shares with a fair value equal to fixed dollar amount on the settlement date. We remeasure the fair value of such liability at each reporting period end through earnings until the actual settlement date, which is the date when the number of underlying shares were fixed and recorded the compensation cost over the remaining vesting term.

A cancellation of the terms or conditions of an equity award under original award in exchange for a new award should be treated as modification. The compensation costs associated with the modified awards are recognized if either the original vesting conditions or the new vesting conditions have been achieved. Total recognized compensation cost for the awards is at least equal to the fair value of the original awards at the grant date unless at the date of the modification the performance or service conditions of the original awards are not expected to be satisfied. The incremental compensation cost is measured as the excess of the fair value of the replacement awards over the fair value at the modification date. Therefore, in relation to the modified awards, we recognize share-based compensation over the vesting periods of the new awards, which comprises (i) the amortization of the incremental portion of share-based compensation over the remaining vesting term, and (ii) any unrecognized compensation cost of original awards, using either the original term or the new term, whichever results in higher expenses for each reporting period. For modification of a liability award that remains a liability after modification, the liability award continues to be re-measured at fair value at each reporting date. For a modification of a market condition, the incremental portion of share-based compensation and unrecognized compensation cost of original award are recognized over new vesting period. For modification of a liability award that remains a liability after modification, the liability award continues to be remeasured at fair value at each reporting date.

Recently Issued Accounting Pronouncements

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform* (Topic 848), which is elective, and provides for optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts and hedging relationships that reference LIBOR or another reference rate expected to be discontinued due to reference rate reform. These amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. We are currently evaluating the impact of reference rate reform and potential impact of adoption of these elective practical expedients on our condensed consolidated financial statements and will consider the impact of adoption during our analysis.

In August 2020, the FASB issued ASU No. 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity's Own Equity* ("ASU 2020-06"), which focuses on amending the legacy guidance on convertible instruments and the derivatives scope exception for contracts in an entity's own equity. ASU 2020-06 simplifies an issuer's accounting for convertible instruments by reducing the number of accounting models that require separate accounting for embedded conversion features. ASU 2020-06 also simplifies the settlement assessment that entities are required to perform to determine whether a contract qualifies for equity classification. Further, ASU 2020-06 enhances information transparency by making targeted improvements to the disclosures for convertible instruments and earnings-per-share (EPS) guidance, i.e., aligning the diluted EPS calculation for convertible instruments by requiring that an entity use the if-converted method and that the effect of potential share settlement be included in the diluted EPS calculation when an instrument may be settled in cash or shares, adding information about events or conditions that occur during the reporting period that cause conversion contingencies to be met or conversion terms to be significantly changed. This update will be effective for our fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Entities can elect to adopt the new guidance through either a modified retrospective method of transition or a fully retrospective method of transition. We expect to early adopt ASU 2020-06 beginning January 1, 2021 and do not expect any material impact on its financial statement at the date of adoption.

Inflation

In the last three years, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the annual average percent changes in the consumer price index in China for 2018, 2019 and 2020 were 2.1%, 2.9% and 2.5%, respectively. Although we have not been materially affected by inflation in the past, we cannot assure you that we will not be affected in the future by higher rates of inflation in China.

Cost of Revenues

Our cost of revenues increased by 31.7% from RMB2,849.5 million in 2019 to RMB3,753.0 million (US\$575.2 million) in 2020, primarily due to (i) increases in our telecommunication, utility and depreciation costs attributable to the delivery of additional cabinets and (ii) increased customer demand for our cloud and VPN services.

Gross Profit

As a result of the foregoing, our gross profit increased by 14.5% from RMB939.4 million in 2019 to RMB1,076.0 million (US\$164.9 million) in 2020. Our gross margin decreased from 24.8% in 2019 to 22.3% in 2020, primarily due to the delivery of additional cabinets which usually have lower utilization and incur depreciation and maintenance costs during the ramp-up period.

Operating Expenses

Our operating expenses increased by 26.7% from RMB757.2 million in 2019 to RMB959.4 million (US\$147.0 million) in 2020. Our operating expenses as a percentage of net revenues remains stable at 19.9% in 2020 compared to that of 20.0% in 2019.

Sales and Marketing Expenses. Our sales and marketing expenses increased by 13.9% from RMB206.3 million in 2019 to RMB235.0 million (US\$36.0 million) in 2020, primarily due to the expansion of our business. As a percentage of net revenues, our sales and marketing expenses decreased from 5.4% in 2019 to 4.9% in 2020.

Research and Development Expenses. Our research and development expenses increased by 27.1% from RMB88.8 million in 2019 to RMB112.9 million (US\$17.3 million) in 2020, in line with the overall growth of our business and attributable to the increase in staff costs as we have recruited new senior management. As a percentage of net revenues, our research and development expenses were both 2.3% in 2019 and 2020.

General and Administrative Expenses. Our general and administrative expenses increased by 28.9% from RMB415.3 million in 2019 to RMB535.1 million (US\$82.0 million) in 2020, in line with the overall growth of our business and attributable to the increase in staff costs as we have recruited new senior management. As a percentage of net revenues, our general and administrative expenses slightly increased from 11.0% in 2019 to 11.1% in 2020.

Allowance for doubtful debt. Our allowance for doubtful debt increased from RMB1.6 million in 2019 to RMB2.4 million (US\$0.4 million) in 2020.

Impairment of long-lived assets. We recorded a loss of RMB81.6 million (US\$12.5 million) in 2020.

Interest Income

Our interest income decreased by 41.9% from RMB54.6 million in 2019 to RMB31.7 million (US\$4.9 million) in 2020, primarily due to our increased use of funds in various business projects.

Interest Expense

Our interest expense increased by 10.0% from RMB346.0 million in 2019 to RMB380.6 million (US\$58.3 million) in 2020, primarily due to interest expense recognized for the convertible promissory notes with an aggregate principal amount of US\$200 million issued by us in 2020, and an increase in our bank borrowings in 2020.

Other Income

Our other income decreased by 54.5% from RMB36.4 million in 2019 to RMB16.5 million (US\$2.5 million) in 2020. Other income comprises miscellaneous non-operating income that we generate.

Other Expenses

Our other expenses increased from RMB5.6 million in 2019 to RMB36.9 million (US\$5.7 million) in 2020, primarily due to expenses of RMB18.7 million (US\$2.9 million) incurred in connection with issuing the convertible promissory notes in 2020.

Changes in the Fair Value of Convertible Promissory Notes

Changes in the fair value of convertible promissory notes were RMB2.5 billion (US\$0.4 billion) in 2020, which represent unrealized loss on the fair value of our convertible promissory notes issued by us in February to April 2020 caused by changes in the market price of our ADSs.

Loss on Debt Extinguishment

We did not record any loss or profit on debt extinguishment in 2020, compared to RMB18.9 million in 2019.

Foreign Exchange Gain

We had a foreign exchange gain of RMB228.1 million (US\$35.0 million) in 2020, which represents unrealized net gain caused by the depreciation of the U.S. dollar against the Renminbi.

Income Tax Expenses

We recorded income tax expenses in the amount of RMB109.3 million (US\$16.8 million) in 2020, compared with income tax expenses of RMB5.4 million in 2019, with the effective tax rate 4.3%. This is primarily due to:

- Loss incurred outside China reduces the income tax benefit by RMB712.0 million (US\$109.1 million) in 2020;
- Current and deferred tax rate differences lead to an income tax expense in the amount of RMB36.4 million (US\$5.6 million) in 2020; and
- Change in valuation allowance leads to a decrease in the income tax expense in the amount of RMB6.5 million (US\$1.0 million) in 2020.

Net Loss

As a result of the foregoing, we recorded a net loss of RMB2,680.3 million (US\$410.8 million) in 2020, as compared to a net loss of RMB181.2 million in 2019.

Year Ended December 31, 2019 Compared to Year Ended December 31, 2018

Net Revenues

Our net revenues increased from RMB3,401.0 million in 2018 to RMB3,789.0 million in 2019. The increase was primarily attributable to the growing demand for data centers in the domestic market, driven by the ongoing expansion of corporate digitalization across China.

Revenues from our hosting and related services amounted to RMB3,789.0 million in 2019, increasing by 11.4% from RMB3,401.0 million in 2018. The increase in revenues from our hosting and related services was primarily due to (i) the increase in the total number of billable cabinets and the amount of monthly recurring revenue per cabinet under our management, which was attributable to growing customer demand, (ii) the growth in demand for our cloud business. The number of cabinets under our management increased from 30,654 as of December 31, 2018 to 36,291 as of December 31, 2019.

Cost of Revenues

Our cost of revenues increased by 16.0% from RMB2,456.2 million in 2018 to RMB2,849.5 million in 2019. Our telecommunication costs increased by 17.9% from RMB1,332.3 million in 2018 to RMB1,570.8 million in 2019. The increase in our cost of revenues was primarily due to the delivery of additional pipeline capacity.

Gross Profit

Our gross profit decreased by 0.6% from RMB944.9 million in 2018 to RMB939.4 million in 2019. As a percentage of net revenues, our gross profit decreased from 27.8% in 2018 to 24.8% in 2019. The decrease of gross profit and gross margin was primarily due to the delivery of additional pipeline capacity.

Operating Expenses

Our operating expenses increased by 7.0% from RMB707.4 million in 2018 to RMB757.2 million in 2019. Our operating expenses as a percentage of net revenues decreased from 20.8% in 2018 to 20.0% in 2019. The decrease of operating expenses as a percentage of net revenues was primarily due to the successful implementation of the Company's efficiency enhancement initiatives.

Sales and Marketing Expenses. Our sales and marketing expenses increased by 19.8% from RMB172.2 million in 2018 to RMB206.3 million in 2019, primarily due to the successful implementation of various market activities. As a percentage of net revenues, our sales and marketing expenses was 5.1% and 5.4% in 2018 and 2019, respectively.

Research and Development Expenses. Our research and development expenses decreased from RMB92.1 million in 2018 to RMB88.8 million in 2019. As a percentage of net revenues, our research and development expenses decreased from 2.7% in 2018 to 2.3% in 2019.

General and Administrative Expenses. Our general and administrative expenses decreased by 10.2% from RMB462.6 million in 2018 to RMB415.3 million in 2019, primarily due to a decrease in labor cost as a result of the successful implementation of the Company's efficiency enhancement initiatives. As a percentage of net revenues, our general and administrative expenses decreased from 13.5% in 2018 to 11.0% in 2019.

Changes in the Fair Value of Contingent Purchase Consideration Payable. We incurred nil in the changes of the fair value of contingent purchase consideration payable in 2019.

Impairment of receivables from equity investees. We recorded a loss of RMB52.1 million in 2019.

Impairment of long-lived assets. We incurred nil in impairment of long-lived assets in 2019.

Impairment of goodwill. We incurred nil in impairment of goodwill in 2019.

Interest Income

Our interest income increased from RMB45.2 million in 2018 to RMB54.6 million in 2019, primarily due to an increase in interest income generated from short-term investments.

Interest Expense

Our interest expense increased from RMB236.1 million in 2018 to RMB346.0 million in 2019, primarily due to interest expense recognized for the 2021 Notes.

Other Income

Our other income decreased from RMB58.0 million in 2018 to RMB36.4 million in 2019. Other income in 2019 was primarily attributable to disposal gain on equity method investments.

Other Expenses

Our other expenses increased from RMB4.1 million in 2018 to RMB5.6 million in 2019. Other expenses in both periods were primarily due to the loss attributable to the disposal of certain of our equipment, such as servers and back-up batteries.

Loss on Debt Extinguishment

We recorded a loss on debt extinguishment of RMB18.9 million 2019.

Foreign Exchange Loss

We had a foreign exchange loss of RMB28.0 million in 2019, primarily due to the appreciation of U.S. dollar against Renminbi in 2019.

Income Tax Expenses

We recorded income tax expenses in the amount of RMB5.4 million in 2019, compared with income tax expenses of RMB24.4 million in 2018, with the effective tax rates 3.1%. This is primarily due to:

- Change in valuation allowance leads to a decrease in the income tax expense in the amount of RMB25.4 million in 2019;
- Loss incurred outside China reduces the income tax benefit by RMB77.1 million in 2019; and
- Current and deferred tax rate differences lead to an income tax expense in the amount of RMB8.7 million in 2019.

Consolidated Net Loss

As a result of the above, we recorded a net loss of RMB181.2 million in 2019, as compared to a net loss of RMB186.7 million in 2018.

B. Liquidity and Capital Resources

As of December 31, 2019, we had RMB1,808.5 million in cash and cash equivalents, RMB548.7 million in restricted cash (current and non-current portion) and RMB363.9 million in short-term investments. As of December 31, 2020, we had RMB2,710.3 million (US\$415.4 million) in cash and cash equivalents, RMB270.5 million (US\$41.4 million) in restricted cash, RMB135.6 million (US\$20.8 million) in non-current portion of restricted cash and RMB285.9 million (US\$43.8 million) in short-term investments.

As of December 31, 2019, we had short-term bank borrowings and long-term borrowings (current portion) from various commercial banks with an aggregate outstanding balance of RMB267.0 million, and long-term borrowings (excluding current portion) from various commercial banks with an aggregate outstanding balance of RMB79.5 million. As of December 31, 2020, we had short-term bank borrowings and long-term borrowings (current portion) from various commercial banks with an aggregate outstanding balance of RMB214.3 million (US\$32.8 million), and long-term borrowings (excluding current portion) from various commercial banks with an aggregate outstanding balance of RMB887.0 million (US\$135.9 million). Our short-term bank borrowings bore average interest rates of 4.05%, 4.56% and 4.46% per annum, respectively, in 2018, 2019 and 2020. Our short-term bank borrowings have maturity terms of one year and expire at various times throughout the year. There are no material covenants or restrictions on us associated with our outstanding short-term borrowings. We have entered into long-term borrowing arrangements since 2013 with maturity terms of two to five years. The long-term borrowings (including current and non-current portions) outstanding as of December 31, 2018, 2019 and 2020 bore weighted-average interest rates of 5.31%, 5.28% and 5.61% per annum, respectively.

We issued an aggregate of 150,000 Series A perpetual convertible preferred shares to Vector Holdco Pte. Ltd., BTO Vector Fund ESC (CYM) L.P. and BTO Vector Fund FD (CYM) L.P., collectively referred to as "Affiliates of Vector", pursuant to an investment agreement dated June 22, 2020 among us, Affiliates of Vector and Blackstone Tactical Opportunities Fund — FD (Cayman) — NQ L.P. Dividends on each Series A perpetual convertible preferred share will accrue at 4.5% per annum from the issuance date until the date immediately prior to the conversion date. At any time after the issuance date, Series A convertible preferred shares are convertible into Class A ordinary shares or ADSs at the holder's option, the number of which will be determined based on a conversion price which is initially US\$2.8333 per Class A ordinary shares or US\$17.00 per ADS, subject to certain adjustments therein. On March 1, 2021, Affiliates of Vector converted all of their 150,000 Series A perpetual convertible preferred shares into 54,570,816 Class A Ordinary Shares.

We issued convertible promissory notes to Goldman Sachs Asia Strategic Pte. Ltd., StoneBridge 2020, L.P. and StoneBridge 2020 Offshore Holdings II, L.P. in an aggregate principal amount of US\$75,000,000 pursuant to a convertible note purchase agreement dated February 19, 2020 between us and Goldman Sachs Asia Strategic Pte. Ltd. We issued convertible promissory notes to Hina Group Fund II, L.P. and Hina Group Fund VI, L.P. in an aggregate principal amount of US\$17,000,000 pursuant to a convertible note purchase agreement dated March 16, 2020 among us, Hina Group Fund II, L.P. and Hina Group Fund VI, L.P. We issued convertible promissory notes to UBS SDIC Fund Management Co., Ltd. in an aggregate principal amount of US\$58,000,000 pursuant to a convertible note purchase agreement dated April 27, 2020 and a convertible note purchase agreement dated June 5, 2020, between us and UBS SDIC Fund Management Co., Ltd. We issued a convertible promissory note to Asialeads Capital (Cayman) Limited in an aggregate principal amount of US\$50,000,000 pursuant to a convertible note purchase agreement dated February 24, 2020 between us and Asialeads Capital (Cayman) Limited. The convertible notes will mature in five years, bearing interest at the rate of 2% per annum from the issuance date which shall be payable semiannually in arrears in cash. At any time after the issuance, each note is convertible into our Class A Ordinary Shares at the holder's option at a conversion price of US\$2 per share, or US\$12 per ADS, subject to customary anti-dilution adjustments. Unless previously redeemed or converted, we shall redeem the note on the maturity date at 115% of the then outstanding principal amount plus all accrued but unpaid interest. In addition, if any portion of the outstanding principal amount of the notes has not been converted into our shares by the third anniversary of the note issuance date, the holders have the right to require us to redeem, in whole or in part, the outstanding principal amount of the note at 109% of the principal amount plus all accrued but unpaid interest. In August 2020, Asialeads Capital (Cayman) Limited partially converted the principal amount of its convertible note of US\$25,000,000 into 12,499,998 Class A Ordinary Shares at the conversion price of US\$2 per share, or US\$12 per ADS. In December 2020, Hina Group Fund VI, L.P. partially converted the principal amount of its convertible note of US\$1,705,002.63 into 856,326 Class A Ordinary Shares at the conversion price of US\$2 per share, or US\$12 per ADS. In December, UBS SDIC Fund Management Co., Ltd partially converted the principal amount of its convertible note of US\$20,666,667.01 into 10,353,816 Class A Ordinary Shares at the conversion price of US\$2 per share, or US\$12 per ADS.

In August 2017, we issued USD-denominated notes due 2020 in an aggregate principal amount of US\$200 million at a coupon rate of 7.000% per annum and in September 2017, we issued USD-denominated notes due 2020 in an aggregate principal amount of US\$100 million at a coupon rate of 7.000% per annum, collectively referred to as the "2020 Notes." The notes issued in September 2017 were priced at a slight premium of 100.04, with an effective yield of 6.98%. The notes issued in September 2017 constituted a further issuance of, and were consolidated to form a single series with, the notes issued in August 2017. Interest on the 2020 Notes is payable semi-annually in arrears on, or nearest to, August 17 and February 17 in each year, beginning on February 17, 2018.

In April 2019, we issued USD-denominated notes due 2021 in an aggregate principal amount of US\$300 million at an interest rate of 7.875% per annum, or the 2021 Notes, and used a portion of the proceeds to purchase, pursuant to a tender offer, US\$150,839,000 in principal amount of the 2020 Notes, representing 50.3% of the outstanding principal amount of the 2020 Notes. On August 12, 2019, we repurchased US\$18,000,000 in principal amount of 2020 Notes at the par value. As of September 30, 2020, the outstanding principal amount of the 2020 Notes was nil. Interest on the 2021 Notes is payable semi-annually in arrears on April 15 and October 15 in each year, beginning on October 15, 2019.

Both the 2020 Notes and 2021 Notes have (i) a restrictive covenant that restricts our ability in consolidation, merger and sale of assets to a certain extent; (ii) a negative pledge covenant that restricts our ability to create security upon our undertaking, assets or revenues to secure bonds, notes, debentures or other securities that are quoted, listed or dealt in or traded on securities market; (iii) a dividend payment restriction covenant; and (iv) a covenant relating to the ratio of our Adjusted EBITDA to our Consolidated Interest Expense (interest expense paid net of interest income received). Such covenants may limit our ability to undertake additional debt financing, but not equity financing.

We had unused credit lines in an aggregate amount of RMB1,574.6 million (US\$241.3 million) as of December 31, 2020 under credit agreements with nine banks. As of the same date, we used RMB858.6 million (US\$131.6 million) of the credit lines under the credit agreements with nine banks, pursuant to which we were granted credit lines in an aggregate amount of RMB2,433.2 million (US\$372.9 million). There are no material covenants that restrict our ability to undertake additional financing associated with the used credit lines. No terms and conditions of the unused credit lines are available yet because utilization of such unused portion requires approval by the banks and separate loan agreements setting forth detailed terms and conditions will only be entered into with the banks upon utilization. In January 2021, we issued USD-denominated convertible senior notes due 2026 in an aggregate principal amount of US\$600 million at a zero-coupon rate. We believe the working capital as of December 31, 2020 is sufficient for our present requirements.

As of December 31, 2020, we had total outstanding debts (including borrowings and bonds payable), of RMB3,044.9 million (US\$466.7 million), consisting of onshore debt obligations of RMB1,101.3 million (US\$168.8 million) and offshore debt obligations of RMB1,943.6 million (US\$297.9 million). We believe we have sufficient financial resources to meet both of our onshore and offshore debt obligations when due. The growth of our business relies on the construction of new data centers. We also intend to acquire or invest in companies whose businesses are complementary to ours. We intend to use the proceeds of our outstanding debt mainly to construct new data centers and fund our acquisitions. As of December 31, 2020, we had purchase commitments made for acquisitions of machinery, equipment, construction in progress, bandwidth and cabinet capacity of RMB2,385.0 million (US\$365.5 million) coming due within twelve months, and we intend to use a portion of the proceeds to fund these purchase commitments. Except as disclosed in this annual report, we have no outstanding bank loans or financial guarantees or similar commitments to guarantee the payment obligations of third parties. We believe that our current cash, cash equivalents and time deposits, our cash flow from operations and proceeds from our financing activities will be sufficient to meet our anticipated cash needs, including our cash needs for working capital and capital expenditures, for the next 12 months. If we have additional liquidity needs in the future, we may obtain additional financing, including equity offering and debt financing in capital markets, to meet such needs.

As of December 31, 2020, the total amount of cash and cash equivalents, restricted cash and short-term investments was RMB3,402.3 million (US\$521.4 million), of which RMB1,028.3 million (US\$157.6 million), RMB391.6 million (US\$60.0 million) and RMB1,982.4 million (US\$303.8 million) was held by our consolidated affiliated entities, PRC subsidiaries and offshore subsidiaries, respectively. Cash transfers from our PRC subsidiaries to our subsidiaries outside of China are subject to PRC government control of currency conversion. Restrictions on the availability of foreign currency may affect the ability of our PRC subsidiaries and consolidated affiliated entities to remit sufficient foreign currency to pay dividends or other payments to us, or otherwise satisfy their foreign currency denominated obligations. See “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Governmental control of currency conversion may limit our ability to receive and utilize our revenues effectively.” The major cost that would be incurred to distribute dividends is the withholding tax imposed on the dividends distributed by our PRC operating subsidiaries at the rate of 10% or a lower rate under an applicable tax treaty, if any.

The following table sets forth a summary of our cash flows for the periods indicated:

	For the Years Ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
	(in thousands)			
Net cash generated from operating activities	704,966	802,922	714,243	109,464
Net cash used in investing activities	(304,846)	(1,611,983)	(3,889,174)	(596,043)
Net cash (used in) generated from financing activities	(19,901)	461,557	4,163,255	638,046
Effect on foreign exchange rate changes on cash and cash equivalents and restricted cash	85,333	43,660	(229,064)	(35,106)
Net increase (decrease) in cash and cash equivalents and restricted cash	465,552	(303,844)	759,260	116,361
Cash and cash equivalents and restricted cash at beginning of the year	2,195,469	2,661,021	2,357,177	361,253
Cash and cash equivalents and restricted cash at end of the year	2,661,021	2,357,177	3,116,437	477,614
Cash and cash equivalents, restricted cash and short-term investments at end of the year	2,906,035	2,721,033	3,402,309	521,426

Operating Activities

Net cash generated from operating activities was RMB714.2 million (US\$109.5 million) in 2020, primarily resulted from a net loss of RMB2,680.3 million (US\$410.8 million), positively adjusted for certain items such as (i) depreciation and amortization of RMB989.0 million (US\$151.6 million), (ii) the increase in advances from customers of RMB27.1 million (US\$4.2 million), and (iii) loss from equity method investments of RMB10.9 million (US\$1.7 million), partially offset by certain item such as the increase in prepaid expenses and other current assets of RMB117.1 million (US\$17.9 million).

Net cash generated from operating activities was RMB802.9 million in 2019, primarily resulted from a net loss of RMB181.2 million, positively adjusted for certain items such as (i) depreciation and amortization of RMB772.2 million, (ii) the increase in advances from customers of RMB398.7 million, and (iii) loss from equity method investments of RMB50.6 million, partially offset by certain item such as the increase in prepaid expenses and other current assets of RMB328.2 million.

Net cash generated from operating activities was RMB705.0 million in 2018, primarily resulted from a net loss of RMB186.7 million, positively adjusted for certain items such as (i) depreciation and amortization of RMB634.6 million, (ii) the increase in advances from customers of RMB266.8 million, and (iii) loss from equity method investments of RMB186.6 million, partially offset by certain item such as the increase in prepaid expenses and other current assets of RMB262.4 million.

Investing Activities

Net cash used in investing activities was RMB3,889.2 million (US\$596.0 million) in 2020, as compared to net cash used in investing activities of RMB1,612.0 million in 2019. Net cash used in investing activities in 2020 is primarily related to our purchase of property and equipment in the amounts of RMB2,473.3 million (US\$379.1 million), our payment for short-term investments in the amount of RMB328.2 million (US\$50.3 million), offset by proceeds received from maturity for short-term investments in the amount of RMB397.6 million (US\$60.9 million), proceeds from disposal of long-term investments in the amount of RMB1.9 million (US\$0.3 million).

Net cash used in investing activities was RMB1,612.0 million in 2019, as compared to net cash used in investing activities of RMB304.8 million in 2018. Net cash used in investing activities in 2019 is primarily related to our purchase of property and equipment in the amounts of RMB1,248.8 million, our payments for long-term investments in the amount of RMB9.3 million, our payment for short-term investments in the amount of RMB436.7 million, offset by proceeds received from maturity for short-term investments in the amount of RMB312.2 million, proceeds from disposal of long-term investments in the amount of RMB19.0 million.

Net cash used in investing activities was RMB304.8 million in 2018, as compared to net cash used in investing activities of RMB833.3 million in 2017. Net cash used in investing activities in 2018 is primarily related to our purchase of property and equipment in the amounts of RMB435.2 million, our payments for long-term investments in the amount of RMB252.8 million, our payment for short-term investments in the amount of RMB98.9 million, offset by proceeds received from maturity for short-term investments in the amount of RMB417.6 million, proceeds from disposal of long-term investments in the amount of RMB75.7 million.

Financing Activities

Net cash generated from financing activities was RMB4,163.3million (US\$638.0 million) in 2020, as compared to net cash used in financing activities amounting to RMB461.6 million in 2019. Net cash generated from financing activities in 2020 is primarily related to the proceeds from short-term bank borrowings of RMB34.0 million (US\$5.2 million), partially offset by payment for purchase of property and equipment through finance leases of RMB376.2 million (US\$57.7 million), the repayment of long-term bank borrowings of RMB33.0 million (US\$5.1 million), proceeds from issuance of convertible promissory notes of RMB1,409.4 million (US\$216.0 million), partially offset by payment of issuance and conversion cost of convertible promissory notes of RMB21.6 million (US\$3.3 million), proceeds from Series A perpetual convertible preferred shares of RMB1,058.3 million (US\$162.2 million) and proceeds from issuance of ordinary shares of RMB2,680.4 million (US\$410.8 million).

Net cash generated from financing activities was RMB461.6 million in 2019, as compared to net cash used in financing activities amounting to RMB19.9 million in 2018. Net cash generated from financing activities in 2019 is primarily related to the proceeds from issuance of 2021 Notes of RMB2,012.1 million and the proceeds from short-term bank borrowings of RMB234.5 million, partially offset by payment for purchase of property and equipment through finance leases of RMB333.6 million, the repayment of long-term bank borrowings of RMB85.1 million and the repurchase of 2020 Notes of RMB1,148.1 million.

Net cash used in financing activities was RMB19.9 million in 2018, as compared to net cash used in financing activities amounting to RMB612.7 million in 2017. Net cash used in financing activities in 2018 is primarily related to the payment for purchase of property and equipment through finance leases of RMB279.9 million and the repayment of long-term bank borrowings of RMB70.6 million, partially offset by the contribution from non-controlling interest in a subsidiary of RMB196.3 million and proceeds from the issuance of discounted notes of RMB95.6 million.

Capital Expenditures

We had capital expenditures relating to the addition of property and equipment of RMB435.2 million, RMB1,248.8 million and RMB2,473.3 million (US\$379.1 million) in 2018, 2019 and 2020, respectively, representing 12.8%, 33.0% and 51.2%, respectively, of our total net revenues. Our capital expenditures were primarily for building self-built data centers, purchasing network equipment, servers and other equipment. Our capital expenditures have been primarily funded by cash generated from our operations and net cash provided by financing activities. We estimate that our data center capital expenditures in 2021 will be within the range of RMB5.0 billion to RMB6.0 billion, which will primarily be used to build, or pursue acquisitions of, data centers, purchase network equipment, servers and other equipment to expand our business. We expect our data center capacity to increase by an aggregate amount of approximately 25,000 cabinets during the year of 2021, through both organic growth and strategic acquisitions. We may incur additional capital expenditure for real property purchase, data center construction and network capacity expansion if our actual development is beyond our current plan. We plan to fund the balance of our capital expenditure requirements for 2021 with cash from the proceeds from our operations, this offering, operations and additional bank borrowings, if available.

Holding Company Structure

21Vianet Group, Inc. is a holding company with no material operations of its own. We conduct our operations primarily through our PRC subsidiaries and consolidated affiliated entities in China. As a result, although other means are available for us to obtain financing at the holding company level, 21Vianet Group, Inc.'s ability to pay dividends and to finance any debt it may incur depends upon dividends paid by our subsidiaries. If our subsidiaries or any newly formed subsidiaries incur debt on its own behalf in the future, the instruments governing their debt may restrict its ability to pay dividends to 21Vianet Group, Inc. In addition, our PRC subsidiaries and consolidated affiliated entities are permitted to pay dividends to us only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. Under PRC law, our PRC subsidiaries and consolidated affiliated entities are required to set aside a portion of their after-tax profits each year to fund a statutory reserve and to further set aside a portion of its after-tax profits to fund the employee welfare fund at the discretion of the board or the enterprise itself. Although the statutory reserves can be used, among other ways, to increase the registered capital and eliminate future losses in excess of retained earnings of the respective companies, the reserve funds are not distributable as cash dividends except in the event of liquidation of these subsidiaries and consolidated affiliated entities.

C. Research and Development, Patents and Licenses, etc.

Research and Development and Intellectual Property

Our strong research and development capabilities support and enhance our service offerings. We have an experienced research and development team and devote significant resources to our research and development efforts, focusing on improving customer experience, increasing operational efficiency and bringing innovative solutions to the market quickly.

We have made continual investments and trainings for research and development to drive our growth in both mature and emerging businesses. We incurred RMB92.1 million, RMB88.8 million and RMB112.9 million (US\$17.3 million) in research and development expenses for the years ended December 31, 2018, 2019 and 2020, respectively. As of December 31, 2020, our experienced research and development team consisted of 125 engineers, many of whom have more than 10 years of relevant industry experience.

Our research and development efforts have yielded 75 patents, 80 patent applications and 161 software copyright registrations as of December 31, 2020, all in China and focused on the areas including (i) energy saving technology, (ii) data center design and facility maintenance and operations, (iii) network operation and maintenance management, (iv) cloud-related technologies, and (v) edge computing and blockchain.

We rely on a combination of copyright, patent, trademark, trade secret and other intellectual property laws, nondisclosure agreements and other protective measures to protect our intellectual property rights. We generally control access to and use of our proprietary software and other confidential information through the use of internal and external controls, including physical and electronic security, contractual protections, and intellectual property law. We have implemented a strict security and information technology management system, including the prohibition of copying and transferring of codes. We educate our staff on the need to, and require them to, comply with such security procedures. We also promote protection through contractual prohibitions, such as requiring our employees to enter into confidentiality and non-compete agreements.

D. Trend Information

Other than as disclosed elsewhere in this annual report, we are not aware of any trends, uncertainties, demands, commitments or events for the year ended December 31, 2020 that are reasonably likely to have a material adverse effect on our net revenues, income, profitability, liquidity or capital resources, or that caused the disclosed financial information to be not necessarily indicative of future results of operations or financial conditions.

E. Off-Balance Sheet Arrangements

We have not entered into any financial guarantees or other commitments to guarantee the payment obligations of any third parties. We have not entered into any derivative contracts that are indexed to our shares and classified as shareholder's equity, or that are not reflected in our consolidated financial statements. Furthermore, we do not have any retained or contingent interest in assets transferred to an unconsolidated entity that serves as credit, liquidity or market risk support to such entity. Moreover, we do not have any variable interest in any unconsolidated entity that provides financing, liquidity, market risk or credit support to us or engages in leasing, hedging or research and development services with us.

F. Tabular Disclosure of Contractual Obligations

The following table sets forth our contractual obligations and commercial commitments as of December 31, 2020:

	Payment Due by Period				
	Total	Less than 1 year	1-3 years	3-5 years	More than 5 years
	(in thousands of RMB)				
Short-term borrowings ⁽¹⁾	34,000	34,000	—	—	—
Long-term borrowings ⁽¹⁾⁽²⁾	1,113,487	200,796	375,340	315,232	222,119
Notes payable ⁽³⁾	1,957,470	1,957,470	—	—	—
Operating lease obligations ⁽⁴⁾	2,073,454	415,892	367,795	174,385	1,115,382
Purchase commitments ⁽⁵⁾	2,549,478	2,384,988	155,789	4,284	4,417
Finance lease minimum lease payment ⁽⁶⁾	2,928,844	542,268	488,963	219,443	1,678,170
Total	10,656,733	5,535,414	1,387,887	713,344	3,020,088

Notes:

- (1) As of December 31, 2020, our short-term bank borrowings bore a weighted average interest rate of 4.46% and have original maturity terms of one year. Our unused short-term and long-term borrowing facilities amounted to RMB1,574.6 million (US\$241.3 million). We have pledged land use rights with the net book value of RMB141.0 million (US\$21.6 million), property with the net book value of RMB264.8 million (US\$40.6 million), leasehold improvements with the net book value of RMB90.9 million (US\$13.9 million), construction-in-progress with the net book value of RMB238.8 million (US\$36.6 million), and computer and network equipment with the net book value of RMB40.9 (US\$6.3 million) for our borrowings.
- (2) Long-term borrowings (including the current portions) outstanding as of December 31, 2020 bear a weighted-average interest rate of 5.61% per annum, and are denominated in Renminbi. These loans were obtained from financial institutions located in the PRC.
- (3) The 2021 Notes with US\$300.0 million of the principal amount outstanding due 2021 at an interest rate of 7.875% per annum.
- (4) Operating lease obligations are primarily related to the lease of office and data center space.
- (5) As of December 31, 2020, we had commitments of approximately RMB1,678.3 million (US\$257.2 million) related to acquisition of machinery, equipment and construction in progress. In addition, we had outstanding purchase commitments in relation to bandwidth and cabinet capacity of RMB871.2 million (US\$133.5 million).
- (6) Related to finance leases for electronic equipment, optic fibers and property.

G. Safe Harbor

This annual report on Form 20-F contains forward-looking statements. These statements are made under the “safe harbor” provisions of Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements can be identified by terminology such as “will,” “expects,” “anticipates,” “future,” “intends,” “plans,” “believes,” “estimates,” “may,” “intend,” “is currently reviewing,” “it is possible,” “subject to” and similar statements. Among other things, the sections titled “Item 3. Key Information—Risk Factors,” “Item 4. Information on the Company,” and “Item 5. Operating and Financial Review and Prospects” in this annual report on Form 20-F, as well as our strategic and operational plans, contain forward-looking statements. We may also make written or oral forward-looking statements in our reports filed with or furnished to the SEC, in our annual report to shareholders, in press releases and other written materials and in oral statements made by our officers, directors or employees to third parties. Statements that are not historical facts, including statements about our beliefs and expectations, are forward-looking statements and are subject to change, and such change may be material and may have a material adverse effect on our financial condition and results of operations for one or more prior periods. Forward-looking statements involve inherent risks and uncertainties. A number of important factors could cause actual results to differ materially from those contained, either expressly or impliedly, in any of the forward-looking statements in this annual report on Form 20-F. Potential risks and uncertainties include, but are not limited to, a further slowdown in the growth of China’s economy, government measures that may adversely and materially affect our business, failure of the wealth management services industry in China to develop or mature as quickly as expected, diminution of the value of our brand or image due to our failure to satisfy customer needs and/or other reasons, our inability to successfully execute the strategy of expanding into new geographical markets in China, our failure to manage growth, and other risks outlined in our filings with the SEC. All information provided in this annual report on Form 20-F and in the exhibits is as of the date of this annual report on Form 20-F, and we do not undertake any obligation to update any such information, except as required under applicable law.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Senior Management

The following table sets forth information regarding our directors and executive officers as of the date of this annual report.

<u>Directors and Executive Officers</u>	<u>Age</u>	<u>Position/Title</u>
Sheng Chen	52	Chairman of the Board of Directors
Yoshihisa Ueno	58	Independent Director
Kenneth Chung-Hou Tai	70	Independent Director
Sean Shao	64	Independent Director
Erhfei Liu	62	Independent Director
Yao Li	52	Independent Director
Samuel Yuan-Ching Shen	56	Chief Executive Officer and Executive Chairman of Retail IDC Business Group
Sharon Xiao Liu	40	Chief Financial Officer and President of Wholesale IDC business group
Shiqi Wang	45	Chief Executive Officer of Wholesale IDC business group
Chunfeng Cai	38	Chief Operating Officer and Chief Executive Officer of Retail IDC Business Group
Tim Chen	46	Chief Strategy Officer and Chief Financial Officer Appointee

Mr. Sheng Chen, also known as Josh Sheng Chen, is one of our co-founders and has served as the executive chairman of our Board since the incorporation of the Company. He has been our chief executive officer since our inception to October 2015. Mr. Chen has been instrumental to the development and success of our business. Mr. Chen provides vision, overall management, and strategic decision-making relating to marketing, investment planning, and corporate development. Mr. Chen has more than 20 years’ experience in the internet infrastructure industry in China and started his entrepreneur career in 1990 when he was a sophomore at Tsinghua University. Mr. Chen founded our business in May 1996 and started the first carrier-neutral data center in China in July 1999. Mr. Chen currently also serves as a director of Cloud Tech Services Limited and Yipu Chain Network (Beijing) Technology Co., Ltd. Mr. Chen received his bachelor’s degree in electrical engineering from Tsinghua University in 1991. Mr. Chen is a member of the Tsinghua Entrepreneur and Executive Club and a managing director of the Internet Society of China.

Mr. Yoshihisa Ueno has served as our Director since October 2010. Mr. Ueno is a serial entrepreneur and venture capitalist with operations and industrial expertise in the U.S., Europe, Japan and China and over 35 years of incubation investment experience in emerging technology startups. Mr. Ueno has been our lead investor and board member of several of our affiliated companies since 2006. Mr. Ueno has been the founding partner of Synapse Company Limited and Synapse Partners Limited since December 2002, Synapse Holdings Limited since October 2013 and SMC Synapse Partners Limited from December 2010 to September 2015. Mr. Ueno has also been a director of several start-up portfolios such as Hivelocity Inc. from May 2015 and Catalyst Group Limited (Exicon Limited) from March 2015. Mr. Ueno has also served as director of Beyondsoft Corporation (a company listed on the Shenzhen Stock Exchange, stock code: 2649), from September 2005 to March 2010, CDS GS Japan Ltd. (a joint venture with CDC Corp) from June 2011 to April 2012, and Insource (HK) Ltd. (a JV with Insource Co., Ltd. (a company listed on the Tokyo Stock Exchange, stock code: 6200)) from December 2011 to September 2014. Mr. Ueno has managed several venture funds such as the Japan-China Bridge Fund from March 2005 to February 2011, Intellectual Property Bank (IPB) Partners Fund #1 in Japan from March 2006 to March 2010 and IPB Holding LLC in the U.S. from March 2006 to July 2007. Mr. Ueno also served as the chief executive officer at Cycolor, Inc., in the U.S. from September 1998 to June 2003, until Cycolor, Inc. was acquired by Eastman Kodak in early 2003. Mr. Ueno worked for Fujitec from April 1985 to May 1997 in various managerial capacities in Japan, China, the United Kingdom, Spain and Hong Kong. Mr. Ueno received his bachelor's degree in business administration from Takushoku University.

Mr. Kenneth Chung-Hou Tai has served as our Director since October 2012. Mr. Tai is a prominent figure in the Taiwanese technology sector with over 40 years of industry experience with leading technology and hardware companies in Taiwan and the U.S. Mr. Tai co-founded Acer Computer in 1976, which has become one of the top five branded PC vendors in the world today, and held various managerial positions during his tenure. Later in his technology career, Mr. Tai founded Investor Capital, a venture capital firm focusing on IT companies. Mr. Tai is now serving as chairman of Photonics Industry and Technology Development Association (PIDA), a non-profit organization affiliated to the Ministry of Science and Technology (MOST), and chairman of Digitimes Incorporated, the only technology-focused newspaper in Taiwan. Currently, Mr. Tai serves on the board of directors of several public companies in Taiwan and Singapore, including Global Testing Corporation (a company listed on the Singapore Stock Exchange, SGX: G31), Asustek Computer Inc. (a company listed on the Taiwan Stock Exchange, stock code: 2357), Chief Telecom Corporation (a company listed on Taipei Exchange, stock code: 6561), and Wafer Works Corporation (a company listed on Taipei Exchange, stock code: 6182). Mr. Tai also serves on the board of directors of several private companies, including Jasper Display Corporation. Mr. Tai received a master's degree in business administration from Tam Kang University and a bachelor's degree in electrical engineering from National Chiao Tung University in Taiwan.

Mr. Sean Shao has served as independent director and chairman of the audit committee of our company since August 2015 and also for UTStarcom Holdings Corp. (a company listed on Nasdaq, Nasdaq: UTSI) since October 2012. He served as chief financial officer and a board member of Trina Solar Limited from 2006 to 2008 and from 2015 to 2017, respectively. Mr. Shao was an independent director and chairman of the audit committee of Luckin Coffee Inc. from May 2019 until July 2020 and was re-appointed as an independent director of Luckin Coffee Inc. in September 2020. He was also the chairman of a special committee of the board which investigated accounting improprieties at Luckin Coffee Inc during 2020. In addition, Mr. Shao served as chief financial officer of ChinaEdu Corporation and Watchdata Technologies Ltd from 2004 to 2006. Prior to that, Mr. Shao worked at Deloitte Touche Tohmatsu CPA Ltd. for approximately a decade. Mr. Shao received his master's degree in healthcare administration from the University of California at Los Angeles in 1988 and his bachelor's degree in arts from East China Normal University in 1982. Mr. Shao is a member of the American Institute of Certified Public Accountants. See also "Risk Factors — Our directors and employees may face claims and lawsuits as a result of their position in other companies, which may also harm our reputation" for further information on certain pending litigation involving some of the U.S. listed companies of which Mr. Shao is an independent director.

Mr. Erhfei Liu has served as our Director since May 2015. Mr. Liu also serves as independent director for QingLing Motors (Group) Co., Ltd. (a company listed on the Hong Kong Stock Exchange, stock code: 1122), Jiangxi Copper Corporation (a company listed on the Hong Kong Stock Exchange, stock code: 358), and Frontage Holdings Corporation (a company listed on the Hong Kong Stock Exchange, stock code: 1521), . Mr. Liu has served as CEO of Asia Investment Fund (AIF), a private equity investment fund, since 2018, and co-founder and director of Cindat Capital Management Limited (Cindat), a global restate investment platform, from 2013 to 2017. Mr. Liu has remained in his position as a director at Cindat, but no longer participates in the day to day operations since 2018. From 1999 to 2012, Mr. Liu served as Chairman of Merrill Lynch China initially and Country Executive of Bank of America Merrill Lynch. In addition to his various investment banking responsibilities, he was also in charge of the firm's private equity business in Greater China from 2006 to 2010. Prior to joining Merrill Lynch, Mr. Liu worked as head of Asia or China for Goldman Sachs, Morgan Stanley, Smith Barney and Indosuez. Mr. Liu received an MBA from Harvard Business School and his bachelor's degrees from Brandeis University and Beijing Foreign Languages University.

Mr. Yao Li has served as our Director since May 2018. Dr. Li has over 23 years' experience in the finance and investment industry, and currently serves as the Chief Investment Officer of Asia for the International Finance Corporation (IFC) of the World Bank Group, Hong Kong office. Mr. Li also serves as independent director for Aceso Life Science Group Limited (a company listed on the Hong Kong Stock Exchange, stock code: 0474). Prior to joining IFC, Dr. Li served as the Vice General Manager in investment of PingAn Trust Company of PingAn Group of China from 2015 to early 2016. Prior to that, he served as the Chief Executive Officer of China-ASEAN Capital Advisory Company Limited and the Chairman of the Investment Committee of China-ASEAN Fund Management Company from mid-2011 to 2015. Prior to that, Dr. Li was a Co-head of the Investment Banking Business for Bank of China (BOC), where he was responsible for setting up the domestic securities business for BOC. Dr. Li holds a doctorate's degree in economics from Renmin University of China, a master's degree in economics from Nankai University and a bachelor's degree in economics from Nanjing University.

Mr. Samuel Yuan-Ching Shen has served as Group CEO from January 1, 2021 and executive chairman of our retail IDC business group since May 2020. Mr. Shen also serves as an independent director of Insigma Technology Co., Ltd. (a company listed on the Shanghai Stock Exchange, stock code: 600797), Mercury Fintech Holding Inc. (a company listed on the New York Stock Exchange, NYSE: MFH), and Xinyuan Real Estate Co., Ltd. (a company listed on the New York Stock Exchange, NYSE: XIN). Mr. Shen served as an independent director of Kingdee International Software Group Co. Ltd. (a company listed on the Hong Kong Stock Exchange, stock code: 0268), from January 2018 to January 2020. Mr. Shen has extensive experience in the fields of cloud, edge computing, big data, and AI services. Mr. Shen previously served as President of JD Cloud where he led JD Cloud's efforts to extend its offerings of tailored service solutions to a wide range of companies in different industry verticals. Prior to JD Cloud, Mr. Shen held various senior positions at Microsoft. Mr. Shen received his master's degree in computer science from University of California, Santa Barbara, and his bachelor's degree in chemistry from National Tsing Hua University.

Ms. Sharon Xiao Liu has served as president of Wholesale IDC business group from January 1, 2021 and our chief financial officer since January 2018. Ms. Liu will step down from chief financial officer and any other positions of our company effective April 30, 2021. Ms. Liu joined us in October 2010, and served as our vice president of finance in charge of the finance-related matters of our hosting and related services business prior to becoming our chief financial officer. Ms. Liu was also previously responsible for our pre- and post-IPO finance matters, investor relations, financial reporting, financial planning and analysis, and financial business plan. Prior to joining us, Ms. Liu was a manager at KPMG China in its audit division since 2003. Ms. Liu is a Certified Public Accountant (CPA) in the state of North Dakota. Ms. Liu received her dual bachelor's degrees in economics and law from Peking University.

Mr. Shiqi Wang has served as our chief executive officer of Wholesale IDC business group from January 1, 2021. Mr. Wang served as our chief executive officer and president from February 2018 to December 2020. Mr. Wang also served as the vice president of TUS Digital Group, a subsidiary of Tus-Holdings, director of Beijing CIC Technology Co., Ltd. and director of Guangzhou Tuwei Technology Co., Ltd. Mr. Wang has nearly 20 years of experience in the telecommunications industry and has worked at various renowned international companies, including 11 years with Ericsson, focusing primarily on strategy development and execution, corporate management, and equity investments. Mr. Wang received a bachelor's degree from Tsinghua University and an MBA from Peking University-Vlerick MBA Program (BiMBA).

Mr. Chunfeng Cai has served as our chief executive officer of Retail IDC business group from January 1, 2021 and our chief operating officer since November 2019. Mr. Cai also served as the national general sales manager since July 2019. He has served as the general manager of our East China business and South China business since February 2015 to November 2019. Mr. Cai has ten years of working experience in the IDC and content delivery network industry, as well as extensive experience in 2B business management. Prior to joining us, Mr. Cai was the vice president of ChinaCache International Holdings Ltd., primarily responsible for the departments of enterprise business and company operation management center. Mr. Cai received his master's degree in mechanical and electronic engineering from Zhejiang University and his bachelor's degree in mechanical engineering from Jilin University.

Mr. Tim Chen has served as our chief strategy officer since August 2020. Mr. Chen's position will change to our chief financial officer effective from May 1, 2021. Prior to joining us, Mr. Chen served as chief financial officer of Asia Maritime Pacific (Hong Kong) Limited over a decade from 2009 and has 14-year experience in prominent investment banking and private equity firms, including two years at Affinity Equity Partners, eight years at Morgan Stanley and four years at J.P. Morgan from 1996 to 2009. Mr. Chen received a bachelor of science degree in industrial engineering and operations research from Columbia University in New York.

Employment Agreements

We have entered into employment agreements with each of our executive officers. Under these agreements, each of our senior executive officers is employed for a specified time period. We may terminate employment for cause, at any time, without advance notice or remuneration, for certain acts of the executive officer, such as conviction or plea of guilty to a felony or any crime involving moral turpitude, negligent or dishonest acts to our detriment, or misconduct or a failure to perform agreed duties. In such case, the executive officer will not be entitled to receive payment of any severance benefits or other amounts by reason of the termination, and the executive officer's right to all other benefits will terminate, except as required by any applicable law. We may also terminate an executive officer's employment without cause upon one-month advance written notice. In such case of termination by us, we are required to provide compensation to the executive officer, including severance pay, as expressly required by the applicable law of the jurisdiction where the executive officer is based. The executive officer may terminate the employment at any time with a one-month advance written notice, if there is any significant change in the executive officer's duties and responsibilities inconsistent in any material and adverse respect with his or her title and position or a material reduction in the executive officer's annual salary before the next annual salary review, or if otherwise approved by the board of directors.

Each executive officer has agreed to hold, both during and after the termination or expiry of his or her employment agreement, in strict confidence, and not to use, except as required in the performance of his or her duties in connection with the employment, any of our confidential information or trade secrets, any confidential information or trade secrets of our clients or prospective clients, or the confidential or proprietary information of any third party received by us and for which we have confidential obligations. The executive officers have also agreed to disclose in confidence to us all inventions, designs and trade secrets which they conceive, develop or reduce to practice and to assign all right, title and interest in them to us, and assist us in obtaining patents, copyrights and other legal rights for these inventions, designs and trade secrets.

In addition, each executive officer has agreed to be bound by non-competition and non-solicitation restrictions during the term of his or her employment and for one year following the last date of employment. Specifically, each executive officer has agreed not to (i) approach our clients, customers or contacts or other persons or entities introduced to the executive officer for the purpose of doing business with such persons or entities that will harm our business relationships with these persons or entities; (ii) assume employment with or provide services to any of our competitors, or engage, whether as principal, partner, licensor or otherwise, any of our competitors; or (iii) seek directly or indirectly, to solicit the services of any of our employees who is employed by us on or after the date of the executive officer's termination, or in the year preceding such termination.

B. Compensation

In 2020, the aggregate cash compensation we paid to our executive officers was approximately RMB10.3 million (US\$1.6 million), which total amount included RMB0.3 million (US\$0.05 million) for pension, retirement, medical insurance or other similar benefits for our executive officers. We did not provide any cash compensation to our non-executive directors in 2020. Other than the amounts stated above, no pension, retirement or similar benefits has been set aside or accrued for our executive officers or directors. None of our non-executive directors has a service contract with us that provides for benefits upon termination of employment.

In addition to the cash compensation referenced above, we also provide share-based compensation to our directors and officers. The total share-based compensation we provided to our directors and officers amounted to RMB60.1 million (US\$9.2 million) in 2020. For option grants to our directors and officers, see "—Share Incentive Plans."

Share Incentive Plans

On July 16, 2010, we adopted our 2010 Plan to attract and retain the best available personnel, provide additional incentives to employees, directors and consultants and to promote the success of our business. We subsequently amended our 2010 Plan on January 14, 2011 and July 6, 2012. On May 29, 2014, we adopted our 2014 Plan on our annual general meeting, which was subsequently amended on April 1, 2015 and December 22, 2017 by unanimous written approval of our board of directors. On May 29, 2020, we adopted the 2020 Share Incentive Plan (the “2020 Plan”). Upon the adoption of the 2020 Plan, we will cease to grant any new awards under the 2010 Plan and the 2014 Plan (collectively the “Existing Plans”) while the Existing Plans and outstanding awards granted thereunder shall remain effective and can be amended by the Company from time to time pursuant to the applicable terms thereunder. If any outstanding awards under the Existing Plans are subsequently forfeited, then the shares subject to such awards shall be available for the grant pursuant to the 2020 Plan. The 2020 Plan permits the grant of option, restricted share or restricted share units award. The maximum aggregate number of ordinary shares that may be issued pursuant to all awards under the 2020 Plan is 46,560,708 Class A ordinary shares. To the extent any award granted pursuant to our 2010 Plan or 2014 Plan terminates, expires, lapses or forfeited after the effective date for any reason, shares subject to such awards shall also become available to the grant of an award pursuant to the 2020 Plan. As of April 13, 2021, options to purchase 492,864 ordinary shares and 4,344,504 restricted share units, or RSUs, have been granted to our employees, directors and consultants without giving effect to the options that were exercised or terminated and RSUs that were vested.

Name	Options Granted	Restricted Share Units	Exercise Price (US\$/Share)	Date of Grant	Date of Expiration
Sheng Chen	*	—	0.15	July 16, 2010	July 16, 2020
	—	*	—	August 30, 2012	—
	—	*	—	November 23, 2013	—
	—	*	—	March 7, 2015	—
	—	*	—	November 21, 2015	—
	—	*	—	November 26, 2016	—
	—	*	—	August 18, 2019	—
Yoshihisa Ueno	—	*	—	October 1, 2012	—
	—	*	—	April 25, 2014	—
	—	*	—	December 2, 2017	—
	—	*	—	March 7, 2018	—
	—	*	—	May 15, 2019	—
Kenneth Chung-Hou Tai	—	*	—	October 16, 2012	—
	—	*	—	November 21, 2015	—
	—	*	—	August 14, 2016	—
	—	*	—	May 12, 2017	—
	—	*	—	March 7, 2018	—
Sean Shao	—	*	—	November 21, 2015	—
	—	*	—	May 15, 2019	—
Erhfei Liu	—	*	—	November 21, 2015	—
	—	*	—	May 15, 2019	—
Yao Li	—	*	—	August 15, 2018	—
Samuel Yuan-Ching Shen	—	*	—	August 18, 2020	—
Sharon Xiao Liu	*	—	0.15	August 17, 2012	August 17, 2022
	—	*	—	July 1, 2013	—
	*	—	0.15	May 24, 2015	May 24, 2025
	—	*	—	August 23, 2015	—
	—	*	—	March 5, 2017	—
	—	*	—	April 16, 2018	—
	—	*	—	May 16, 2018	—
	—	*	—	January 2, 2020	—
Shiqi Wang	—	*	—	April 16, 2018	—
	—	*	—	January 2, 2020	—
Chunfeng Cai	—	*	—	March 6, 2016	—
	—	*	—	May 21, 2017	—
	—	*	—	May 16, 2018	—
	—	*	—	January 2, 2020	—
	—	*	—	November 24, 2020	—
Tim Chen	—	*	—	August 18, 2020	—
Other individuals as a group	28,953,524	8,329,851	0.15 to 0.85	—	—

* Shares underlying vested options are less than 1% of our total outstanding shares.

Our 2010 Plan, 2014 Plan and 2020 Plan have similar terms, the following paragraphs describe the principal terms of these plans.

Plan Administration. Our board and the compensation committee of the board will administer our plans. A committee of one or more members of the board designated by our board or the compensation committee is also authorized to grant or amend awards to participants other than senior executives. The committee will determine the provisions and terms and conditions of each award grant. It shall also have discretionary power to interpret the terms of our plans.

Award Agreement. Awards granted under our plans are evidenced by an award agreement that sets forth terms, conditions and limitations for each award, which may include the term of an award, the provisions applicable in the event the participant's employment or service terminates, and our authority to unilaterally or bilaterally amend, modify, suspend, cancel or rescind an award.

Eligibility. We may grant awards to our employees, consultants and directors. However, no shares may be optioned, granted or awarded if such action would cause an incentive share option to fail to qualify as an incentive share option under Section 422 of the Internal Revenue Code of 1986 of the United States.

Acceleration of Awards upon Change in Control. The participant's awards shall become fully exercisable and all forfeiture restrictions on such awards shall lapse, unless converted, assumed or replaced by a successor.

Exercise Price. The exercise price of an option shall be determined by the plan administrator and set forth in the award agreement and may be a fixed or variable price related to the fair market value of the shares, to the extent not prohibited by applicable laws. Subject to certain limits set forth in the plan, the exercise price may be amended or adjusted in the absolute discretion of the plan administrator, the determination of which shall be final, binding and conclusive. To the extent not prohibited by applicable laws or any exchange rule, a downward adjustment of the exercise prices of options shall be effective without the approval of the shareholders or the approval of the affected participants.

Vesting Schedule. In general, our plan administrator determines, or the evidence of the award specifies, the vesting schedule.

Amendment and Termination of the Plan. With the approval of our board, our plan administrator may, at any time and from time to time, amend, modify or terminate the plan, provided, however, that no such amendment shall be made without the approval of our shareholders to the extent such approval is required by applicable laws, or in the event that such amendment increases the number of shares available under our plan, permits our plan administrator to extend the term of our plan or the exercise period for an option beyond ten years from the date of grant or results in a material increase in benefits or a change in eligibility requirements, unless we decides to follow home country practice.

C. [Board Practices](#)

Board of Directors

Our board of directors currently consists of six directors. A director is not required to hold any shares in the company by way of qualification. Under our currently effective memorandum and articles of association, a director may vote in respect of any contract or proposed contract or arrangement and notwithstanding that he may be interested therein and if he does so his vote shall be counted and he may be counted in the quorum at the meeting of the directors at which such contract or proposed contract or arrangement is considered. Any of our directors who is in any way, whether directly or indirectly, interested in a contract or proposed contract with our company is required to declare the nature of his interest at a meeting of the directors. Our directors may exercise all the powers of the company to borrow money, mortgage its undertaking, property and uncalled capital, and issue debentures or other securities whenever money is borrowed or as security for any obligation of the company or of any third party.

Committees of the Board of Directors

We have three committees under the board of directors: the audit committee, the compensation committee and the nominating and corporate governance committee. We have adopted a charter for each of the three committees. Each committee's members and functions are described below.

Audit Committee

Our audit committee consists of Sean Shao, Kenneth Chung-Hou Tai and Yoshihisa Ueno, each of whom satisfies the “independence” requirements of Rule 5605 of Nasdaq Stock Market Rules and Rule 10A-3 under the Securities Exchange Act of 1934. Sean Shao is the chair of our audit committee. The purpose of the audit committee is to assist our board of directors with its oversight responsibilities regarding: (i) the integrity of our financial statements, (ii) our compliance with legal and regulatory requirements, (iii) the independent auditor’s qualifications and independence and (iv) the performance of our internal audit function and independent auditor. The audit committee will be responsible for, among other things:

- appointing the independent auditors and pre-approving all auditing and non-auditing services permitted to be performed by the independent auditors;
- reviewing with the independent auditors any audit problems or difficulties and management’s response;
- discussing the annual audited financial statements with management and the independent auditors;
- reviewing the adequacy and effectiveness of our accounting and internal control policies and procedures and any steps taken to monitor and control major financial risk exposures;
- reviewing and approving all proposed related party transactions;
- meeting separately and periodically with management and the independent auditors; and
- monitoring compliance with our code of business conduct and ethics, including reviewing the adequacy and effectiveness of our procedures to help ensure proper compliance.

Compensation Committee

Our compensation committee consists of Yoshihisa Ueno, Kenneth Chung-Hou Tai, Erhfei Liu and Yao Li, each of whom satisfies the “independence” requirements of Rule 5605 of Nasdaq Stock Market Rules. Yoshihisa Ueno is the chair of our compensation committee. The compensation committee assists the board in reviewing and approving the compensation structure, including all forms of compensation, relating to our directors and executive officers. Our chief executive officer may not be present at any committee meeting during which his compensation is deliberated. The compensation committee is responsible for, among other things:

- reviewing and approving, or recommending to the board for its approval, the compensation for our chief executive officer and other executive officers;
- reviewing and recommending to the board for determination with respect to the compensation of our non-employee directors; and
- reviewing periodically and approving any incentive compensation or equity plans, programs or similar arrangements.

Nominating and Corporate Governance Committee

Our nominating and corporate governance committee consists of Kenneth Chung-Hou Tai and Yoshihisa Ueno, each of whom satisfies the “independence” requirements of Rule 5605 of Nasdaq Stock Market Rules. Kenneth Chung-Hou Tai is the chair of our nominating and corporate governance committee. The nominating and corporate governance committee assists the board of directors in selecting individuals qualified to become our directors and in determining the composition of the board and its committees. The nominating and corporate governance committee is responsible for, among other things:

- selecting and recommending to the board nominees for election by the shareholders or appointment by the board;
- reviewing annually with the board the current composition of the board with regards to characteristics such as independence, knowledge, skills, experience and diversity;

- making recommendations on the frequency and structure of board meetings and monitoring the functioning of the committees of the board; and
- advising the board periodically with regards to significant developments in the law and practice of corporate governance as well as our compliance with applicable laws and regulations, and making recommendations to the board on all matters of corporate governance and on any remedial action to be taken.

Duties of Directors

Under Cayman Islands law, our directors have a fiduciary duty to act honestly and a duty to act in what they consider in good faith with a view to our best interests. Our directors must also exercise their powers only for a proper purpose. Our directors also owe to our company a duty to act with care and diligence that a reasonably prudent person would exercise in comparable circumstances and a duty to exercise the skill they actually possess. It was previously considered that a director need not exhibit in the performance of his duties a greater degree of skill than may reasonably be expected from a person of his knowledge and experience. However, English and Commonwealth courts have moved towards an objective standard with regard to the required skill and care and these authorities are likely to be followed in the Cayman Islands. In fulfilling their duty of care to us, our directors must ensure compliance with our memorandum and articles of association as amended and restated from time to time. We have the right to seek damages if a duty owed by our directors is breached.

Terms of Directors and Officers

Our officers are appointed by and serve at the discretion of our board of directors. Our directors are not subject to a term of office and hold office until such time as they are removed from office by ordinary resolution or the unanimous written resolution of all shareholders. We do not have a mandatory retirement age for directors. The office of a director shall be vacated if, among other things, the director (i) becomes bankrupt or makes any arrangement or composition with his or her creditors; (ii) dies or is found by our company to be or becomes of unsound mind; (iii) resign his office by notice in writing to our company; or (iv) without special leave of absence from our board, is absent from three consecutive board meetings and the board resolves that his office be vacated.

D. Employees

We had 2,220, 2,295 and 2,599 employees as of December 31, 2018, 2019 and 2020, respectively. The following table sets forth the number of our employees by function as of December 31, 2020:

Functional Area	As of December 31, 2020	
	Number of Employees	% of Total
Operations	1,345	52 %
Sales, marketing and customer support	337	13 %
Research and development	182	7 %
General and administrative	735	28 %
Total	2,599	100 %

Among our total employees as of December 31, 2020, 1,361 were located in Beijing, and 1,238 in other cities in China.

Our recruiting efforts include on-campus recruiting, online recruiting and the use of professional recruiters. We partner with leading national research institutions and employ other measures designed to bring us into contact with suitable candidates for employment.

As required by regulations in China, we participate in various government statutory employee benefit plans, including social insurance funds, namely a pension contribution plan, a medical insurance plan, an unemployment insurance plan, a work-related injury insurance plan and a maternity insurance plan, and a housing provident fund. We are required under PRC law to contribute to employee benefit plans at specified percentages of the salaries, bonuses and certain allowances of our employees up to a maximum amount specified by the local government from time to time.

We enter into standard labor contracts with our employees. We also enter into standard confidentiality and non-compete agreements with our senior management. The non-compete restricted period typically expires two years after the termination of employment, and we agree to compensate the employee with a certain percentage of his or her pre-departure salary during the restricted period.

We believe that we maintain a good working relationship with our employees, and we have not experienced any major labor disputes.

E. Share Ownership

Please refer to “Item 7. Major Shareholders and Related Party Transactions—Major Shareholders.”

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

The following table sets forth information with respect to the beneficial ownership of our ordinary shares, as of April 13, 2021, by:

- each of our directors and executive officers; and
- each person known to us to own beneficially more than 5.0% of our ordinary shares.

The calculations in the table below assume there are 862,079,106 ordinary shares issued and outstanding as of April 13, 2021, comprising of 827,197,383 Class A ordinary shares outstanding, excluding treasury shares and Class A ordinary shares in the form of ADSs that are reserved for issuance upon the exercise of share incentive awards, 34,821,723 Class B ordinary shares, 60,000 Class C ordinary shares issued and outstanding.

Percentage ownership and beneficial ownership is determined in accordance with the rules and regulations of the SEC. In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we have included shares that the person has the right to acquire within 60 days of April 13, 2021, including through the exercise of any option, warrant or other right or the conversion of any other security. These shares, however, are not included in the computation of the percentage ownership of any other person.

	Shares Beneficially Owned		
	Number	% of beneficial ownership	% of Voting Power ⁽¹⁾⁽²⁾
Directors and Executive Officers:			
Sheng Chen ⁽³⁾	44,761,879	5.2	28.8
Yoshihisa Ueno ⁽⁴⁾	3,614,676	*	2.0
Kenneth Chung-Hou Tai	*	*	*
Sean Shao	*	*	*
Erhfei Liu	*	*	*
Yao Li	*	*	*
Samuel Yuan-Ching Shen	*	*	*
Sharon Xiao Liu	*	*	*
Shiqi Wang	*	*	*
Chunfeng Cai	*	*	*
Tim Chen	*	*	*
All Directors and Officers as a Group	52,414,939	6.0	31.0
Principal Shareholders:			
Fast Horse Technology Limited ⁽³⁾⁽⁵⁾	19,670,117	2.3	16.7
Sunrise Corporate Holding Ltd. ⁽³⁾⁽⁶⁾	18,887,875	2.2	10.9
Tuspark Innovation Venture Limited ⁽⁷⁾	94,415,771	11.0	8.0
GIC Private Limited ⁽⁸⁾	90,527,634	10.5	7.7
Vector Holdco Pte. Ltd. ⁽⁹⁾	49,107,816	5.7	4.2

* Less than 1% of our total outstanding shares.

(1) Percentage of total voting power represents voting power with respect to all of our Class A, Class B and Class C ordinary shares, as a single class. Each holder of our Class B ordinary shares is entitled to ten votes per Class B ordinary share and each holder of Class A ordinary shares is entitled to one vote per Class A ordinary share held by our shareholders on all matters submitted to them for a vote. Each holder of Class C ordinary shares is entitled to one vote per Class C ordinary share on all matters submitted to them for a vote, except that we shall only proceed with the following matters with the written consent of the holders holding a majority of the issued and outstanding Class C ordinary shares or with the sanction of a special resolution passed at a separate meeting of the holders of the issued and outstanding Class C ordinary shares: (i) any appointment or removal of directors other than the appointment or removal of directors that is made pursuant to a shareholder's right under the Investor Rights Agreement, dated January 15, 2015, among us, King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein, and the Share Subscription Agreement, dated May 23, 2016, between us and Tuspark Innovation Venture Limited; (ii) entry into any agreement by us or our subsidiaries with any shareholder who holds more than 10% of our issued and outstanding share capital or such shareholder's affiliate, other than agreements entered into in our ordinary course of business with a total contract amount below 10% of our consolidated total revenue in the most recent completed fiscal year; and (iii) any proposed amendments to our memorandum and articles of associations that will amend, alter, modify or change the rights attached to Class C ordinary shares. Our Class A, Class B and Class C ordinary shares vote together as a single class on all matters submitted to a vote of our shareholders, except as may otherwise be required by law. Our Class B and Class C ordinary shares are convertible at any time by the holder into Class A ordinary shares on a 1:1 basis.

- (2) In the computation of the percentages of aggregate voting power, we have included our Series A perpetual convertible preferred shares, the holders of which are entitled to (i) vote with the holders of the Class A ordinary shares on any and all matters submitted for a vote of shareholders and (ii) a number of votes per such Preferred Shares equal to the number of Class A ordinary share into which each such Series A perpetual convertible preferred shares is then convertible at the time of the related record date as if the holders of such Series A perpetual convertible preferred shares were holders of Class A ordinary shares.
- (3) Consists of (i) 19,670,117 Class B ordinary shares held by Fast Horse Technology Limited, a British Virgin Islands company solely owned by Mr. Chen; (ii) 12,187,875 Class B ordinary shares and 6,700,000 Class A ordinary shares held by Sunrise Corporate Holding Ltd., a British Virgin Islands company solely owned by Mr. Chen; (iii) 60,000 Class C ordinary shares, 769,486 Class B ordinary shares and four Class A ordinary shares held by Personal Group Limited, a British Virgin Islands company solely owned by Mr. Chen; (iv) 3,894,737 Class A ordinary shares held by Beacon Capital Group Inc. a British Virgin Islands company solely owned by Mr. Chen; and (v) 1,479,660 Class A ordinary shares upon vesting of Mr. Chen's restricted share units within 60 days of December 31, 2020. The business address for Mr. Chen is Guanjie Building, Southeast 1st Floor, 10# Jiuxianqiao East Road, Chaoyang District, Beijing 100016, China.
- (4) Consists of (i) 2,194,200 Class B ordinary shares and 1,344,228 Class A ordinary shares held by Synapse Holdings Limited, and (ii) 76,248 Class A ordinary shares upon vesting of Mr. Ueno's restricted share units within 60 days of December 31, 2020. Mr. Ueno is a director of our company appointed by Synapse Holdings Limited. The business address for Mr. Ueno is 1108, 11/F, Dominion Centre, 43-59 Queen's Road East, Wan Chai, Hong Kong.
- (5) Consists of 19,670,117 Class B ordinary shares. Fast Horse Technology Limited is 100% owned by Sheng Chen. The registered address for Fast Horse Technology Limited is P.O. Box 957, Offshore Incorporations Centre, Road Town, Tortola, British Virgin Islands.
- (6) Consists of 6,700,000 Class A ordinary shares and 12,187,875 Class B ordinary shares. Sunrise Corporate Holding Ltd. is 100% owned by Sheng Chen. The registered address for Sunrise Corporate Holding Ltd. is Kingston Chambers, PO Box 173, Road Town, Tortola, British Virgin Islands.
- (7) Consists of 94,415,771 Class A ordinary shares. The business address for Tuspark Innovation Venture Limited. is 16/F, Block A, Innovation Park, Tsinghua Science Park, Haidian District, Beijing, the People's Republic of China.
- (8) Consists of (i) 72,153,492 Class A ordinary shares over which GIC Private Limited has sole voting power and (ii) 18,374,142 Class A ordinary shares over which GIC Private Limited has shared voting power. Information set forth above is based upon GIC Private Limited's Schedule 13G/A filing with the SEC on February 12, 2021. The business address of GIC Private Limited is 168 Robinson Road, #37-01 Capital Tower, Singapore 068912.
- (9) Consists of 49,107,816 Class A ordinary shares held in the form of ADSs by (i) Vector Holdco Pte. Ltd. ("Vector Holdco"), a private limited company incorporated under the laws of Singapore, (ii) BTO Vector Fund FD (CYM) L.P. ("Vector Fund FD"), a limited partnership established under the laws of the Cayman Islands, and (iii) BTO Vector Fund ESC (CYM) L.P. ("Vector Fund ESC"), an exempted limited partnership registered under the laws of the Cayman Islands. BTO Super Holding (NQ) Co. III Pte. Ltd. ("BTO Super Holding") is the 100% equity owner of Vector Holdco. Blackstone Tactical Opportunities SG II (Cayman) L.P. ("BTO SG") is the 100% equity owner of BTO Super Holding. BTO Holdings (Cayman)—NQ Manager L.L.C. ("BTO Holdings") is the general partner of Vector Fund ESC and Vector Fund FD. Blackstone Tactical Opportunities Management Associates (Cayman)—NQ L.P. ("BTOMA") is the managing member of BTO Holdings and the general partner of BTO SG. BTO GP—NQ L.L.C. ("BTO GP") and Blackstone Tactical Opportunities LR Associates (Cayman)—NQ Ltd. ("BTOLRA") are the general partners of BTOMA with BTO GP controlling BTOMA with respect to all matters other than voting of securities of underlying portfolio companies, which power is held by the Class B shareholders of BTOLRA, who are certain senior personnel of Blackstone. Blackstone Holdings IV L.P. ("Blackstone IV") is the sole member of BTO GP and the sole Class A shareholder of BTOLRA. Blackstone Holdings IV GP L.P. ("Blackstone IV GP") is the general partner of Blackstone IV. Blackstone Holdings IV GP Management (Delaware) L.P. ("Blackstone IV GP Management (Delaware)") is the general partner of Blackstone IV GP. Blackstone Holdings IV GP Management L.L.C. ("Blackstone IV GP Management") is the general partner of Blackstone IV GP Management (Delaware). The Blackstone Group Inc. is the sole member of Blackstone IV GP Management. Blackstone Group Management L.L.C. is the sole holder of the Class C common stock of The Blackstone Group Inc. Blackstone Group Management L.L.C. is wholly-owned by Blackstone's senior managing directors and controlled by its founder, Stephen A. Schwarzman. Information set forth above is based upon Vector Holdco's Schedule 13D/A filing with the SEC on April 1, 2021. The registered address of Vector Holdco is c/o Intertrust Singapore Corporate Services Pte. Ltd. 77 Robinson Road, #13-00 Robinson 77, Singapore. The registered address of each of Vector Fund FD and Vector Fund ESC is c/o Intertrust Corporate Services (Cayman) Limited 190 Elgin Avenue Grand Cayman, KY1-9005, Cayman Islands.

Our ordinary shares are divided into Class A ordinary shares, Class B ordinary shares and Class C ordinary shares. Holders of Class A ordinary shares are entitled to one vote per share, while holders of Class B ordinary shares are entitled to ten votes per share and holders of Class C ordinary shares are entitled to one vote per share, except that we shall only proceed with the following matters with the written consent of the holders holding a majority of the issued and outstanding Class C ordinary shares or with the sanction of a special resolution passed at a separate meeting of the holders of the issued and outstanding Class C ordinary shares: (i) any appointment or removal of directors other than the appointment or removal of directors that is made pursuant to a shareholder's right under the Investor Rights Agreement, dated January 15, 2015, among the Company, King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein, and the Share Subscription Agreement, dated May 23, 2016, between Company and Tuspark Innovation Venture Limited; (ii) entry into any agreement by us or our subsidiaries with any shareholder who holds more than 10% of our issued and outstanding share capital or such shareholder's affiliate, other than agreements entered into in our ordinary course of business with a total contract amount below 10% of our consolidated total revenue in the most recent completed fiscal year; and (iii) any proposed amendments to our memorandum and articles of associations that will amend, alter, modify or change the rights attached to Class C ordinary shares. We issued Class A ordinary shares represented by our ADSs in our initial public offering in April 2011 and issued Class C ordinary shares in October 2019 to further enhance our ability to execute business strategies over the long term under the leadership of our board and senior management. Holders of our Class B ordinary shares or Class C ordinary shares may choose to convert their Class B ordinary shares or Class C ordinary shares into the same number of Class A ordinary shares at any time. We have been informed that Tuspark Innovation Venture Limited has also agreed to sell and transfer additional ordinary shares to Beacon Capital Group Inc., a company affiliated with Mr. Josh Sheng Chen. If this additional share transfer is consummated, Tuspark Innovation Venture Limited will retain a small shareholding of less than 5% in the Company.

To our knowledge, as of April 13, 2021, a total of 753,491,302 Class A ordinary shares and 16 Class B ordinary shares are held by eleven record holders in the United States, including Citibank N.A., the depository of our ADS program. The number of beneficial owners of our ADSs in the United States is likely to be much larger than the number of record holders of our ordinary shares in the United States.

B. Related Party Transactions

Transactions with Shareholders and Affiliates

On August 15, 2018, 21Vianet Beijing entered into a lease agreement with Beijing Tuspark, a company controlled by Tus-Holdings, to lease certain floors of a building owned by Beijing Tuspark for a term of 20 years expiring on September 27, 2038, which will extend for another 20 years upon signing of a renewal agreement prior to 6 months before the expiration of the term. For the year ended December 31, 2020, we paid RMB43.7 million (US\$6.7 million) rental to Beijing Tuspark. We also had non-current receivables due from, current payables due to, and non-current payables due to Beijing Tuspark, in the amount of RMB11.9 million (US\$1.8 million), RMB13.6 million (US\$2.1 million), and RMB716.0 million (US\$109.7 million), respectively.

We currently lease certain equipment from Ziguang Financial Leasing Co., Ltd., a company controlled by Tus-Holdings, through certain finance lease arrangements. For the year ended December 31, 2020, we paid RMB0.1 million (US\$0.02 million) lease deposit and RMB30.8 million (US\$4.7 million) lease payment to Ziguang Financial Leasing Co., Ltd. We also had current and non-current receivables due from, current payables due to, and non-current payables due to Ziguang Financial Leasing Co., Ltd., in the amount of RMB2.0 million (US\$0.3 million), RMB6.3 million (US\$1.0 million), RMB31.7 million (US\$4.9 million) and RMB22.2 million (US\$3.4 million), respectively.

For the year ended December 31, 2020, we provided hosting and related services in the amount of RMB3.5 million (US\$0.5 million) to Qidi Bus (Beijing) Technology Co., Ltd., a company controlled by Tus-Holdings.

For the year ended December 31, 2020, we purchased services from companies that are under common control with Beijing Huaqing in the amount of RMB4.4 million (US\$0.7 million). We also had non-current receivables due from Beijing Huaqing Property Management Co., Ltd, in the amount of RMB1.3 million (US\$0.2 million).

For the year ended December 31, 2020, we provided hosting and related services to companies that are under common control with Xiaomi in the amount of RMB527.7 million (US\$80.9 million).

For the year ended December 31, 2020, we provided hosting and related services to companies that are under common control with Kingsoft in the amount of RMB0.14 million (US\$0.02 million). We purchased services from companies that are under common control with Kingsoft in the amount of RMB16.9 million (US\$2.6 million).

For the year ended December 31, 2020, we purchased services from Apurimac Partners Limited, a company controlled by an officer of our Company, in the amount of RMB8.1 million (US\$1.2 million). We also had current payables due to Apurimac Partners Limited, in the amount of RMB0.8 million (US\$0.1 million).

Other Transactions with Related Parties

Our related party transactions, including services provided by/to our equity method investees and other investees measured using measurement alternative in the ordinary course of business were insignificant for the year ended December 31, 2020.

In February 2020, we entered into a convertible note purchase agreement with a private equity fund affiliated with one of our independent directors, pursuant to which such private equity fund acquired convertible notes in an aggregate principal amount of US\$50,000,000. The convertible notes will mature in five years, bearing interest at the rate of 2% per annum from the issuance date which shall be payable semiannually in arrears in cash. At any time after the issuance, each note is convertible into Class A ordinary shares at the holder's option at a conversion price of US\$2 per share, or US\$12 per ADS, subject to customary anti-dilution adjustments. Unless previously redeemed or converted, we shall redeem the note on the maturity date at 115% of the then outstanding principal amount plus all accrued but unpaid interest. In addition, if any portion of the outstanding principal amount of the notes has not been converted into our shares by the third anniversary of the note issuance date, the holders have the right to require us to redeem, in whole or in part, the outstanding principal amount of the note at 109% of the principal amount plus all accrued but unpaid interest.

Contractual Arrangements with Our Variable Interest Entities and Their Shareholders

See "Item 4.C. Information on the Company—Organizational Structure—Contractual Arrangements with Our Variable Interest Entities and Their Shareholders."

Our PRC subsidiaries and consolidated affiliated entities have engaged, during the ordinary course of business, in a number of customary transactions with each other. All of these inter-company balances have been eliminated in consolidation.

Employment Agreement

Please refer to "Item 6.A. Directors, Senior Management and Employees—Directors and Senior Management—Employment Agreements."

C. Interests of Experts and Counsel

Not applicable.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements and Other Financial Information

We have appended consolidated financial statements filed as part of this annual report.

Legal Proceedings

From time to time, we are subject to legal proceedings, investigations and claims incidental to the conduct of our business. For risks and uncertainties relating to the pending case against us, please see "Item 3. Key Information—D. Risk Factors—Risks Related to Our Business— We may be subject to legal proceedings or arbitration claims in the ordinary course of our business, and the court ruling or arbitration award may not be favorable to us." We are currently not involved in any legal or administrative proceedings that may have a material adverse impact on our business, financial position or profitability.

Litigation

In September 2014, our Company and certain of our officers and directors were named as defendants in two putative securities class actions filed in U.S. federal district courts in Texas: *Sun v. 21Vianet et al.*, Civil Action No. 14 CV 926 (E.D. Tex.) and *Singh v. 21Vianet et al.*, Civil Action No. 14 CV 894 (E.D. Tex.). The Sun action originally was filed in the U.S. District Court for the Southern District of Texas, and was transferred to the U.S. District Court for the Eastern District of Texas, or the Court. The complaints in both actions alleged that certain of our Company's financial statements and other public disclosures contained misstatements or omissions and asserted claims under the U.S. securities laws. On September 15, 2015, the Court entered an order consolidating the cases and on September 21, 2015, the Court entered an order appointing a lead plaintiff and lead counsel for the consolidated case. On September 13, 2016, the lead plaintiff filed an amended complaint against our Company and certain of our personnel and sought to represent a class of persons who allegedly suffered damages as a result of their trading activities related to our Company's ADSs from August 20, 2013 to August 16, 2016. After our motion to dismiss the case was denied, on April 9, 2018, the lead plaintiff filed an unopposed motion for preliminary approval of class action settlement, requesting that the Court (i) preliminarily approve a settlement agreement, pursuant to which the parties agreed to settle the case for US\$9,000,000, (ii) preliminarily certify the proposed settlement class, (iii) approve the parties' proposed notice to the settlement class, and (iv) set the date for a hearing by the Court to consider the final approval of the settlement and entry of a proposed final judgment approving class action settlement, the plan of allocation of settlement proceeds, and lead counsel's application for an award of attorneys' fees and expenses. The Court granted that motion and, on October 31, 2018, held a settlement approval hearing. On November 9, 2018, the Court approved the settlement and issued final judgment, ending the case.

Disputes with Shanghai 21Vianet Information System Co., Ltd.

Shanghai 21Vianet Information System Co., Ltd. is a company bearing "21Vianet" in its name but is not affiliated with us. In January 2008, 21Vianet Beijing and 21Vianet China brought two lawsuits against Shanghai 21Vianet Information System Co., Ltd. in a Beijing court for intellectual property rights infringement and unfair competition. 21Vianet Beijing and 21Vianet China prevailed in each case. The court ordered Shanghai 21Vianet Information System Co., Ltd. to stop infringing our trademark and stop engaging unfair competition activities. 21Vianet Beijing and 21Vianet China was also awarded RMB150,000 in damages for each case. In October 2010, 21Vianet China filed another complaint against Shanghai 21Vianet Information System Co., Ltd. for domain name infringement and unfair competition. In July 2011, Shanghai 21Vianet Information System Co., Ltd. settled the case with us and transferred the domain name www.21vianet.com.cn to us for free. However, Shanghai 21Vianet Information System Co., Ltd. may continue to include "21Vianet" as part of its official company name when the name is spelt out in full, while using "21Vianet" or our logo in a short form or other context is prohibited.

Our executive chairman, Mr. Sheng Chen, holds a minority equity interest in Shanghai 21Vianet Information System Co., Ltd. due to historical reasons. As a result of the restriction on equity transfer pursuant to its articles of association, it is not practical for Mr. Chen to transfer his equity interest in Shanghai 21Vianet Information System Co., Ltd. to us or any other parties. Mr. Chen, however, has executed an irrevocable power of attorney, pursuant to which Mr. Chen has appointed 21Vianet Beijing as his attorney-in-fact to attend shareholders' meeting of Shanghai 21Vianet Information System Co., Ltd. and to exercise all the shareholder's voting rights. Such power of attorney remains valid and irrevocable so long as Mr. Chen remains the shareholder of Shanghai 21Vianet Information System Co., Ltd.

Dividend Policy

We do not plan to pay any dividends on our ordinary shares in the foreseeable future. We currently intend to retain most, if not all, of our available funds and any future earnings to operate and expand our business.

Our board of directors has complete discretion whether to distribute dividends, subject to certain restrictions under Cayman Islands law and our memorandum and articles of association. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our board of directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business. Even if our board of directors decides to pay dividends, the form, frequency and amount will depend upon our future operations and earnings, capital requirements and surplus, general financial condition, contractual restrictions and other factors that the board of directors may deem relevant.

Holders of our ADSs will be entitled to receive dividends, if any, subject to the terms of the deposit agreement, to the same extent as the holders of our ordinary shares. Cash dividends will be paid to the depository in U.S. dollars, which will distribute them to the holders of ADSs according to the terms of the deposit agreement. Other distributions, if any, will be paid by the depository to the holders of ADSs by any means it deems legal, fair and practical.

We are a holding company incorporated in the Cayman Islands. We rely on dividends from our operating subsidiary to fund cash and financing requirements. Our operating subsidiary is required to comply with the applicable PRC regulations when it pays dividends to us. See “Item 3.D. Key Information—Risk Factors—Risks Related to Doing Business in China—We may rely on dividends paid by our operating subsidiaries to fund cash and financing requirements, and limitations on the ability of our operating subsidiaries to make payments to us could have a material adverse effect on our ability to conduct our business and fund our operations.”

B. Significant Changes

Except as disclosed elsewhere in this annual report, we have not experienced any significant changes since the date of our audited consolidated financial statements included in this annual report.

ITEM 9. THE OFFER AND LISTING

A. Offering and Listing Details

Our ADSs, each representing six of our Class A ordinary shares, have been listed on the Nasdaq Global Select Market since April 21, 2011 under the symbol “VNET.”

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs, each representing six of our ordinary shares, have been traded on the Nasdaq Global Select Market since April 21, 2011 under the symbol “VNET.”

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

ITEM 10. ADDITIONAL INFORMATION

A. Share capital

Not applicable.

B. Memorandum and Articles of Association

We are a Cayman Islands company and our corporate affairs are governed by our memorandum and articles of association and by the Companies Act (As Revised) and common law of the Cayman Islands.

As of the date hereof, our authorized share capital is US\$15,000 divided into (i) 1,199,790,000 Class A Ordinary Shares of a nominal or par value of US\$0.00001 each, (ii) 300,000,000 Class B Ordinary Shares of a nominal or par value of US\$0.00001 each, (iii) 60,000 Class C Ordinary Shares of a nominal or par value of US\$0.00001 each, and (iv) 150,000 series A perpetual convertible preferred shares of a nominal or par value of US\$0.00001 each (the “Series A Preferred Shares”). As of April 13, 2021, there are 827,197,383 Class A ordinary shares (excluding treasury shares and Class A ordinary shares in the form of ADSs that are reserved for issuance upon the exercise of share incentive awards) outstanding, 34,821,723 Class B ordinary shares, 60,000 Class C ordinary shares issued and outstanding.

The following are summaries of material provisions of our currently effective memorandum and articles of association and the Companies Act insofar as they relate to the material terms of our shares.

Registered Office and Objects

The Registered Office of the Company is situated at the offices of Maples Corporate Services Limited, PO Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands, or at such other location within the Cayman Islands as our directors may from time to time determine. The objects for which the Company is established are unrestricted and the Company shall have full power and authority to carry out any object not prohibited by the Companies Act or any other law of the Cayman Islands.

Board of Directors

See “Item 6. Board Practices—C. Board of Directors.”

Ordinary shares

General. Our ordinary shares are divided into Class A ordinary shares, Class B ordinary shares and Class C ordinary shares. Holders of Class A ordinary shares, Class B ordinary shares and Class C ordinary shares have the same rights except for voting and conversion rights (as described in more details below). Our ordinary shares are issued in registered form, and are issued when registered in our register of members (shareholders). Our shareholders who are non-residents of the Cayman Islands may freely hold and vote their shares.

Dividends. The holders of our ordinary shares are entitled to such dividends as may be declared by our board of directors, subject to the Companies Act and our articles of association. In addition, our shareholders may by ordinary resolution declare a dividend, but no dividend may exceed the amount recommended by our directors. Under Cayman Islands law, a Cayman Islands company may pay a dividend on its shares out of either profit or share premium account, provided that in no circumstances may a dividend be paid if this would result in the company being unable to pay its debts as they fall due in the ordinary course of business.

Conversion. Each Class B ordinary share or each Class C ordinary share is convertible into one Class A ordinary share at any time by the holder thereof. Class A ordinary shares are not convertible into Class B ordinary shares or Class C ordinary shares under any circumstances.

Upon any transfer of Class B ordinary shares or Class C ordinary shares by a holder thereof to any person or entity which is not an affiliate of such holder, such Class B ordinary shares or Class C ordinary shares will be automatically and immediately converted into an equal number of Class A ordinary shares. In addition, any Class C ordinary shares shall be automatically and immediately converted into an equal number of Class A ordinary shares upon the direct or indirect sale or transfer of a majority of the voting securities of, or the direct or indirect sale or transfer of all or substantially all of the assets of, a holder of Class C ordinary shares to any person that is not an affiliate of such holder.

Voting Rights. In respect of matters requiring shareholders' votes, on a show of hands, each shareholder is entitled to one vote for each ordinary share registered in such shareholder's name on the register of members of the Company or, on a poll, each Class A ordinary share is entitled to one vote, each Class B ordinary share is entitled to ten votes, and each Class C ordinary shares is entitled to one vote per share, except that we shall only proceed with the following matters with the written consent of the holders holding a majority of the issued and outstanding Class C ordinary shares or with the sanction of a special resolution passed at a separate meeting of the holders of the issued and outstanding Class C ordinary shares: (i) any appointment or removal of directors other than the appointment or removal of directors that is made pursuant to a shareholder's right under the Investor Rights Agreement, dated January 15, 2015, among the Company, King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein, and the Share Subscription Agreement, dated May 23, 2016, between Company and Tuspark Innovation Venture Limited; (ii) entry into any agreement by us or our subsidiaries with any shareholder who holds more than 10% of our issued and outstanding share capital or such shareholder's affiliate, other than agreements entered into in our ordinary course of business with a total contract amount below 10% of our consolidated total revenue in the most recent completed fiscal year; and (iii) any proposed amendments to our memorandum and articles of associations that will amend, alter, modify or change the rights attached to Class C ordinary shares. Voting at any shareholders' meeting is by show of hands unless a poll is demanded. A poll may be demanded by the chairman or by any three shareholders entitled to vote at the meeting, or one or more shareholders holding at least 10% of the paid-up voting share capital or 10% of the total voting rights entitled to vote at the meeting, present in person or by proxy.

A quorum required for a meeting of shareholders consists of at least one shareholder present in person or by proxy or, if a corporation or other non-natural person, by its duly authorized representative, who holds no less than one-third of the voting power of the shares in issue carrying a right to vote at a meeting of shareholders. Shareholders' meetings may be held annually and may be convened by our board of directors on its own initiative or upon a requisition to the directors made by shareholders holding in aggregate at least one-third of the voting power of the shares in issue carrying a right to vote at a meeting of shareholders. Advance notice of at least 14 days is required for a meeting of shareholders.

An ordinary resolution to be passed by the shareholders requires a simple majority of votes attaching to the ordinary shares cast in a general meeting while a special resolution requires no less than two-thirds of the votes attaching to the ordinary shares cast in a general meeting. Both ordinary resolutions and special resolutions may also be passed by a unanimous written resolution signed by all the shareholders of our company, as permitted by the Companies Act and our memorandum and articles of association. A special resolution is required for matters including, but not limited to, amending the memorandum and articles of association of the company, reducing share capital and winding up. Our shareholders may affect certain changes by ordinary resolution, including increasing the amount of our authorized share capital, consolidating and dividing all or any of our share capital into shares of larger amount than our existing shares, and the cancellation of any authorized but unissued shares.

Transfer of Shares. Subject to the restrictions of our memorandum and articles of association, any of our shareholders may transfer all or any of his or her ordinary shares by an instrument of transfer in any usual or common form or any other form approved by our board of directors.

Our board of directors may, in its sole discretion, decline to register any transfer of any ordinary share which is not fully paid up or on which we have a lien. Our directors may also decline to register any transfer of any share unless (a) the instrument of transfer is lodged with us, accompanied by the certificate for the shares to which it relates and such other evidence as our board of directors may reasonably require to show the right of the transferor to make the transfer; (b) the instrument of transfer is in respect of only one class of shares; (c) the instrument of transfer is properly stamped, if required; (d) in the case of a transfer to joint holders, the number of joint holders to whom the share is to be transferred does not exceed four; (e) the shares transferred are free of any lien in favor of us; and (f) a nominal processing fee determined to be payable by our directors (not to exceed the maximum sum as Nasdaq may determine to be payable) has been paid to us in respect thereof.

If our directors refuse to register a transfer, they must, within two months after the date on which the instrument of transfer was lodged, send to each of the transferor and the transferee notice of such refusal. The registration of transfers may, on 14 days' notice being given by advertisement in one or more newspapers or by electronic means, be suspended and the register closed at such times and for such periods as our board of directors may from time to time determine; provided, however, that the registration of transfers may not be suspended and the register may not be closed for more than 30 days in any year.

Liquidation. On a return of capital on winding up, if the assets available for distribution among our shareholders are more than sufficient to repay the whole of the share capital at the commencement of the winding up, the surplus will be distributed among shareholders in proportion to the par value of the shares held by them at the commencement of the winding up, subject to a deduction from those shares in respect of which there are monies due, of all monies payable to our company for unpaid calls or otherwise. If our assets available for distribution are insufficient to repay the whole of the share capital, the assets will be distributed so that, as nearly as may be, the losses are borne by our shareholders in proportion to the par value of the shares held by them.

Calls on Shares and Forfeiture of Shares. Our board of directors may from time to time make calls upon shareholders for any amounts unpaid on their shares in a notice served to such shareholders at least 14 days prior to the specified time of payment. The shares that have been called upon and remain unpaid on the specified time are subject to forfeiture.

Redemption, Repurchase and Surrender of Shares. We may issue shares on terms that such shares are subject to redemption, at our option or at the option of the holders thereof, on such terms and in such manner as may be determined, before the issue of such shares, by our board of directors or by a special resolution of our shareholders. Our company may also repurchase any of our shares provided that the manner of such purchase has been approved by an ordinary resolution of our shareholders, or the manner of purchase is in accordance with the procedures set out in our memorandum and articles of association. Under the Companies Act, the redemption or repurchase of any share may be paid out of our company's profits or out of the proceeds of a fresh issue of shares made for the purpose of such redemption or repurchase, or out of capital (including share premium account and capital redemption reserve) if our company can, immediately following such payment, pay its debts as they fall due in the ordinary course of business. In addition, under the Companies Act no such share may be redeemed or repurchased (a) unless it is fully paid up, (b) if such redemption or repurchase would result in there being no shares outstanding, or (c) if the company has commenced liquidation. In addition, our company may accept the surrender of any fully paid share for no consideration.

Variations of Rights of Shares. Whenever the capital of our company is divided into different classes, the rights attached to any such class of shares may, subject to any right or restriction attached to any class, be materially adversely varied either with the written consent of the holders of a majority of the issued shares of that class or with the sanction of a special resolution passed at a separate meeting of the holders of the shares of that class. The rights conferred upon the holders of the shares of any class will not, unless otherwise expressly provided by the terms of issue of the shares of that class, be deemed to be varied by the creation or issue of further shares ranking in priority to or *pari passu* with such previously existing shares.

Inspection of Books and Records. Holders of our ordinary shares will have no right to inspect our corporate records except as conferred by Cayman Islands law or authorized by the board or by ordinary resolution of the shareholders.

C. Material Contracts

On October 14, 2019, we entered into a Share Subscription Agreement with Personal Group Limited, a British Virgin Islands company wholly owned by Mr. Sheng Chen. Pursuant to the Share Subscription Agreement, we issued 60,000 Class C ordinary shares to Personal Group Limited, with the rights, restrictions, preferences and privileges set forth therein, at a price of US\$1.35 per share. The holders of Class C ordinary shares are entitled to one vote per share, except that we shall only proceed with the following matters with the written consent of the holders holding a majority of the issued and outstanding Class C ordinary shares or with the sanction of a special resolution passed at a separate meeting of the holders of the issued and outstanding Class C ordinary shares:

- any appointment or removal of directors other than the appointment or removal of directors that is made pursuant to a shareholder's right under the Investor Rights Agreement, dated January 15, 2015, among the Company, King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein, and the Share Subscription Agreement, dated May 23, 2016, between Company and Tuspark Innovation Venture Limited;
- entry into any agreement by us or our subsidiaries with any shareholder who holds more than 10% of our issued and outstanding share capital or such shareholder's affiliate, other than agreements entered into in our ordinary course of business with a total contract amount below 10% of our consolidated total revenue in the most recent completed fiscal year; and
- any proposed amendments to our memorandum and articles of associations that will amend, alter, modify or change the rights attached to Class C ordinary shares.

Each Class C ordinary share is convertible into one Class A ordinary share at any time by the holder thereof, and Class C ordinary shares are not convertible into Class B ordinary shares or preferred shares under any circumstances. Upon any transfer of Class C ordinary shares by a holder thereof to any person or entity which is not an affiliate of such holder, or upon the direct or indirect sale or transfer of a majority of the voting securities of, or the direct or indirect sale or transfer of all or substantially all of the assets of, a holder of Class C Ordinary Shares to any person that is not an affiliate of such holder, such Class C ordinary shares shall be automatically and immediately converted into the equal number of Class A ordinary shares.

On July 24, 2019, we reached the following agreements with Warburg Pincus to restructure our partnership: (i) an amended and restated investment agreement, by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited; and (ii) a restructuring agreement, by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited. On January 15, 2020, we further entered in to an amendment to restructuring agreement, by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited, in connection with the restructuring of our joint ventures with Warburg Pincus. Pursuant to the amended and restated investment agreement, the restructuring agreement, and the amendment to restructuring agreement, (i) one of the joint ventures distributed its assets and projects to us and to Princeton Digital Group (PDG), a Warburg Pincus-backed company, on a pro rata basis in principle, after which we obtained 100% ownership of a project under development in the Shanghai Waigaoqiao Free Trade Zone, as well as a certain amount of cash, and Princeton Digital Group (PDG) obtained 100% ownership of four projects under development in Shanghai, Nanjing, Nantong and Wuxi; and (ii) we and Warburg Pincus will adjust the existing holding structure for operating the current projects, and jointly establish an additional holding vehicle for sourcing and developing new projects in China.

In February 2020, we entered into convertible note purchase agreements with a group of investors led by Goldman Sachs Asia Strategic Pte. Ltd. in an aggregate principal amount of US\$200 million through a private placement to the investors. The convertible notes will mature in five years, bearing interest at the rate of 2% per annum from the issuance date which shall be payable semiannually in arrears in cash. At any time after the issuance, each note is convertible into Class A ordinary shares at the holder's option at a conversion price of US\$2 per share, or US\$12 per ADS, subject to customary anti-dilution adjustments. Unless previously redeemed or converted, we shall redeem the note on the maturity date at 115% of the then outstanding principal amount plus all accrued but unpaid interest. In addition, if any portion of the outstanding principal amount of the notes has not been converted into our shares by the third anniversary of the note issuance date, the holders have the right to require us to redeem, in whole or in part, the outstanding principal amount of the note at 109% of the principal amount plus all accrued but unpaid interest.

On June 22, 2020, we entered into an investment agreement with Affiliates of Vector and Blackstone Tactical Opportunities Fund - FD (Cayman) - NQ L.P, pursuant to which we issued an aggregate of 150,000 Series A perpetual convertible preferred shares to Affiliates of Vector. Dividends on each Series A perpetual convertible preferred share will accrue at 4.5% per annum from the issuance date until the date immediately prior to the conversion date. At any time after the issuance date, Series A convertible preferred shares are convertible into Class A ordinary shares or ADSs at the holder's option, the number of which will be determined based on a conversion price which is initially US\$2.8333 per Class A ordinary shares or US\$17.00 per ADS, subject to certain adjustments therein. On March 1, 2021, Affiliates of Vector converted all of their 150,000 Series A perpetual convertible preferred shares into 54,570,816 Class A Ordinary Shares.

Other than in the ordinary course of business and other than those described above, in "Item 4. Information on the Company" and "Item 7. Major Shareholders and Related Party Transactions—B. Related Party Transactions" or elsewhere in this annual report, we have not entered into any material contract during the two years immediately preceding the date of this annual report.

D. [Exchange Controls](#)

See "Item 4. Information on the Company—B. Business Overview—Regulations—Regulations on Foreign Currency Exchange."

E. [Taxation](#)

The following summary of the material Cayman Islands, PRC and United States federal income tax consequences of an investment in our ADSs or Class A ordinary shares is based upon laws and relevant interpretations thereof in effect as of the date of this annual report, all of which are subject to change. This summary does not deal with all possible tax consequences relating to an investment in our ADSs or Class A ordinary shares, such as the tax consequences under state, local and other tax laws.

Cayman Islands Taxation

The Cayman Islands currently levies no taxes on individuals or corporations based upon profits, income, gains or appreciation and there is no taxation in the nature of inheritance tax or estate duty. There are no other taxes likely to be material to our company levied by the government of the Cayman Islands, except for stamp duties that may be applicable on instruments executed in, or after execution, brought within the jurisdiction of, the Cayman Islands. The Cayman Islands is not a party to any double taxation treaties that are applicable to any payments made to or by our company. There are no exchange control regulations or currency restrictions in the Cayman Islands.

Payment of dividends and capital in respect of the shares will not be subject to taxation in the Cayman Islands and no withholding will be requested on the payment of a dividend or capital to any holder of the shares, nor will gains derived from the disposal of the shares be subject to Cayman Islands income or corporation tax.

People's Republic of China Taxation

Under the EIT Law, an enterprise established under the laws of foreign countries or regions and whose “place of effective management” is located within the PRC are considered PRC tax resident enterprises and subject to PRC income tax at the rate of 25% on worldwide income. Circular 82, as amended, clarified that dividends and other income paid by certain offshore enterprises controlled by a PRC company or a PRC company group established outside of the PRC will be considered PRC-source income and subject to PRC withholding tax, currently at a rate of 10% (or a lower rate under an applicable tax treaty, if any), when paid to non-PRC enterprise shareholders. Under the implementation regulations to the EIT Law, a “place of effective management” is defined as a body that has material and overall management and control over the manufacturing and business operations, personnel and human resources, finances and properties of an enterprise. In addition, the circular mentioned above specifies that certain offshore enterprises controlled by a PRC company or a PRC company group will be classified as PRC resident enterprises if the following are located or resident in the PRC: senior management personnel and departments that are responsible for daily production, operation and management; financial and personnel decision-making bodies; key properties, accounting books, the company seal, and minutes of board meetings and shareholders meetings; and half or more of the senior management or directors having voting rights. Although the circular only applies to offshore enterprises controlled by PRC enterprises and not those controlled by PRC individuals, the determining criteria set forth in the circular may reflect the State Administration of Taxation’s general position on how the “place of effective management” test should be applied in determining the tax resident status of offshore enterprises, regardless of whether they are controlled by PRC enterprises or individuals.

We believe that we are not a PRC resident enterprise. However, if the PRC tax authorities determine we are a PRC resident enterprise for EIT purposes, we may be required to withhold tax at the rate of 10% (or a lower rate under an applicable tax treaty, if any) from dividends we pay to our non-PRC resident enterprise shareholders (20% for non-PRC individual shareholders), including the holders of our ADSs. In addition, non-PRC holders of shares and ADSs may be subject to PRC tax on gains realized on the sale or other disposition of ADSs or Class A ordinary shares at the same rates if such income is treated as sourced from within the PRC. It is unclear whether our non-PRC holders of shares and ADSs would be able to claim the benefits of any tax treaties between their jurisdictions of tax residence and the PRC in the event that we are treated as a PRC resident enterprise. See “Item 3. Key Information—D. Risk Factors—Risks Related to Doing Business in China—Under the New PRC Enterprise Income Tax Law, we may be classified as a “resident enterprise” of China. Such classification could result in unfavorable tax consequences to us and our non-PRC holders of shares and ADSs.”

Certain U.S. Federal Income Tax Considerations

The following is a summary of certain U.S. federal income tax considerations of the ownership and disposition of our ADSs or Class A ordinary shares by a U.S. Holder, as defined below, that holds our ADSs or Class A ordinary shares as “capital assets” (generally, property held for investment) under the U.S. Internal Revenue Code of 1986, as amended (the “Code”). This summary is based on the tax laws of the United States as in effect on the date of this annual report on Form 20-F and on U.S. Treasury regulations in effect or, in some cases, proposed, as of the date of this annual report on Form 20-F, as well as judicial and administrative interpretations thereof available on or before such date. All of the foregoing authorities are subject to change, which change could apply retroactively and could affect the tax considerations described below. No ruling has been sought from the United States Internal Revenue Service (the “IRS”) with respect to any U.S. federal income tax considerations described below, and there can be no assurance that the IRS or a court will not take a contrary position. This summary does not discuss all aspects of U.S. federal income taxation that may be important to particular investors in light of their individual investment circumstances, including the application of estate and gift taxes, the alternative minimum tax, the Medicare contribution tax, special accounting rules under Section 451(b) of the Code, and tax consequences applicable to U.S. Holders subject to special tax rules (for example, banks, certain financial institutions, insurance companies, regulated investment companies, real estate investment trusts, broker-dealers, traders in securities that elect mark-to-market treatment, partnerships or other entities or arrangements classified as partnerships for U.S. federal income tax purposes (and investors therein), tax-exempt entities (including private foundations), persons who acquired their ADSs or Class A ordinary shares pursuant to the exercise of any employee share option or otherwise as compensation, persons who own (directly, indirectly, or constructively) 10% or more of our stock (by vote or value), persons that hold their ADSs or Class A ordinary shares as part of a straddle, hedge, conversion, constructive sale or other integrated transaction for U.S. federal income tax purposes, or persons that have a functional currency other than the U.S. dollar), all of whom may be subject to tax rules that differ significantly from those summarized below. In addition, this summary does not discuss any state, local, or non-U.S. tax considerations. Each potential investor is urged to consult its tax advisor regarding the U.S. federal, state, local and non-U.S. income and other tax considerations of an investment in our ADSs or Class A ordinary shares.

General

For purposes of this summary, a “U.S. Holder” is a beneficial owner of our ADSs or Class A ordinary shares that is, for U.S. federal income tax purposes, (i) an individual who is a citizen or resident of the United States, (ii) a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) created in, or organized under the law of, the United States or any state thereof or the District of Columbia, (iii) an estate the income of which is includible in gross income for U.S. federal income tax purposes regardless of its source, or (iv) a trust (A) the administration of which is subject to the primary supervision of a United States court and which has one or more U.S. persons who have the authority to control all substantial decisions of the trust or (B) that has otherwise elected to be treated as a U.S. person under applicable U.S. Treasury Regulations.

If a partnership (or other entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of our ADSs or Class A ordinary shares, the tax treatment of a partner in the partnership will generally depend upon the status of the partner and the activities of the partnership. Partnerships and partners of a partnership holding our ADSs or Class A ordinary shares are urged to consult their tax advisors regarding an investment in our ADSs or Class A ordinary shares.

The discussion below assumes that the representations contained in the deposit agreement are true and that the obligations in the deposit agreement and any related agreement have been and will be complied with in accordance with their terms. U.S. Holders who hold ADSs will be treated as the holder of the underlying Class A ordinary shares represented by those ADSs for U.S. federal income tax purposes.

Passive Foreign Investment Company Considerations

A non-U.S. corporation, such as our company, will be a “passive foreign investment company,” or PFIC, for U.S. federal income tax purposes for any taxable year, if either (i) 75% or more of its gross income for such year consists of certain types of “passive” income or (ii) 50% or more of the value of its assets (determined on the basis of a quarterly average) during such year produce or are held for the production of passive income (the “asset test”). Passive income generally includes dividends, interest, certain non-active royalties, rents, annuities, net gains from the sale or exchange of property producing such income and certain net foreign currency gains. For this purpose, cash and assets readily convertible into cash are categorized as passive assets and the company’s unbooked intangibles are taken into account for determining the value of its assets. We will be treated as owning a proportionate share of the assets and earning a proportionate share of the income of any other corporation in which we own, directly or indirectly, more than 25% (by value) of the stock.

Although the law in this regard is not entirely clear, we treat our variable interest entities as being owned by us for U.S. federal income tax purposes because we control their management decisions and we are entitled to substantially all of their economic benefits and, as a result, we consolidate their results of operations in our consolidated U.S. GAAP financial statements. If it were determined, however, that we are not the owner of our variable interest entities for U.S. federal income tax purposes, we would likely be treated as a PFIC for our taxable year ended December 31, 2020 and for subsequent taxable years.

Assuming that we are the owner of our variable interest entities for U.S. federal income tax purposes, we believe that we primarily operate as an active provider of managed hosting and cloud services in China. Based on the market price of our ADSs and Class A ordinary shares, the value of our assets, and the composition of our assets and income, we believe that we were not a PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2020.

While we do not anticipate becoming a PFIC, no assurances regarding our PFIC status can be provided for any past, current or future taxable year. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis and the applicable law is subject to varying interpretation. In particular, the characterization of our assets as active or passive may depend in part on our current and intended future business plans, which are subject to change. In addition, the value of our assets for purposes of the asset test may be determined, in part, by reference to the market price of our ADSs or Class A ordinary shares, so fluctuations in the market price of our ADSs and Class A ordinary shares may cause us to become a PFIC for the current or any subsequent taxable year. Under circumstances where revenues from activities that produce passive income significantly increase relative to our revenues from activities that produce non-passive income, or where we determine not to deploy significant amounts of cash for active purposes, our risk of becoming a PFIC may substantially increase.

Furthermore, because there are uncertainties in the application of the relevant rules, it is possible that the IRS may challenge our classification of certain income and assets as non-passive or our valuation of our tangible and intangible assets, each of which may result in our becoming a PFIC for the current taxable year or any future taxable years. Accordingly, our U.S. counsel expresses no opinion with respect to our PFIC status for any prior, current or subsequent year.

If we are a PFIC for any year during which a U.S. Holder holds our ADSs or Class A ordinary shares, we generally will continue to be treated as a PFIC as to such U.S. Holder for all succeeding years during which such U.S. Holder holds our ADSs or Class A ordinary shares unless we cease to be a PFIC and the U.S. Holder makes a "deemed sale" election with respect to the ADSs or Class A ordinary shares. If such a deemed sale election is made, a U.S. Holder will be deemed to have sold the ADSs or Class A ordinary shares the U.S. Holder holds at their fair market value and any gain from such deemed sale would be subject to the rules described below. After the deemed sale election, so long as we do not become a PFIC in a subsequent taxable year, the U.S. Holder's ADSs or Class A ordinary shares with respect to which such election was made will not be treated as shares in a PFIC and the U.S. Holder will not be subject to the rules described below with respect to any "excess distribution" the U.S. Holder receives from us or any gain from an actual sale or other disposition and consequences of making a deemed sale election if we cease to be a PFIC and such election becomes available.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A ordinary shares, unless the U.S. Holder makes a mark-to-market election (as described below), the U.S. Holder will generally be subject to special tax rules that have a penalizing effect, regardless of whether we remain a PFIC, on (i) any excess distribution that we make to the U.S. Holder (which generally means any distribution paid during a taxable year to a U.S. Holder that is greater than 125% of the average annual distributions paid in the three preceding taxable years or, if shorter, the U.S. Holder's holding period for the ADSs or Class A ordinary shares), and (ii) any gain realized on the sale or other disposition, including, under certain circumstances, a pledge, of ADSs or Class A ordinary shares. Under the PFIC rules:

- the excess distribution and/or gain will be allocated ratably over the U.S. Holder's holding period for the ADSs or Class A ordinary shares;
- the amount allocated to the current taxable year and any taxable years in the U.S. Holder's holding period prior to the first taxable year in which we are a PFIC, or pre-PFIC year, will be taxable as ordinary income;
- the amount allocated to each of the other taxable years would be subject to tax at the highest rate of tax in effect for the applicable class of taxpayer for such year and the interest charge generally applicable to underpayments of tax will be imposed on the resulting tax attributable to each such year.

The tax liability for amounts allocated to years prior to the year of disposition or “excess distribution” cannot be offset by any net operating losses for such years, and gains (but not losses) realized on the sale of the ADSs or Class A ordinary shares cannot be treated as capital, even if such ADSs or Class A ordinary shares are held as capital assets.

If we are a PFIC for any taxable year during which a U.S. Holder holds our ADSs or Class A ordinary shares and any of our non-U.S. subsidiaries is also a PFIC, such U.S. Holder would be treated as owning a proportionate amount (by value) of the shares of the lower-tier PFIC and would be subject to the rules described above on certain distributions by a lower-tier PFIC and a disposition of shares of a lower-tier PFIC even though such U.S. holder would not receive the proceeds of those distributions or dispositions. U.S. Holders should consult their tax advisors regarding the application of the PFIC rules to any of our subsidiaries.

As an alternative to the foregoing rules, if we are a PFIC, a U.S. Holder of “marketable stock” (as defined below) may make a mark-to-market election with respect to our ADSs, but not our Class A ordinary shares, provided that the ADSs continue to be listed on the Nasdaq Global Select Market and are regularly traded. The mark-to-market election is available only for “marketable stock,” which is stock that is traded in other than de minimis quantities on at least 15 days during each calendar quarter, or “regularly traded,” on a qualified exchange or other market, as defined in applicable Treasury regulations. If a U.S. Holder makes this election, the holder will generally (i) include as ordinary income for each taxable year that we are a PFIC the excess, if any, of the fair market value of ADSs held at the end of the taxable year over the adjusted tax basis of such ADSs and (ii) deduct as an ordinary loss the excess, if any, of the adjusted tax basis of the ADSs over the fair market value of such ADSs held at the end of the taxable year, but such deduction will only be allowed to the extent of the net amount previously included in income as a result of the mark-to-market election. The U.S. Holder’s adjusted tax basis in the ADSs would be adjusted to reflect any income or loss resulting from the mark-to-market election. If a U.S. Holder makes a mark-to-market election and we cease to be a PFIC, the holder will not be required to take into account the mark-to-market gain or loss described above during any period that we are not a PFIC. If a U.S. Holder makes a mark-to-market election, any gain such U.S. Holder recognizes upon the sale or other disposition of our ADSs in a year when we are a PFIC will be treated as ordinary income and any loss will be treated as ordinary loss, but such loss will only be treated as ordinary loss to the extent of the net amount previously included in income as a result of the mark-to-market election. In the case of a U.S. Holder who has held ADSs during any taxable year in respect of which we were classified as a PFIC and continues to hold such ADSs (or any portion thereof) and has not previously determined to make a mark-to-market election, and who is now considering making a mark-to-market election, special tax rules may apply relating to purging the PFIC taint of such ADSs.

Because, as a technical matter, a mark-to-market election cannot be made for any lower-tier PFICs that we may own, a U.S. Holder may continue to be subject to the general PFIC rules described above with respect to such U.S. Holder’s indirect interest in any investments held by us that are treated as an equity interest in a PFIC for U.S. federal income tax purposes, notwithstanding a market-to-market election.

We do not intend to provide information necessary for U.S. Holders to make qualified electing fund elections, which, if available, would result in tax treatment different from the general tax treatment for PFICs described above.

If a U.S. Holder owns our ADSs or Class A ordinary shares during any taxable year that we are a PFIC, the holder must file an annual report with the U.S. Internal Revenue Service. Each U.S. Holder is urged to consult its tax advisor concerning the U.S. federal income tax considerations of purchasing, holding, and disposing ADSs or Class A ordinary shares if we are or become a PFIC, including the possibility of making a mark-to-market election.

Distributions

Subject to the PFIC discussion above, any distributions (including the amount of any PRC tax withheld, but not include certain pro rata distributions of Class A ordinary shares of ADSs) paid on our ADSs or Class A ordinary shares out of our current or accumulated earnings and profits, as determined under U.S. federal income tax principles, will generally be includible in the gross income of a U.S. Holder as dividend income on the day actually or constructively received by the U.S. Holder, in the case of Class A ordinary shares, or by the depository bank, in the case of ADSs. Because we do not intend to determine our earnings and profits on the basis of U.S. federal income tax principles, any distribution paid will generally be treated as a “dividend” for U.S. federal income tax purposes.

Individuals and other non-corporate recipients of dividend income generally will be subject to tax on dividend income from a “qualified foreign corporation” at a rate applicable to “qualified dividend income” rate rather than the marginal tax rates generally applicable to ordinary income provided that certain holding period and other requirements are met. We will be considered to be a qualified foreign corporation with respect to any dividend we pay on our ADSs or Class A ordinary shares provided that (i) our ADSs or Class A ordinary shares are readily tradable on an established securities market in the United States, or we are eligible for the benefits of a comprehensive tax treaty with the United States that the Secretary of Treasury of the United States determines is satisfactory for this purpose and includes an exchange of information program, (ii) we are not treated as a PFIC for U.S. federal income tax purposes for the taxable year in which the dividend was paid or the preceding taxable year, and (iii) certain holding period requirements are met. Because (i) U.S. Treasury guidance indicates that ADSs representing ordinary shares, such as ours, listed on the Nasdaq Global Select Market are considered to be readily tradable on an established securities market in the United States, and (ii) we believe that we were not a PFIC for U.S. federal income tax purposes for our taxable year ended December 31, 2020, we believe that we are a qualified foreign corporation with respect to dividends paid on the ADSs, but it is unclear whether dividends paid on our Class A ordinary shares that are not represented by ADSs will meet the conditions required for the reduced tax rate. There can be no assurance that our ADSs will continue to be considered readily tradable on an established securities market in later years. U.S. Holders should consult their tax advisors regarding the availability of the reduced tax rate on dividends in their particular circumstances. Dividends received on our ADSs or Class A ordinary shares will not be eligible for the dividends received deduction allowed to corporations.

In the event we are deemed to be a resident enterprise under the PRC Enterprise Income Tax Law, dividends paid by us on our ADSs or Class A Ordinary Shares may be subject to PRC withholding taxes at a rate of 10% in the case of non-PRC enterprises or 20% in the case of non-PRC individuals (in each case, subject to the provisions of any applicable tax treaty). However, it is unclear whether a U.S. Holder would be able to claim the benefits under the United States-PRC income tax treaty (which the U.S. Treasury Department has determined is satisfactory for this purpose) and whether we would be treated as a qualified foreign corporation with respect to dividends paid on both our Class A ordinary shares or ADSs. We cannot guarantee that such dividends will not be subject to PRC withholding taxes and any such tax may reduce the returns on our U.S. Holder’s investment in the ADSs or Class A ordinary shares.

For U.S. foreign tax credit purposes, dividends paid on our ADSs or Class A ordinary shares generally will be treated as income from foreign sources and generally will constitute passive category income. In the event that we are deemed to be a PRC resident enterprise under the PRC Enterprise Income Tax Law, a U.S. Holder may be subject to PRC withholding taxes on dividends paid, if any, on our ADSs or Class A ordinary shares. A U.S. Holder may be eligible, subject to a number of complex limitations, to claim a foreign tax credit in respect of any nonrefundable foreign withholding taxes imposed on dividends received on our ADSs or Class A ordinary shares. A U.S. Holder who does not elect to claim a foreign tax credit for foreign tax withheld may instead claim a deduction for U.S. federal income tax purposes in respect of such withholding, but only for a year in which such holder elects to do so for all creditable foreign income taxes. The rules governing the foreign tax credit are complex. Accordingly, U.S. Holders are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Sale or Other Disposition of ADSs or Class A Ordinary Shares

Subject to the PFIC discussion above, a U.S. Holder will generally recognize capital gain or loss upon the sale or other disposition of ADSs or Class A ordinary shares in an amount equal to the difference between the amount realized upon the disposition and the holder’s adjusted tax basis in such ADSs or Class A ordinary shares. The gain or loss will generally be capital gain or loss. Any capital gain or loss will be long-term if the ADSs or Class A ordinary shares have been held for more than one year. An individual U.S. Holder or other non-corporate U.S. Holder who has held the ADS or Class A ordinary share for more than one year, will generally be eligible for reduced tax rates. The deductibility of capital losses is subject to limitations. Any such gain or loss that recognized by a U.S. Holder will generally be treated as U.S. source income or loss for foreign tax credit limitation purposes, which will generally limit the availability of foreign tax credits. However, in the event we are deemed to be a PRC “resident enterprise” under PRC tax law, we may be eligible for the benefits of the income tax treaty between the United States and the PRC. In such event, if PRC tax were to be imposed on any gain from the disposition of the ADSs or Class A ordinary shares, a U.S. Holder that is eligible for the benefits of the income tax treaty between the United States and the PRC may elect to treat such gain as PRC source income. If a U.S. Holder is not eligible for the benefits of the United States-PRC income tax treaty or fails to make the election to treat any gain as foreign source, then such U.S. Holder may not be able to use the foreign tax credit arising from any PRC tax imposed on the disposition of the ADSs or Class A Ordinary Shares unless such credit can be applied (subject to applicable limitations) against United States federal income tax due on other income derived from foreign sources in the same income category (generally, the passive category). U.S. holders are urged to consult their tax advisors regarding the tax considerations if a foreign tax is imposed on a disposition of our ADSs or Class A ordinary shares, including the availability of the foreign tax credit under their particular circumstances.

Information Reporting and Backup Withholding

Payments of dividends and sales proceeds that are made within the United States or through certain U.S.-related financial intermediaries generally are subject to information reporting, and may be subject to backup withholding, unless (i) the U.S. Holder is a corporation or other exempt recipient or (ii) in the case of backup withholding, the U.S. Holder provides a correct taxpayer identification number and certifies that it is not subject to backup withholding.

Backup withholding is not an additional tax. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the holder's U.S. federal income tax liability and may entitle it to a refund, provided that the required information is timely furnished to the IRS.

Information with Respect to Foreign Financial Assets

Certain U.S. Holders who are individuals (and, under proposed regulations, certain entities) may be required to report information relating to the Class A ordinary shares or ADSs, subject to certain exceptions (including an exception for Class A ordinary shares or ADSs held in accounts maintained by certain U.S. financial institutions). U.S. Holders should consult their tax advisers regarding their reporting obligations with respect to their ownership and disposition of the Class A ordinary shares or ADSs.

F. [Dividends and Paying Agents](#)

Not applicable.

G. [Statement by Experts](#)

Not applicable.

H. [Documents on Display](#)

We have filed with the SEC a registration statement on Form F-1, including relevant exhibits and securities under the Securities Act with respect to underlying ordinary shares represented by the ADSs.

We are subject to the periodic reporting and other informational requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act. Under the Exchange Act, we are required to file reports and other information with the SEC. Specifically, we are required to file annually a Form 20-F no later than four months after the close of each fiscal year, which is December 31. Copies of reports and other information, when so filed, may be inspected without charge and may be obtained at prescribed rates at the public reference facilities maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549, and at the regional office of the SEC located at Citicorp Center, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. The public may obtain information regarding the Washington, D.C. Public Reference Room by calling the SEC at 1-800-SEC-0330. The SEC also maintains a web site at www.sec.gov that contains reports, proxy and information statements, and other information regarding registrants that make electronic filings with the SEC using its EDGAR system.

Our investor relations website is <http://ir.21vianet.com>. We make available free of charge on our investor relations website our annual reports on Form 20-F and any amendments to such reports as soon as reasonably practicable following the electronic filing of such report with the SEC. In addition, we provide electronic or paper copies of our filings free of charge upon request. The information contained on our website is not part of this or any other report filed with or furnished to the SEC.

As a foreign private issuer, we are exempt from the rules under the Exchange Act prescribing the furnishing and content of quarterly reports and proxy statements, and officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. Our financial statements have been prepared in accordance with U.S. GAAP.

We will furnish hard copies of our annual report which will include a review of operations and annual audited consolidated financial statements prepared in conformity with U.S. GAAP free of charge to our shareholders and ADS holders upon request.

I. [Subsidiary Information](#)

For a listing of our subsidiaries, see "Item 4. Information on the Company—C. Organizational Structure."

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Risk

Our exposure to interest rate risk primarily relates to interest expenses incurred in respect of bonds payable, borrowings, finance lease liabilities as well as interest income generated by excess cash, which is mostly held in interest-bearing bank deposits. As of December 31, 2020, we had (i) short-term and long-term borrowings (current portions) with an aggregate outstanding balance of RMB214.3 million (US\$32.8 million), (ii) long-term borrowings (excluding current portions) with an aggregate outstanding balance of RMB887.0 million (US\$135.9 million), and (iii) an outstanding principal balance of US\$300.0 million with respect to the 2021 Notes payable.

The short-term bank borrowings bore a weighted average interest rate of 4.46% per annum. The long-term borrowings bore weighted-average interest rate of 5.61% per annum. The 2020 Notes bore an interest rate of 7.000% per annum and an effective interest rate of 6.98% per annum. The 2021 Notes bore an interest rate of 7.875% per annum. We also had RMB285.9 million (US\$43.8 million) in short-term investments with original maturities of greater than 90 days but less than 365 days. A hypothetical one percentage point (100 basis-point) decrease in interest rates would have resulted in a decrease of approximately RMB27.6 million (US\$4.2 million) in interest expense for the year ended December 31, 2020. We have not used derivative financial instruments in our investment portfolio. Interest earning instruments and interest-bearing obligations carry a degree of interest rate risk. We have not been exposed to, nor do we anticipate being exposed to, material risks due to changes in market interest rates. However, our future interest income and interest expenses may fluctuate due to changes in market interest rates.

Foreign Exchange Risk

We earn most of our revenues and incur most of our expenses in Renminbi, and most of our sales and purchase contracts are denominated in Renminbi. We have not used any derivative financial instruments to hedge our exposure to foreign exchange risk. The Renminbi depreciated by 1.6% against the U.S. dollar in 2019 and then appreciated 6.5% in 2020. The Company intends to hold U.S. dollar-denominated financial assets and will convert to RMB according to the trend of exchange rate changes. As of December 31, 2020, we had total U.S. dollar-denominated cash and cash equivalents, restricted cash and short-term investments in the amount of US\$295.9 million. A hypothetical 10% increase in the exchange rate of the U.S. dollar against the RMB would have resulted in an increase of RMB193.0 million (US\$29.6 million) in the value of our U.S. dollar-denominated financial assets at December 31, 2020.

The conversion of Renminbi into foreign currencies, including U.S. dollars, is based on rates set by the People's Bank of China. Since June 2010, the RMB has fluctuated against the U.S. dollar, at times significantly and unpredictably, and in recent years the RMB has depreciated significantly against the U.S. dollar. It is difficult to predict whether the depreciation will continue and how market forces or PRC or U.S. government policy may impact the exchange rate between the RMB and the U.S. dollar in the future. As our costs and expenses are mostly denominated in RMB, the appreciation of the RMB against the U.S. dollar would increase our costs in U.S. dollar terms. In addition, as our operating subsidiaries and VIEs in China receive revenues in RMB, any significant depreciation of the RMB against the U.S. dollar may have a material and adverse effect on our revenues in U.S. dollar terms and financial condition, and the value of, and any dividends payable on, our ordinary shares. For example, to the extent that we need to convert U.S. dollars into Renminbi for capital expenditures and working capital and other business purposes, appreciation of the Renminbi against the U.S. dollar would have an adverse effect on the RMB amount we would receive from the conversion. Conversely, if we decide to convert Renminbi into U.S. dollars for the purpose of making payments for dividends on our ordinary shares or ADSs, strategic acquisitions or investments or other business purposes, appreciation of the U.S. dollar against the Renminbi would have a negative effect on the U.S. dollar amount available to us.

Inflation Risk

In the last three years, inflation in China has not materially impacted our results of operations. According to the National Bureau of Statistics of China, the annual average percent changes in the consumer price index in China for 2018, 2019 and 2020 were 2.1%, 2.9% and 2.5%, respectively. Although we have not been materially affected by inflation in the past, we cannot assure you that we will not be affected in the future by higher rates of inflation in China.

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**A. Debt Securities**

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares**Fees and Charges Our ADS holders May Have to Pay**

Citibank, N.A., the depository of our ADS program, collects fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depository collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depository may collect its annual fee for depository services by deductions from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depository may generally refuse to provide fee-attracting services until its fees for those services are paid. Citibank's principal executive office is located at 388 Greenwich Street, New York, New York, 10013. The depository bank typically appoints a custodian to safeguard the securities on deposit. In this case, the custodian is Citibank Hong Kong, located at 9/F Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong. As an ADS holder, you will be required to pay the following service fees to the depository bank:

Service	Fees
Issuance of ADSs	Up to US\$0.05 per ADS issued
Cancellation of ADSs	Up to US\$0.05 per ADS canceled
Distribution of cash dividends or other cash distributions	Up to US\$0.05 per ADS held
Distribution of ADSs pursuant to stock dividends, free stock distributions or exercise of rights	Up to US\$0.05 per ADS held
Distribution of securities other than ADSs or rights to purchase additional ADSs	Up to US\$0.05 per ADS held
Depository services	Up to US\$0.05 per ADS held on the applicable record date(s) established by the Depository

As an ADS holder, you will also be responsible to pay certain fees and expenses incurred by the depository bank and certain taxes and governmental charges such as:

- fees for the transfer and registration of Class A ordinary shares charged by the registrar and transfer agent for the Class A ordinary shares in the Cayman Islands (i.e., upon deposit and withdrawal of Class A ordinary shares);
- expenses incurred for converting foreign currency into U.S. dollars;
- expenses for cable, telex and fax transmissions and for delivery of securities;
- taxes and duties upon the transfer of securities (i.e., when Class A ordinary shares are deposited or withdrawn from deposit); and
- fees and expenses incurred in connection with the delivery or servicing of Class A ordinary shares on deposit.

Depository fees payable upon the issuance and cancellation of ADSs are typically paid to the depository bank by the brokers (on behalf of their clients) receiving the newly issued ADSs from the depository bank and by the brokers (on behalf of their clients) delivering the ADSs to the depository bank for cancellation. The brokers in turn charge these fees to their clients. Depository fees payable in connection with distributions of cash or securities to ADS holders and the depository services fee are charged by the depository bank to the record holders of ADSs as of the applicable ADS record date.

The depository fees payable for cash distributions are generally deducted from the cash being distributed. In the case of distributions other than cash (i.e., stock dividends, rights), the depository bank charges the applicable fee to the record date ADS holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or uncertificated in the direct registration system), the depository bank sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts (via DTC), the depository bank generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depository banks.

In the event of refusal to pay the depository fees, the depository bank may, under the terms of the deposit agreement, refuse the requested service until payment is received or may set off the amount of the depository fees from any distribution to be made to the ADS holder.

Note that the fees and charges you may be required to pay may vary over time and may be changed by us and by the depository bank. You will receive prior notice of such changes.

The depository bank may reimburse us for certain expenses incurred by us in respect of the ADR program established pursuant to the deposit agreement, by making available a portion of the depository fees charged in respect of the ADR program or otherwise, upon such terms and conditions as we and the depository bank may agree from time to time.

Fees and Other Payments Made by the Depository to Us

Our depository has agreed to reimburse us for certain expenses we incur that are related to establishment and maintenance of the ADS program, including investor relations expenses and exchange application and listing fees. There are limits on the amount of expenses for which the depository will reimburse us, but the amount of reimbursement available to us is not related to the amounts of fees the depository collects from investors. For the year ended December 31, 2020, we were entitled to US\$1,171,855.02 from the depository as reimbursement for our expenses incurred in connection with the establishment and maintenance of the ADS program.

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

None.

ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS

See “Item 10. Additional Information” for a description of the rights of security holders, which remain unchanged since our initial public offering.

The following “Use of Proceeds” information relates to the registration statement on Form F-1 (File number 333-173292) for our initial public offering of 14,950,000 ADSs, representing 89,700,000 Class A ordinary shares, which registration statement was declared effective by the SEC on April 21, 2011. We issued and sold all registered ADSs at an initial offering price of US\$15.00 per ADS.

We received net proceeds of US\$204.3 million from our initial public offering. We used all of the net proceeds received from our initial public offering on data center infrastructure expansion, network infrastructure expansion and general corporate purposes.

ITEM 15. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

Our management, with the participation of our chief executive officer and chief financial officer, has performed an evaluation of the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of the end of the period covered by this annual report, as required by Rule 13a-15(b) under the Exchange Act. Based on such evaluation, our management has concluded that, as of the end of the period covered by this annual report, our disclosure controls and procedures were effective.

Management’s Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Our internal control system was designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation and fair presentation of its published consolidated financial statements. All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective may not prevent or detect misstatements and can provide only reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management, with the participation of our chief executive officer and chief financial officer, conducted an assessment of the effectiveness of our internal control over financial reporting as of December 31, 2020. In making this assessment, we used the criteria established within the Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, our management has concluded that, as of December 31, 2020, our internal control over financial reporting was effective.

Our independent registered public accounting firm, Ernst & Young Hua Ming LLP, has audited our internal control over financial reporting as of December 31, 2020 and has issued an attestation report set forth below.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of 21Vianet Group, Inc.:

Opinion on Internal Control over Financial Reporting

We have audited 21Vianet Group, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, 21Vianet Group, Inc. (the "Company") maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2020, and the related notes and our report dated April 28, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young Hua Ming LLP

Shanghai, the People's Republic of China

April 28, 2021

Changes in Internal Control over Financial Reporting

There were no changes in our internal controls over financial reporting that occurred during the period covered by this annual report that have materially affected, or are reasonably likely to materially affect, our internal controls over financial reporting.

ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT

Our board of directors has determined that Mr. Sean Shao, an independent director (under the standards set forth in Nasdaq Stock Market Rule 5605(a)(2) and Rule 10A-3 under the Exchange Act) and a member of our audit committee, is an audit committee financial expert.

ITEM 16B. CODE OF ETHICS

Our board of directors has adopted a code of ethics that applies to our directors, officers, employees and agents, including certain provisions that specifically apply to our chief executive officer, chief financial officer, chief operating officer, vice presidents and any other persons who perform similar functions for us. We have filed our code of business conduct and ethics as an exhibit to our registration statement on Form F-1 (No. 333-173292).

ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES

The following table sets forth the aggregate fees by categories specified below in connection with certain professional services rendered by Ernst & Young Hua Ming LLP for the periods indicated. We did not pay any other fees to Ernst & Young Hua Ming LLP during the periods indicated below

	For the Years Ended December 31,	
	2019	2020
	(in US\$ thousands)	
Audit fees ⁽¹⁾	915	1,163
Audit-related fees ⁽²⁾	203	854
Tax fees	19	23
Other fees ⁽³⁾	45	—

Notes:

- (1) "Audit fees" means the aggregate fees billed for professional services rendered by Ernst & Young Hua Ming LLP for the audit of our annual financial statements.
- (2) "Audit-related fees" means, for the year ended December 31, 2020, the aggregate fees billed for services provided in connection with issuance of comfort letters and review of financial statements.
- (3) "Other fees" means the aggregate fees billed for professional services in connection with the review of ASC842 in 2019.

The policy of our audit committee is to pre-approve all audit and non-audit services provided by Ernst & Young Hua Ming LLP, including audit, audit-related and tax services as described above, prior to the commencement of such services.

ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES

Not applicable.

ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS

On December 2, 2019, our board of directors approved a share repurchase program to repurchase up to US\$20 million worth of our ADSs during a 13-month period ending on December 31, 2020. The share repurchase program permitted us to purchase its ADSs through various means, including open market transactions, privately negotiated transactions, any combination thereof or other legally permissible means in accordance with applicable rules and regulations. The number of ADSs repurchased and the timing of repurchases will depend on a number of factors, including, but not limited to, price, trading volume and general market conditions, along with our working capital requirements, general business conditions and other factors.

For the period from January 1 to December 31, 2020, we did not purchase any ADSs under our share repurchase program. The following table sets forth a summary of our repurchase of our ordinary shares and ADSs made in the year 2020:

Period	Total Number of ADSs Purchased ⁽²⁾	Average Price Paid Per ADS ⁽²⁾	Total Number of ADSs Purchased as Part of Publicly Announced Program ⁽¹⁾	Maximum Dollar Value of ADSs that May Yet Be Purchased Under the Program (US\$)
(January 1, 2020—December 31, 2020) ⁽³⁾	727,273	27.5	—	—

- (1) On December 2, 2019, our board of directors approved a share repurchase program under which we may repurchase up to US\$20 million worth of our ADSs, representing Class A ordinary shares, during a 13-month period ending on December 31, 2020.
- (2) Each ADS represents six Class A ordinary shares.
- (3) Pursuant to a share repurchase agreement entered into with King Venture Holdings Limited in December 2020, we agreed to repurchase from King Venture Holdings Limited an aggregate of 4,363,639 Class A ordinary shares (727,273 ADSs) at US\$4.5833 per Class A ordinary shares (US\$27.50 per ADS), for an aggregate repurchase price of US\$20 million.

ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANT

Not applicable.

ITEM 16G. CORPORATE GOVERNANCE

Certain corporate governance practices in the Cayman Islands, which is our home country, are considerably different than the standards applied to U.S. domestic issuers. Nasdaq Stock Market Rules provide that foreign private issuers are exempt from certain corporate governance requirements of Nasdaq and may follow their home country practices, subject to certain exceptions and requirements to the extent that such exemptions would be contrary to U.S. federal securities laws and regulations. We currently follow our home country practice that: (i) does not require us to solicit proxy and hold meetings of our shareholders every year, (ii) does not restrict a company's transactions with directors, requiring only that directors exercise a duty of care and owe certain fiduciary duties to the companies for which they serve, (iii) does not require us to obtain shareholder approval for issuing additional securities exceeding 20% of our outstanding ordinary shares, and (iv) does not require us to seek shareholders' approval for amending our share incentive plan. In the future, we may rely on other exemptions provided by Nasdaq.

In accordance with NASDAQ Stock Market Rule 5250(d)(1), we will post this annual report on Form 20-F on our company website at <http://ir.21vianet.com>. In addition, we will provide hard copies of our annual report free of charge to shareholders and ADS holders upon request.

ITEM 16H. MINE SAFETY DISCLOSURE

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

We have elected to provide financial statements pursuant to Item 18.

ITEM 18. FINANCIAL STATEMENTS

The consolidated financial statements of 21Vianet Group, Inc. and its subsidiaries and consolidated affiliated entities are included at the end of this annual report.

ITEM 19. EXHIBITS

<u>Exhibit Number</u>	<u>Description of Document</u>
1.1	Fourth Amended and Restated Memorandum and Articles of Incorporation of the Registrant (incorporated by reference to Exhibit 3.2 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the U.S. Securities and Exchange Commission (the "Commission") on April 4, 2011)
2.1	Specimen American Depositary Receipt of the Registrant (incorporated by reference to Exhibit 4.1 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
2.2	Specimen Certificate for Class A Ordinary Shares of the Registrant (incorporated by reference to Exhibit 4.2 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
2.3	Deposit Agreement among the Registrant, the depository and holders and beneficial holders of the American Depositary Shares (incorporated by reference to Exhibit 4.3 from our registration statement on Form S-8 (File No. 333-177273), as amended, filed with the Commission on October 13, 2011)
2.4	Amended and Restated Shareholders Agreement between the Registrant and other parties therein dated January 14, 2011 (incorporated by reference to Exhibit 4.4 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
2.5	Description of securities (incorporated by reference to Exhibit 2.5 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
2.6	Indenture dated April 15, 2019 constituting US\$300 million 7.875% Senior Notes due 2021 between the Registrant and Citicorp International Limited, as trustee (incorporated by reference to Exhibit 2.6 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
2.7*	Indenture dated January 26, 2021 constituting US\$600 million 0.00% Convertible Senior Notes due 2026 between the Registrant and Citicorp International Limited, as trustee
4.1	Form of Indemnification Agreement between the Registrant and its Directors (incorporated by reference to Exhibit 10.3 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.2	Form of Employment Agreement between the Registrant and an Executive Officer of the Registrant (incorporated by reference to Exhibit 10.4 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.3	English translation of Loan Agreement dated January 28, 2011, between 21Vianet Data Center Co., Ltd. and the shareholders of Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) (incorporated by reference to Exhibit 4.7 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 19, 2013)

<u>Exhibit Number</u>	<u>Description of Document</u>
4.4	English translation of Share Pledge Agreement dated February 23, 2011, among 21Vianet Data Center Co., Ltd., Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) and the shareholders of Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) (incorporated by reference to Exhibit 10.6 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.5	English translation of Form Irrevocable Power of Attorney, by the shareholders of Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) (incorporated by reference to Exhibit 10.7 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.6	English Translation of Power of Attorney dated September 30, 2010, by 21Vianet Data Center Co., Ltd. (incorporated by reference to Exhibit 10.8 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.7	Exclusive Technical Consulting and Services Agreement dated December 19, 2006, between 21Vianet Data Center Co., Ltd. and Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) (incorporated by reference to Exhibit 10.9 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.8	Optional Share Purchase Agreement dated December 19, 2006, among 21Vianet Data Center Co., Ltd., 21Vianet System Limited (which later changed its name to Beijing aBitCool Network Technology Co., Ltd. and then to Beijing Yiyun Network Technology Co., Ltd.), Beijing 21Vianet Broad Band Data Center Co., Ltd. and the shareholders of Beijing aBitCool Network Technology Co., Ltd. (which later changed its name to Beijing Yiyun Network Technology Co., Ltd.) (incorporated by reference to Exhibit 10.10 from our registration statement on Form F-1 (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
4.9	Commitment Letter dated September 30, 2010, by AsiaCloud Inc. (which later changed its name to 21Vianet Group, Inc.), 21Vianet Data Center Co., Ltd., Sheng Chen and Jun Zhang (incorporated by reference to Exhibit 4.13 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 19, 2013)
4.10	2010 Share Incentive Plan, as amended on January 14, 2011 and July 6, 2012 (incorporated by reference to Exhibit 10.12 from our Form S-8 (File No. 333-187695), initially filed with the Commission on April 3, 2013)
4.11	English summary of Property Lease Agreement dated February 4, 2013, between Beijing Xingguang Tuocheng Investment Co., Ltd. and Beijing 21Vianet Broad Band Data Center Co., Ltd. (incorporated by reference to Exhibit 4.18 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 19, 2013)
4.12	Investor Rights Agreement dated January 15, 2015, among 21Vianet Group, Inc., King Venture Holdings Limited, Xiaomi Ventures Limited and certain other parties named therein (incorporated by reference to Exhibit 7.04 from Form Schedule 13D (File No. 005-86326), initially filed by King Venture Holdings Limited and other filers with the Commission on January 20, 2015)
4.13	Registration Rights Agreement dated January 15, 2015, among 21Vianet Group, Inc., King Venture Holdings Limited and Xiaomi Ventures Limited (incorporated by reference to Exhibit 7.05 from Form Schedule 13D (File No. 005-86326), initially filed by King Venture Holdings Limited and other filers with the Commission on January 20, 2015)
4.14*	English translation of Loan Agreement dated January 11, 2021, between Abitcool (China) Broadband Inc. and Sheng Chen
4.15*	English translation of Equity Pledge Agreement dated January 11, 2021, between Abitcool (China) Broadband Inc. and Sheng Chen

<u>Exhibit Number</u>	<u>Description of Document</u>
4.16*	English translation of Power of Attorney dated January 11, 2021, by Sheng Chen, the sole shareholder of WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.)
4.17*	English translation of Power of Attorney dated January 11, 2021, by Abitcool (China) Broadband Inc.
4.18*	English translation of Exclusive Technology Consulting and Services Agreement dated January 11, 2021, between Abitcool (China) Broadband Inc. and WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.)
4.19*	English translation of Exclusive Services Agreement dated January 11, 2021, between Abitcool (China) Broadband Inc. and WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.)
4.20*	English translation of Exclusive Call Option Agreement dated January 11, 2021, among WiFire Group Inc. (previously known as aBitcool Broadband Inc.), Sheng Chen and WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.)
4.21*	English translation of Commitment Letter dated January 11, 2021 by Sheng Chen and WiFire Network Technology (Beijing) Co., Ltd. (previously known as aBitcool Small Micro Network Technology (BJ) Co., Ltd.)
4.22*	English translation of Commitment Letter dated January 11, 2021 by WiFire Group Inc. (previously known as aBitcool Broadband Inc.)
4.23	2014 Share Incentive Plan, as amended on April 1, 2015 and December 22, 2017 (incorporated by reference to Exhibit 10.1 from our Form S-8 (File No. 333-222521), initially filed with the Commission on January 12, 2018)
4.24	Share Subscription Agreement, dated May 23, 2016, between 21Vianet Group Inc. and Tuspark Innovation Venture Limited (incorporated by reference to Exhibit 7.02 from Form Schedule 13D (File No. 005-86326), initially filed by Tuspark Innovation Venture Limited and other filers with the Commission on July 13, 2016)
4.25	English translation of the Supplemental Agreement to the Optional Share Purchase Agreement, dated December 19, 2016, by and among 21Vianet Data Center Co., Ltd., Beijing Yiyun Network Technology Co., Ltd., Beijing 21Vianet Broad Band Data Center Co., Ltd. and the shareholders of Beijing Yiyun Network Technology Co., Ltd. (incorporated by reference to Exhibit 4.37 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 12, 2017)
4.26	English translation of the Supplemental Agreement to the Exclusive Technical Consulting and Services Agreement, dated December 19, 2016, by and among 21Vianet Data Center Co., Ltd., Beijing Yiyun Network Technology Co., Ltd., and Beijing 21Vianet Broad Band Data Center Co., Ltd. (incorporated by reference to Exhibit 4.38 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 12, 2017)
4.27	English translation of the equity interest purchase agreement dated September 27, 2017, by and among Beijing TUS Yuanchuang Technology Development Co., Ltd., a company wholly owned by Tus-Holdings, Beijing 21Vianet Broad Band Data Center Co., Ltd., WiFire Network Technology (Beijing) Co., Ltd., WiFire (Beijing) Technology Co., Ltd., Guangzhou Gehua Network Technology and Development Company Limited, Beijing Chengyishidai Network Technology Co., Ltd., Zhiboxintong (Beijing) Network Technology Co., Ltd., Beijing Fastweb Network Technology Co., Ltd. and Guangzai Wuxian (Shanghai) Network Technology Co., Ltd (incorporated by reference to Exhibit 4.30 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 12, 2018)
4.28	English translation of the lease dated August 15, 2018 by and between the 21ViaNet Broad Band Data Center Co., Ltd. and Beijing Tuspark Harmonious Investment Development Co., Ltd. (incorporated by reference to Exhibit 4.33 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on March 27, 2019)

<u>Exhibit Number</u>	<u>Description of Document</u>
4.29	2020 Share Incentive Plan (incorporated herein by reference to Exhibit 99.1 on Form 6-K furnished to the Commission on May 29, 2020)
4.30	Amended and Restated Investment Agreement dated July 24, 2019 by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited (incorporated by reference to Exhibit 4.28 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
4.31	Restructuring Agreement dated July 24, 2019 by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited (incorporated by reference to Exhibit 4.29 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
4.32	Amendment to Restructuring Agreement dated January 15, 2020 by and among 21Vianet Group, Inc., 21Vianet DRP Investment Holdings Limited and Marble Stone Holdings Limited (incorporated by reference to Exhibit 4.30 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
4.33	Share Subscription Agreement dated October 14, 2019 by and between 21Vianet Group, Inc. and Personal Group Limited (incorporated by reference to Exhibit 4.31 from our annual report on Form 20-F (File No. 001-35126), initially filed with the Commission on April 02, 2020)
4.34	Form of Note Purchase Agreement by and between 21Vianet Group, Inc. and a purchaser (incorporated by reference to Exhibit 99.2 from our Form 6-K (File No. 001-35126), initially furnished with the Commission on February 20, 2020)
4.35*	English translation of Equity Pledge Agreement dated December 10, 2020, among Shanghai Edge Connect Technology Co., Ltd. and the shareholder of Shanghai Zhiyan Yunwei Technology Co., Ltd.
4.36*	English translation of Power of Attorney dated December 10, 2020, by the shareholder of Shanghai Zhiyan Yunwei Technology Co., Ltd.
4.37*	English translation of Exclusive Technical Consulting and Service Agreement dated December 10, 2020, between Shanghai Edge Connect Technology Co., Ltd. and Shanghai Zhiyan Yunwei Technology Co., Ltd.
4.38*	English translation of Exclusive Call Option Agreement dated December 10, 2020, among Shanghai Edge Connect Technology Co., Ltd., Shanghai Zhiyan Yunwei Technology Co., Ltd. and its shareholder
4.39*	English translation of Letter of Undertaking dated December 10, 2020, by Shanghai Zhiyan Yunwei Technology Co., Ltd. and its shareholder
4.40*	English translation of Letter of Undertaking dated December 10, 2020, by Shanghai Edge Connect Technology Co., Ltd.
4.41*	English translation of Supplementary Exclusive Technical Consulting and Service Agreement dated December 10, 2020, among Shanghai Edge Connect Technology Co., Ltd., Shanghai Zhiyan Yunwei Technology Co., Ltd. and its shareholder
4.42*	English translation of Share Repurchase Agreement dated March 23, 2021, between 21Vianet Group, Inc. and Tuspark Innovation Venture Limited
8.1*	List of Subsidiaries and Principal Consolidated Affiliated Entities
11.1	Code of Business Conduct and Ethics of Registrant (incorporated by reference to Exhibit 99.1 from our F-1 registration statement (File No. 333-173292), as amended, initially filed with the Commission on April 4, 2011)
12.1*	Chief Executive Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

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<u>Exhibit Number</u>	<u>Description of Document</u>
12.2*	Chief Financial Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
13.1**	Chief Executive Officer Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**	Chief Financial Officer Certification Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
15.1*	Consent of Ernst & Young Hua Ming LLP, Independent Registered Public Accounting Firm
15.2*	Consent of Han Kun Law Offices
101.INS*	XBRL Instance Document
101.SCH*	XBRL Taxonomy Extension Schema Document
101.CAL*	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF*	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB*	XBRL Taxonomy Extension Label Linkbase Document
101.PRE*	XBRL Taxonomy Extension Presentation Linkbase Document
104*	Cover Page Interactive Data File (embedded within the Inline XBRL document)

* Filed with this Annual Report on Form 20-F.

** Furnished with Annual Report on Form 20-F.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

21Vianet Group, Inc.

By: /s/ Sheng Chen

Name: Sheng Chen

Title: Executive Chairman of Board of Directors

Date: April 28, 2021

21VIANET GROUP, INC.

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of 21Vianet Group, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of 21Vianet Group, Inc. (the “Company”) as of December 31, 2020 and 2019, the related consolidated statements of operations, comprehensive loss, cash flows and shareholders’ equity for each of the three years in the period ended December 31, 2020 and the related notes (collectively referred to as the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company’s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated April 28, 2021 expressed an unqualified opinion thereon.

Adoption of New Accounting Standards

As discussed in Note 2 to the consolidated financial statements, the Company changed its method for accounting for lease in the year ended December 31, 2019.

Basis for Opinion

These financial statements are the responsibility of the Company’s management. Our responsibility is to express an opinion on the Company’s financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the consolidated financial statements and (ii) involved our especially challenging, subjective or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation allowance for deferred tax assets

Description of the Matter As described in Notes 2 and 24 to the consolidated financial statements, the Company recorded deferred tax assets of RMB851.7 million, net of valuation allowance of RMB170.1 million as of December 31, 2020. The carrying amount of deferred tax assets is reviewed on an entity-by-entity basis and is reduced by a valuation allowance to the extent that it is more-likely-than-not that the benefits of the deferred tax assets will not be realized in future years. The valuation allowance is determined based on the weight of positive and negative evidence including future reversals of existing taxable temporary differences, the adequacy of future taxable income exclusive of reversing temporary differences and verifiable tax planning.

Auditing the valuation allowance for deferred tax assets was complex and required significant auditor judgment and effort because management's estimate of future taxable income is judgmental and may be affected by future market conditions and the performance of the Company.

How we addressed the matter in our audit We obtained an understanding, evaluated the design and tested the operating effectiveness of controls that address the risks of material misstatement relating to the realizability of deferred tax assets. For example, we tested controls over management's projections of future taxable income.

We performed procedures that included, among others, evaluating the assumptions used by the Company in estimating future taxable income and testing the completeness and accuracy of the underlying data used in the projections. For example, we evaluated the assumptions used by the Company to project future taxable income by comparing the forecasted revenue growth rate to historical revenue growth rates and management's plan of expanding the Company's operating capacity as well as current industry trends. We also assessed the historical accuracy of management's estimates by comparing the historical estimated future taxable income to the actual results.

/s/ Ernst & Young Hua Ming LLP

We have served as the Company's auditor since 2010.

Shanghai, the People's Republic of China

April 28, 2021

21VIANET GROUP, INC.
CONSOLIDATED BALANCE SHEETS
(Amounts in thousands of Renminbi (“RMB”) and US dollars (“US\$”))

	Notes	As of December 31,		
		2019 RMB	2020 RMB	US\$
ASSETS				
Current assets:				
Cash and cash equivalents		1,808,483	2,710,349	415,379
Restricted cash		478,873	270,450	41,448
Accounts and notes receivable (net of allowance for doubtful debt of RMB67,828 and RMB68,921 (US\$10,563) as of December 31, 2019 and 2020, respectively)	5	657,158	847,233	129,844
Short-term investments	6	363,856	285,872	43,812
Prepaid expenses and other current assets	7	1,618,149	1,866,184	286,005
Amounts due from related parties	25	301,665	75,519	11,574
Total current assets		<u>5,228,184</u>	<u>6,055,607</u>	<u>928,062</u>
Non-current assets:				
Property and equipment, net	8	5,443,565	8,106,425	1,242,364
Intangible assets, net	9	410,595	658,195	100,873
Land use rights, net	10	233,154	255,373	39,138
Operating lease right-of-use assets, net	15	1,221,616	1,325,526	203,146
Goodwill	11	989,530	994,993	152,489
Restricted cash		69,821	135,638	20,787
Deferred tax assets, net	24	209,366	185,481	28,426
Long-term investments, net	12	169,653	135,517	20,769
Amounts due from related parties	25	20,654	20,562	3,151
Other non-current assets		277,568	1,500,438	229,952
Total non-current assets		<u>9,045,522</u>	<u>13,318,148</u>	<u>2,041,095</u>
Total assets		<u>14,273,706</u>	<u>19,373,755</u>	<u>2,969,157</u>

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(Amounts in thousands of RMB and US\$)

	Notes	As of December 31,		
		2019 RMB	2020 RMB	US\$
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Short-term bank borrowings (including short-term bank borrowings of the Consolidated VIEs without recourse to the primary beneficiaries of RMB232,323 and RMB34,000 (US\$5,211) as of December 31, 2019 and 2020, respectively)	13	234,500	34,000	5,211
Accounts and notes payable (including accounts and notes payable of the Consolidated VIEs without recourse to the primary beneficiaries of RMB211,710 and RMB182,669 (US\$27,995) as of December 31, 2019 and 2020, respectively)		303,128	289,387	44,350
Accrued expenses and other payables (including accrued expenses and other payables of the Consolidated VIEs without recourse to the primary beneficiaries of RMB622,160 and RMB981,961 (US\$150,492) as of December 31, 2019 and 2020, respectively)	14	978,935	1,631,563	250,048
Advances from customers (including advances from customers of the Consolidated VIEs without recourse to the primary beneficiaries of RMB1,068,692 and RMB1,041,594 (US\$159,631) as of December 31, 2019 and 2020, respectively)		1,068,692	1,041,594	159,631
Deferred revenue (including deferred revenue of the Consolidated VIEs without recourse to the primary beneficiaries of RMB52,088 and RMB58,066 (US\$8,899) as of December 31, 2019 and 2020, respectively)		57,625	63,245	9,693
Income taxes payable (including income taxes payable of the Consolidated VIEs without recourse to the primary beneficiaries of RMB8,175 and RMB12,743 (US\$1,953) as of December 31, 2019 and 2020, respectively)		48,032	29,028	4,449
Amounts due to related parties (including amounts due to related parties of the Consolidated VIEs without recourse to the primary beneficiaries of RMB56,977 and RMB50,193 (US\$7,692) as of December 31, 2019 and 2020, respectively)	25	166,935	51,007	7,817
Current portion of long-term borrowings (including current portion of long-term borrowings of the Consolidated VIEs without recourse to the primary beneficiaries of RMB32,500 and RMB165,328 (US\$25,338) as of December 31, 2019 and 2020, respectively)	13	32,500	180,328	27,636
Current portion of finance lease liabilities (including current portion of finance lease liabilities of the Consolidated VIEs without recourse to the primary beneficiaries of RMB220,363 and RMB362,760 (US\$55,595) as of December 31, 2019 and 2020, respectively)	15	227,115	403,843	61,892
Deferred government grants (including deferred government grants of the Consolidated VIEs without recourse to the primary beneficiaries of RMB2,595 and RMB2,074 (US\$318) as of December 31, 2019 and 2020, respectively)	19	2,595	2,074	318
Current portion of bonds payable	16	911,147	1,943,619	297,873
Current portion of operating lease liabilities (including current portion of operating lease liabilities of the Consolidated VIEs without recourse to the primary beneficiaries of RMB410,422 and RMB427,114 (US\$65,458) as of December 31, 2019 and 2020, respectively)	15	437,817	452,272	69,314
Total current liabilities		4,469,021	6,121,960	938,232

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(Amounts in thousands of RMB and US\$)

	Notes	As of December 31,		
		2019 RMB	2020 RMB	US\$
Non-current liabilities:				
Long-term borrowings (including long-term borrowings of the Consolidated VIEs without recourse to the primary beneficiaries of RMB79,500 and RMB570,135 (US\$87,377) as of December 31, 2019 and 2020, respectively)	13	79,500	886,996	135,938
Bonds payable	16	2,060,708	—	—
Convertible promissory notes	18	—	3,014,057	461,924
Non-current portion of finance lease liabilities (including non-current portion of finance lease liabilities of the Consolidated VIEs without recourse to the primary beneficiaries of RMB549,669 and RMB299,399 (US\$45,885) as of December 31, 2019 and 2020, respectively)	15	896,927	688,128	105,460
Unrecognized tax benefits (including unrecognized tax benefits of the Consolidated VIEs without recourse to the primary beneficiaries of RMB1,991 and RMB68,317 (US\$10,470) as of December 31, 2019 and 2020, respectively)	24	2,443	68,696	10,528
Deferred tax liabilities (including deferred tax liabilities of the Consolidated VIEs without recourse to the primary beneficiaries of RMB82,725 and RMB155,281 (US\$23,798) as of December 31, 2019 and 2020, respectively)	24	202,572	299,093	45,838
Deferred government grants (including deferred government grants of the Consolidated VIEs without recourse to the primary beneficiaries of RMB5,906 and RMB4,100 (US\$628) as of December 31, 2019 and 2020, respectively)	19	5,906	4,100	628
Amounts due to related parties (including amounts due to related parties of the Consolidated VIEs without recourse to the primary beneficiaries of RMB745,899 and RMB747,746 (US\$114,597) as of December 31, 2019 and 2020, respectively)	25	745,899	747,746	114,597
Non-current portion of operating lease liabilities (including non-current portion of operating lease liabilities of the Consolidated VIEs without recourse to the primary beneficiaries of RMB529,546 and RMB497,268 (US\$76,210) as of December 31, 2019 and 2020, respectively)	15	579,102	645,499	98,927
Total non-current liabilities		<u>4,573,057</u>	<u>6,354,315</u>	<u>973,840</u>
Total liabilities		<u>9,042,078</u>	<u>12,476,275</u>	<u>1,912,072</u>
Commitments and contingencies	30			

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED BALANCE SHEETS (CONTINUED)
(Amounts in thousands of RMB and US\$, except for number of shares and per share data)

	Notes	As of December 31,		
		2019 RMB	2020 RMB	2020 US\$
Shareholders' equity:				
Class A Ordinary shares (par value of US\$0.00001 per share; 1,200,000,000 and 1,199,790,000 shares authorized; 505,253,850 and 672,024,600 issued and outstanding as of December 31, 2019 and 2020, respectively)	28	34	44	7
Class B Ordinary Shares (par value of US\$0.00001 per share; 300,000,000 and 300,000,000 shares authorized; 174,649,638 and 145,875,113 issued and outstanding as of December 31, 2019 and 2020, respectively)	28	12	12	2
Class C Ordinary Shares (par value of US\$0.00001 per share; 60,000 and 60,000 shares authorized; 60,000 and 60,000 shares issued and outstanding as of December 31, 2019 and 2020, respectively)	28	—	—	—
Additional paid-in capital		9,202,567	13,083,119	2,005,076
Series A perpetual convertible preferred shares (par value of US\$0.00001 per share; nil and 150,000 shares issued and outstanding as of December 31, 2019 and 2020, respectively)	17	—	1,047,468	160,531
Accumulated other comprehensive income (loss)	21	77,904	(55,535)	(8,511)
Statutory reserves		60,469	74,462	11,412
Accumulated deficit		(4,038,390)	(7,235,113)	(1,108,830)
Treasury stock	20	(349,523)	(349,523)	(53,567)
Total 21Vianet Group, Inc. shareholders' equity		<u>4,953,073</u>	<u>6,564,934</u>	<u>1,006,120</u>
Noncontrolling interest		278,555	332,546	50,965
Total shareholders' equity		<u>5,231,628</u>	<u>6,897,480</u>	<u>1,057,085</u>
Total liabilities and shareholders' equity		<u>14,273,706</u>	<u>19,373,755</u>	<u>2,969,157</u>

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands of RMB and US\$, except for number of shares and per shares data)

	Notes	For the years ended December 31,			
		2018 RMB	2019 RMB	2020 RMB	US\$
Net revenues					
Hosting and related services		3,401,037	3,788,967	4,829,019	740,080
Cost of revenues					
Hosting and related services		(2,456,166)	(2,849,518)	(3,753,008)	(575,174)
Gross profit		<u>944,871</u>	<u>939,449</u>	<u>1,076,011</u>	<u>164,906</u>
Operating income (expenses)					
Operating income		5,027	6,862	7,619	1,168
Sales and marketing expenses		(172,176)	(206,309)	(235,012)	(36,017)
Research and development expenses		(92,109)	(88,792)	(112,891)	(17,301)
General and administrative expenses		(462,637)	(415,277)	(535,111)	(82,009)
Reversal (allowance) for doubtful debt		598	(1,557)	(2,393)	(367)
Impairment of receivables from equity investees		—	(52,142)	—	—
Changes in the fair value of contingent purchase consideration payables		13,905	—	—	—
Impairment of long-lived assets		—	—	(81,619)	(12,509)
Total operating expenses		<u>(707,392)</u>	<u>(757,215)</u>	<u>(959,407)</u>	<u>(147,035)</u>
Operating profit		<u>237,479</u>	<u>182,234</u>	<u>116,604</u>	<u>17,871</u>
Interest income		45,186	54,607	31,711	4,860
Interest expense		(236,066)	(345,955)	(380,609)	(58,331)
Gain on deconsolidation of subsidiaries	4	4,843	—	—	—
Loss on debt extinguishment		—	(18,895)	—	—
Other income		58,033	36,380	16,539	2,535
Other expenses		(4,103)	(5,632)	(36,912)	(5,657)
Changes in the fair value of convertible promissory notes		—	—	(2,544,220)	(389,919)
Impairment of long-term investment		—	—	(13,030)	(1,997)
Foreign exchange (loss) gain, net		(81,055)	(27,995)	228,125	34,962
Income (loss) before income taxes and (loss) gain from equity method investments		<u>24,317</u>	<u>(125,256)</u>	<u>(2,581,792)</u>	<u>(395,676)</u>
Income tax expenses	24	(24,411)	(5,437)	(109,336)	(16,756)
(Loss) gain from equity method investments		(186,642)	(50,553)	10,869	1,666
Net loss		<u>(186,736)</u>	<u>(181,246)</u>	<u>(2,680,259)</u>	<u>(410,766)</u>
Net income attributable to noncontrolling interest		(18,329)	(1,046)	(29,088)	(4,458)
Net loss attributable to the 21Vianet Group, Inc.		<u>(205,065)</u>	<u>(182,292)</u>	<u>(2,709,347)</u>	<u>(415,224)</u>
Loss per share:					
Basic	27	<u>RMB (0.30)</u>	<u>RMB (0.27)</u>	<u>RMB (4.47)</u>	<u>US\$ (0.69)</u>
Diluted	27	<u>RMB (0.30)</u>	<u>RMB (0.27)</u>	<u>RMB (4.47)</u>	<u>US\$ (0.69)</u>
Shares used in loss per share computation:					
Basic	27	674,732,130	668,833,756	716,888,919	716,888,919
Diluted	27	674,732,130	668,833,756	716,888,919	716,888,919

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(Amounts in thousands of RMB and US\$)

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net loss	(186,736)	(181,246)	(2,680,259)	(410,766)
Other comprehensive income (loss), net of tax of nil				
Foreign currency translation adjustments, net of tax of nil	88,652	(8,075)	(133,439)	(20,450)
Other comprehensive income (loss), net of tax of nil	88,652	(8,075)	(133,439)	(20,450)
Comprehensive loss	(98,084)	(189,321)	(2,813,698)	(431,216)
Comprehensive income attributable to noncontrolling interest	(18,329)	(1,046)	(29,088)	(4,458)
Comprehensive loss attributable to 21Vianet Group, Inc.	(116,413)	(190,367)	(2,842,786)	(435,674)

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands of RMB and US\$)

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
CASH FLOWS FROM OPERATING ACTIVITIES				
Net loss	(186,736)	(181,246)	(2,680,259)	(410,766)
Adjustments to reconcile net loss to net cash generated from operating activities:				
Foreign exchange loss (gain), net	81,055	27,995	(228,125)	(34,962)
Changes in the fair value of contingent purchase consideration payables	(13,905)	—	—	—
Gain from settlement of contingent purchase consideration	(500)	—	—	—
Depreciation and amortization	634,606	772,205	988,983	151,568
(Gain) loss on disposal of property and equipment and intangible assets	(7,981)	271	6,032	922
(Reversal) allowance for doubtful debt	(598)	1,557	2,393	367
Share-based compensation expense	59,538	43,916	136,804	20,966
Impairment of receivables from equity investees	—	52,142	—	—
Deferred income tax benefits	(19,776)	(64,887)	(22,508)	(3,450)
Loss (gain) from equity method investments	186,642	50,553	(10,869)	(1,666)
Distribution received from an equity method investment	—	20,200	17,723	2,716
Gain from disposal of equity investments without readily determinable fair value	(20,496)	(5,536)	(257)	(39)
Gain from disposal of equity method investment	(16,509)	(17,853)	—	—
Dividend income of equity investments without readily determinable fair values	(406)	—	—	—
Gain from disposal of subsidiaries	(4,843)	—	—	—
Impairment of long-lived assets	—	—	81,619	12,509
Impairment of a long-term investment	—	—	13,030	1,997
Loss on debt extinguishment	—	18,895	—	—
Lease expense	—	205,787	375,112	57,488
Changes in the fair value of convertible promissory notes	—	—	2,544,220	389,919
Changes in operating assets and liabilities, net of effects of acquisitions and disposals:				
Accounts and notes receivable	(68,809)	(156,134)	(171,608)	(26,300)
Prepaid expenses and other current assets	(262,445)	(328,224)	(117,110)	(17,946)
Amounts due from related parties	(38,047)	11,352	37,468	5,742
Accounts and notes payables	41,380	9,185	(13,741)	(2,106)
Unrecognized tax benefits	(9,834)	(4,234)	66,253	10,154
Accrued expenses and other payables	77,744	77,275	91,123	13,966
Deferred revenue	2,001	(129)	5,620	861
Advances from customers	266,793	398,655	(27,098)	(4,153)
Income taxes payable	(198)	34,917	(19,004)	(2,912)
Deferred government grants	(6,643)	500	—	—
Amounts due to related parties	12,933	6,044	(5,605)	(859)
Operating lease liabilities	—	(170,284)	(355,953)	(54,552)
Net cash generated from operating activities	704,966	802,922	714,243	109,464

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(Amounts in thousands of RMB and US\$)

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
CASH FLOWS FROM INVESTING ACTIVITIES				
Purchases of property and equipment	(435,220)	(1,248,834)	(2,473,332)	(379,055)
Purchases of intangible assets	(17,874)	(26,515)	(30,091)	(4,612)
Purchases of land use rights	—	(24,460)	—	—
Proceeds from disposal of property and equipment	15,429	2,484	1,777	272
Proceeds from disposal of land use right	—	—	9,397	1,440
Proceed from disposal of subsidiaries, net	3,389	—	5,802	889
Payments for short-term investments	(98,905)	(436,737)	(328,182)	(50,296)
Payment of loan to a third party	(20,000)	—	(12,562)	(1,925)
Payment of loans to related parties	—	(66,704)	(62,531)	(9,583)
Receipt of loans to third parties	20,413	—	30,000	4,598
Proceeds received from maturity of short-term investments	417,643	312,198	397,575	60,931
Proceeds from disposal of long-term investments	75,653	18,955	1,923	295
Proceeds from dividend income of equity investments without readily determinable fair values	406	—	—	—
Payments for long-term investments	(252,780)	(9,330)	—	—
Prepayments and deposits for acquiring data center	(13,000)	(82,536)	(1,302,601)	(199,633)
Collection of deposit for acquiring data center	—	30,000	106,436	16,312
Payments for acquisitions, net of cash acquired	—	(148,067)	(369,924)	(56,693)
Cash receipt from related parties due to restructuring	—	67,563	140,738	21,569
Payment for other investment activities	—	—	(3,599)	(552)
Net cash used in investing activities	<u>(304,846)</u>	<u>(1,611,983)</u>	<u>(3,889,174)</u>	<u>(596,043)</u>
CASH FLOWS FROM FINANCING ACTIVITIES				
Proceeds from loan from a related party	44,038	—	—	—
Repayment of loan from a related party	—	(47,893)	—	—
Proceeds from exercise of stock options	435	429	3,029	464
Proceeds from issuance of ordinary shares	—	572	2,680,421	410,792
Proceeds from Series A perpetual convertible preferred shares	—	—	1,058,325	162,195
Payment of issuance cost of Series A perpetual convertible preferred shares	—	—	(9,374)	(1,437)
Proceeds from issuance of convertible promissory notes	—	—	1,409,385	215,998
Payment of issuance cost of convertible promissory notes	—	—	(18,841)	(2,888)
Payment of conversion cost of convertible promissory notes	—	—	(2,763)	(423)
Proceeds from issuance of 2021 Notes (Note 16)	—	2,012,084	—	—
Payment of issuance cost of 2021 Notes (Note 16)	—	(35,610)	—	—
Repurchase and repayment of 2020 Notes (Note 16)	—	(1,148,092)	(915,543)	(140,313)
Proceeds from long-term bank borrowings	—	—	594,619	91,129
Proceeds from short-term bank borrowings	69,999	234,500	34,000	5,211
Proceeds from other long-term borrowings	—	110,000	374,448	57,387
Repayment of long-term bank borrowings	(70,643)	(85,110)	(33,000)	(5,057)
Repayment of short-term bank borrowings	(69,999)	(50,000)	(234,500)	(35,939)
Repayment and deposits for other long-term borrowings	(48,401)	(19,399)	(125,825)	(19,284)
Payments for purchase of property and equipment through finance leases	(279,886)	(333,614)	(376,232)	(57,660)
Repayment of loan from third parties	—	(67,659)	(169,325)	(25,950)
Contribution from noncontrolling interest in subsidiaries	196,281	8,532	24,903	3,817
Prepayment for future share repurchase plan	—	(9,778)	—	—
Refund of prepayment for share repurchase plan	42,710	—	—	—
Payments for share repurchase	—	(11,840)	(130,472)	(19,996)
Proceeds from discounted notes	95,565	—	—	—
Repayment of notes payable	—	(95,565)	—	—
Net cash (used in) generated from financing activities	<u>(19,901)</u>	<u>461,557</u>	<u>4,163,255</u>	<u>638,046</u>
Effect of foreign exchange rate changes on cash and cash equivalents and restricted cash	85,333	43,660	(229,064)	(35,106)
Net increase (decrease) in cash and cash equivalents and restricted cash	465,552	(303,844)	759,260	116,361
Cash and cash equivalents and restricted cash at beginning of year	2,195,469	2,661,021	2,357,177	361,253
Cash and cash equivalents and restricted cash at end of year	<u>2,661,021</u>	<u>2,357,177</u>	<u>3,116,437</u>	<u>477,614</u>
Reconciliation of cash and cash equivalents and restricted cash to the consolidated balance sheets				
Cash and cash equivalents	2,358,556	1,808,483	2,710,349	415,379
Restricted cash-current	265,214	478,873	270,450	41,448
Restricted cash-non-current	37,251	69,821	135,638	20,787
Total cash and cash equivalents and restricted cash	<u>2,661,021</u>	<u>2,357,177</u>	<u>3,116,437</u>	<u>477,614</u>

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS (CONTINUED)
(Amounts in thousands of RMB and US\$)

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Supplemental disclosures of cash flow information:				
Income taxes paid	(57,407)	(41,684)	(102,330)	(15,683)
Interest paid	(160,984)	(215,889)	(284,270)	(43,566)
Interest received	50,793	59,054	37,817	5,796
Supplemental disclosures of non-cash activities:				
Right-of-use assets obtained in exchange for new operating lease liabilities	—	618,126	479,022	73,413
Purchase of property and equipment through finance leases	884,871	357,573	217,190	33,286
Purchase of property and equipment included in accrued expenses and other payables	21,918	344,248	591,187	90,603
Purchase of intangible assets included in accrued expenses and other payables	870	(1,642)	2,862	439
Contingent consideration related to the acquisitions included in amounts due to related parties and accrued expenses and other payables	36,734	—	—	—

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY
(Amounts in thousands of RMB and US\$, except for number of shares)

	Notes	Number of ordinary shares	Treasury Stock	Ordinary shares	Additional paid-in capital	Accumulated other comprehensive (loss) income	Statutory reserves	Accumulated deficit	Total 21Vianet Group, Inc. shareholders' equity	Noncontrolling interest	Total shareholders' equity
Balance as of January 1, 2018		671,285,766	(337,683)	46	8,980,407	(2,673)	38,736	(3,629,300)	5,049,533	151,471	5,201,004
Consolidated net loss		—	—	—	—	—	—	(205,065)	(205,065)	18,329	(186,736)
Foreign exchange difference		—	—	—	477	88,652	—	—	89,129	—	89,129
Issuance of new shares for share option exercise and restricted share units vested	26	3,070,500	—	—	—	—	—	—	—	—	—
Share-based compensation		—	—	—	67,009	—	—	—	67,009	—	67,009
Disposal of 49% interest in a subsidiary		—	—	—	93,166	—	—	—	93,166	103,115	196,281
Appropriation of statutory reserves	5	—	—	—	—	—	3,667	(3,667)	—	—	—
Disposal of subsidiaries		—	—	—	—	—	—	—	—	(3,938)	(3,938)
Share options exercised	21	219,972	—	—	435	—	—	—	435	—	435
Restricted share units vested		5,115,558	—	—	—	—	—	—	—	—	—
Settlement of share options and restricted share units with shares held by depository bank		(5,335,530)	—	—	—	—	—	—	—	—	—
Balance as of December 31, 2018		674,356,266	(337,683)	46	9,141,494	85,979	42,403	(3,838,032)	5,094,207	268,977	5,363,184

The accompanying notes are an integral part of these consolidated financial statement

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (CONTINUED)
(Amounts in thousands of RMB and US\$, except for number of shares)

	Notes	Number of ordinary shares	Treasury Stock	Ordinary shares	Additional paid-in capital	Accumulated other comprehensive (loss) income	Statutory reserves	Accumulated Deficit	Total 21Vianet Group, Inc. shareholders' equity	Noncontrolling interest	Total shareholders' equity
Balance as of January 1, 2019		674,356,266	(337,683)	46	9,141,494	85,979	42,403	(3,838,032)	5,094,207	268,977	5,363,184
Consolidated net loss		—	—	—	—	—	—	(182,292)	(182,292)	1,046	(181,246)
Contribution by noncontrolling interest		—	—	—	—	—	—	—	—	8,532	8,532
Foreign exchange difference		—	—	—	24	(8,075)	—	—	(8,051)	—	(8,051)
Issuance of new shares	28	60,000	—	—	572	—	—	—	572	—	572
Issuance of new shares for share option exercise and restricted share units vested	28	304,200	—	—	—	—	—	—	—	—	—
Share-based compensation		—	—	—	60,048	—	—	—	60,048	—	60,048
Appropriation of statutory reserves	5	—	—	—	—	—	18,066	(18,066)	—	—	—
Share issued to depository bank		6,700,002	—	—	—	—	—	—	—	—	—
Share repurchase		(1,456,980)	(11,840)	—	—	—	—	—	(11,840)	—	(11,840)
Share options exercised	23	33,869	—	—	429	—	—	—	429	—	429
Restricted share units vested		5,136,306	—	—	—	—	—	—	—	—	—
Settlement of share options and restricted share units with shares held by depository bank		(5,170,175)	—	—	—	—	—	—	—	—	—
Balance as of December 31, 2019		679,963,488	(349,523)	46	9,202,567	77,904	60,469	(4,038,390)	4,953,073	278,555	5,231,628

The accompanying notes are an integral part of these consolidated financial statement

21VIANET GROUP, INC.
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY (CONTINUED)
(Amounts in thousands of RMB and US\$, except for number of shares)

	Notes	Number of ordinary shares	Treasury Stock	Ordinary shares	Additional paid-in capital	Series A perpetual convertible preferred shareholders	Accumulated other comprehensive (loss) income	Statutory reserves	Accumulated deficit	Total 21Vianet Group, Inc. shareholders' equity	Noncontrolling interest	Total shareholders' equity
Balance as of January 1, 2020		679,963,488	(349,523)	46	9,202,567	—	77,904	60,469	(4,038,390)	4,953,073	278,555	5,231,628
Consolidated net loss		—	—	—	—	—	—	—	(2,709,347)	(2,709,347)	29,088	(2,680,259)
Contribution by noncontrolling interest		—	—	—	—	—	—	—	—	—	24,903	24,903
Cumulative adjustment for changes in accounting policy		—	—	—	—	—	—	—	(2,740)	(2,740)	—	(2,740)
Issuance of new shares		118,754,028	—	8	2,680,283	—	—	—	—	2,680,291	—	2,680,291
Issuance of perpetual convertible preferred shares		—	—	—	—	1,047,468	—	—	—	1,047,468	—	1,047,468
Deemed distribution to perpetual convertible preferred shares		—	—	—	470,643	—	—	—	(470,643)	—	—	—
Foreign exchange difference		—	—	—	—	—	(133,439)	—	—	(133,439)	—	(133,439)
Cancellation of shares issued in prior years		(104,304)	—	—	—	—	—	—	—	—	—	—
Conversion of convertible promissory notes		23,710,140	—	2	717,606	—	—	—	—	717,608	—	717,608
Shares repurchase		(4,363,639)	—	—	(130,650)	—	—	—	—	(130,650)	—	(130,650)
Share-based compensation	26	—	—	—	139,641	—	—	—	—	139,641	—	139,641
Appropriation of statutory reserves		—	—	—	—	—	—	13,993	(13,993)	—	—	—
Share options exercised	21	459,168	—	—	3,029	—	—	—	—	3,029	—	3,029
Restricted share units vested		2,603,430	—	—	—	—	—	—	—	—	—	—
Settlement of share options and restricted share units with shares held by depository bank		(3,062,598)	—	—	—	—	—	—	—	—	—	—
Balance as of December 31, 2020		817,959,713	(349,523)	56	13,083,119	1,047,468	(55,535)	74,462	(7,235,113)	6,564,934	332,546	6,897,480
Balance as of December 31, 2020 US\$			(53,567)	9	2,005,076	160,531	(8,511)	11,412	(1,108,830)	1,006,120	50,965	1,057,085

The accompanying notes are an integral part of these consolidated financial statements

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION

21Vianet Group, Inc. was incorporated under the laws of the Cayman Islands on October 16, 2009 and its principal activity is investment holding. The Company through its consolidated subsidiaries and variable interest entities (the “VIEs”) are principally engaged in the provision of hosting and related services.

(a) As of December 31, 2020, the significant subsidiaries of the Company and consolidated variable interest entities are as follows:

Entity	Date of incorporation/ acquisition	Place of incorporation	Percentage of direct ownership by the Company Direct	Principal activities
Subsidiaries:				
21ViaNet Group Limited (“21Vianet HK”)	May 25, 2007	Hong Kong	100%	Investment holding
21Vianet Data Center Co., Ltd. (“21Vianet China”) ⁽¹⁾	June 12, 2000	PRC	100%	Provision of technical and consultation services and rental of long-lived assets
21Vianet (Foshan) Technology Co., Ltd. (“FS Technology”) ⁽¹⁾	December 20, 2011	PRC	100%	Trading of network equipment, provision of technical and internet data center services
21Vianet Anhui Suzhou Technology Co., Ltd. (“SZ Technology”) ⁽¹⁾	November 16, 2011	PRC	100%	Trading of network equipment
21Vianet Hangzhou Information Technology Co., Ltd. (“HZ Technology”) ⁽¹⁾	March 4, 2013	PRC	100%	Provision of internet data center services
iJoy Holding Limited (“iJoy BVI”)	May 6, 2011	British Virgin Islands	100%	Investment holding
21Vianet Mobile Limited (“21V Mobile”)	April 30, 2013	Hong Kong	100%	Investment holding and provision of telecommunication services
WiFire Group Inc. (“WiFire Group”)	March 7, 2014	British Virgin Islands	100%	Investment holding
Joytone Infotech Co., Ltd. (“SZ Zhuoaiyi”) ⁽¹⁾	April 30, 2013	PRC	100%	Provision of technical and consultation services
21Vianet Ventures Limited (“Ventures”)	March 6, 2014	Hong Kong	100%	Investment holding
Abitcool (China) Broadband Inc. (“aBitCool DG”) ⁽¹⁾	June 13, 2014	PRC	100%	Dormant company
Diyixian.com Limited (“DYX”)	August 10, 2014	Hong Kong	100%	Provision of virtual private network services
21Vianet Zhuhai Financial Leasing Co., Ltd. (“Zhuhai Financial Leasing”) ⁽¹⁾	April 9, 2015	PRC	100%	Provision of finance leasing business services
21Vianet DRP Investment Holdings Limited (“DRP investment”)	January 10, 2017	Hong Kong	100%	Investment holding
Shihua DC Investment Holdings Limited (“Shihua Investment”)	March 14, 2017	Cayman Islands	51%	Investment holding
21Vianet (Xi’an) Technology Co., Ltd. (“Xi’an Tech”) ⁽¹⁾	July 5, 2012	PRC	51%	Provision of technical and internet data center services
Foshan Zhuoyi Intelligence Data Co., Ltd. (“FS Zhuoyi”) ⁽¹⁾	July 7, 2017	PRC	51%	Provision of internet data center services
Beijing Hongyuan Network Technology Co., Ltd. (“BJ Hongyuan”) ⁽¹⁾	December 8, 2014	PRC	51%	Provision of internet data center services
Dermot Holdings Limited (“Dermot BVI”) ⁽³⁾	August 8, 2014	British Virgin Islands	100%	Investment holding
Shihua DC Investment Holdings 2 Limited (“Shihua Holdings 2”) ⁽⁴⁾	August 20, 2019	Cayman Islands	100%	Investment holding
Shanghai Waigaoqiao Free Trade Zone Hongming Logistics Co., Ltd. (“Hongming Logistics”) ^{(1)/(4)}	August 20, 2019	PRC	100%	Provision of internet data center services
Shanghai Edge Connect Technology Co., Ltd. (“SH Edge Connect”) ⁽¹⁾	November 3, 2020	PRC	100%	Provision of technical and internet data center services
Beijing Jianghe Cloud Technology Co., Ltd. (“BJ JHC”) ^{(1)/(8)}	November 17, 2020	PRC	100%	Provision of internet data center services
Beijing Shuntou Green Energy Data Technology Co., Ltd. (“BJ ST”) ^{(1)/(8)}	November 17, 2020	PRC	100%	Provision of internet data center services

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION(CONTINUED)

Entity	Date of incorporation/ acquisition	Place of incorporation	Percentage of direct ownership by the Company Direct	Principal activities
Variable Interest Entities (the "VIEs");				
Beijing Yiyun Network Technology Co., Ltd. ("21Vianet Technology") ^{(1)/(2)}	October 22, 2002	PRC	—	Provision of internet data center services
Beijing iJoy Information Technology Co., Ltd. ("BJ iJoy") ^{(1)/(2)}	April 30, 2013	PRC	—	Provision of internet data center, content delivery network services
WiFire Network Technology (Beijing) Co., Ltd. ("WiFire Network") ^{(1)/(2)}	April 1, 2014	PRC	—	Provision of telecommunication services
Shanghai Zhiyan Yunwei Technology Co.,Ltd. ("SH Zhiyan") ^{(1)/(2)}	December 12, 2020	PRC	—	Provision of telecommunication services
Held directly by 21Vianet Technology:				
Beijing 21Vianet Broad Band Data Center Co., Ltd. ("21Vianet Beijing") ^{(1)/(2)}	March 15, 2006	PRC	—	Provision of internet data center services
Held directly by 21Vianet Beijing:				
21Vianet (Xi'an) Information Outsourcing Industry Park Services Co., Ltd. ("Xi'an Sub") ^{(1)/(2)}	June 23, 2008	PRC	—	Provision of internet data center services
Langfang Xunchi Computer Data Processing Co., Ltd. ("LF Xunchi") ^{(1)/(2)}	December 19, 2011	PRC	—	Dormant company
Beijing Yilong Xinda Technology Co., Ltd. ("Yilong Xinda") ^{(1)/(2)}	August 6, 2010	PRC	—	Provision of internet data center services
Beijing Yichengtaihe Investment Co., Ltd. ("BJ Yichengtaihe") ^{(1)/(2)}	September 30, 2014	PRC	—	Provision of internet data center services
Guangzhou Lianyun Big Data Co. Ltd. ("GZ Lianyun") ^{(1)/(2)}	April 14, 2016	PRC	—	Provision of internet data center services
Beijing Xianghu Yunlian Technology Co., Ltd. ("Xianghu Yunlian") ^{(1)/(2)}	November 7, 2018	PRC	—	Provision of internet data center services
Shanghai Huijiang Songlian Technology Co., Ltd. ("Huijiang Songlian") ^{(1)/(2)}	December 17, 2018	PRC	—	Provision of internet data center services
Beijing Shuhai Hulian Technology Co., Ltd. ("BJ Shuhai") ^{(1)/(2)}	January 2, 2019	PRC	—	Provision of internet data center services
Nantong Chenghong Cloud Computing Co., Ltd. ("NT Chenghong") ^{(1)/(2)}	December 24, 2019	PRC	—	Provision of internet data center services
Shanghai Shuzhong Investment Management Co., Ltd. ("SH Shuzhong") ^{(1)/(2)/(5)}	June 30, 2020	PRC	—	Provision of internet data center services
Sanhe Shulifang Information Technology Co., Ltd. ("Shulifang") ^{(1)/(2)/(6)}	July 21, 2020	PRC	—	Provision of internet data center services
Langfang Huahai Internet Technology Co., Ltd. ("LF Huahai") ^{(1)/(2)/(7)}	September 11, 2020	PRC	—	Provision of internet data center services

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION(CONTINUED)

<u>Entity</u>	<u>Date of incorporation/ acquisition</u>	<u>Place of incorporation</u>	<u>Percentage of direct ownership by the Company</u>	<u>Principal activities</u>
<u>Held directly by SH Zhijian:</u>				
Shanghai Blue Cloud Technology Co., Ltd. (“SH Blue Cloud”) ^{(1)/(2)}	March 21, 2013	PRC	—	Provision of Office 365 and Windows Azure platform services
<u>Held directly by DYX and LF Xunchi:</u>				
Shenzhen Diyixian Telecommunication Co., Ltd. (“SZ DYX”) ⁽¹⁾	August 10, 2014	PRC	100%	Provision of virtual private network services

- (1) Collectively, the “PRC Subsidiaries”.
- (2) Collectively, the “Consolidated VIEs”.
- (3) On August 10, 2014, the Company and its subsidiary, LF Xunchi, acquired 100% equity interest of Dermot BVI and its subsidiaries (collectively referred to as “Dermot Entities”).
- (4) On August 20, 2019, the Company through its subsidiary, DRP Investment, became the sole shareholder in Shihua Holding 2 and its subsidiaries (Note 4).
- (5) On June 30, 2020, the Company through its subsidiary, Shanghai Shilian Technology Co., Ltd (“SH Shilian”), acquired 100% equity interest of SH Shuzhong (Note 4).
- (6) On July 21, 2020, the Company through its subsidiary, SH Shilian, acquired 100% equity interest of Shulifang (Note 4).
- (7) On September 11, 2020, the Company through its subsidiaries, SH Shilian and 21Vianet Venus International Investment Limited (“21Vianet Venus”), acquired 100% equity interest of LF Huahai (Note 4).
- (8) On November 17, 2020, the Company through its subsidiary, 21Vianet Saturn International Investment Limited (“21Vianet Saturn”) and Beijing Zhongshun Yongfeng Investment Consulting Co.,Ltd. (“YF WFOE”), acquired 100% equity interest of BJ JHC and BJ ST (Note 4).

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

- (b) PRC laws and regulations prohibit foreign ownership of internet and telecommunications-related businesses. To comply with these foreign ownership restrictions, the Company conducts its businesses in the PRC through its VIEs using contractual agreements (the “VIE Agreements”). The Company controls four VIEs, namely 21Vianet Technology, BJ iJoy, WiFire Network and SH Zhiyan as of December 31, 2020. The key terms of the VIE Agreements in relation to BJ iJoy, WiFire Network and SH Zhiyan are substantially similar to 21Vianet Technology, except for the terms separately disclosed as below.

The equity interests of 21Vianet Technology are legally held by certain PRC individuals, including Chen Sheng, the Executive Chairman of Board of Directors of the Company and Zhang Jun (collectively the “Nominee Shareholders”). The following is a summary of the key terms of the VIE Agreements of 21Vianet Technology:

Exclusive option agreement

Pursuant to the exclusive option agreement entered into amongst 21Vianet China and the Nominee Shareholders of 21Vianet Technology, the Nominee Shareholders granted the Company or its designated party, an exclusive irrevocable option to purchase all or part of the equity interests held by the Nominee Shareholders in 21Vianet Technology, when and to the extent permitted under the PRC laws, at an amount equal to RMB1. 21Vianet Technology cannot declare any profit distributions or grant loans in any form without the prior written consent of 21Vianet China. The Nominee Shareholders must remit in full any funds received from 21Vianet Technology to 21Vianet China, in the event any distributions are made by 21Vianet Technology. The term of this agreement is 10 years, expiring on December 18, 2016, which is renewable at the sole discretion of 21Vianet China. On December 19, 2016, this agreement was renewed for another 10 years, expiring on December 18, 2026.

SH Zhiyan has substantially similar exclusive option agreement except that the term of SH Zhiyan will terminate when SH Edge Connect, the primary beneficiary, purchases all of SH Zhiyan’s equity interest held by the Nominee Shareholder, Shanghai Rongyan Yunqi Technology Co.,Ltd. (“SH Rongyan”).

Exclusive technical consulting and service agreement

Pursuant to the exclusive technical consulting and service agreement entered into between 21Vianet China and 21Vianet Technology, 21Vianet China is to provide exclusive management consulting services and internet technical services in return for fees based on of a predetermined hourly rate of RMB1, which is adjustable at the sole discretion of 21Vianet China. The term of this agreement is 10 years, expiring on December 18, 2016, which is renewable at the sole discretion of 21Vianet China. On December 19, 2016, this agreement was renewed for another 10 years, expiring on December 18, 2026.

SH Zhiyan has substantially similar exclusive technical consulting and service agreement except that the term for SH Zhiyan would be in effect for an unlimited term unless terminated in writing by SH Edge Connect, the primary beneficiary of VIE SH Zhiyan.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

Loan agreement

In January 2011, 21Vianet China and the Nominee Shareholders entered into a loan agreement. Pursuant to the agreement, 21Vianet China has provided interest-free loan facilities of RMB7,000 and RMB3,000, respectively, to the Nominee Shareholders of 21Vianet Technology for the purpose of providing capital to 21Vianet Technology to develop its data center and telecommunications value-added business and related businesses. There is no fixed term for the loan.

The Nominee Shareholders of SH Zhiyan did not enter into any loan agreement to fund the capital injected in SH Zhiyan.

Power of attorney agreement

The Nominee Shareholders entered into the power of attorney agreement whereby they granted an irrevocable proxy of the voting rights underlying their respective equity interests in 21Vianet Technology to 21Vianet China, which includes, but are not limited to, all the shareholders' rights and voting rights empowered to the Nominee Shareholders by the company law and 21Vianet Technology's Articles of Association. The power of attorney remains valid and irrevocable from the date of execution, so long as each Nominee Shareholder remains as a shareholder of 21Vianet Technology.

The power of attorney agreement in relation to 21Vianet Technology was reassigned to 21Vianet Group, Inc. in September 2010.

Share pledge agreement

Pursuant to the share pledge agreement entered into amongst 21Vianet China, 21Vianet Technology and the Nominee Shareholders, the Nominee Shareholders have contemporaneously pledged all their equity interests in 21Vianet Technology to guarantee the repayment of the loan under the Loan Agreement between 21Vianet China and the Nominee Shareholders. On August 10, 2015, a Notification of Cancellation of share pledge registration was issued by Beijing Administration for Industry and Commerce, Pinggu Branch to cancel the registration of the share pledge by one of the Nominee Shareholders of 21Vianet Technology, Zhang Jun. Such cancellation does not affect the effectiveness of the share pledge agreement and does not lessen the control imposed on the contractual parties of the Company.

If 21Vianet Technology breaches its respective contractual obligations under the Share pledge agreement and the loan agreement, 21Vianet China, as pledgee, will be entitled to certain rights, including the right to sell the pledged equity interests. The Nominee Shareholders agreed not to transfer, sell, pledge, dispose of or otherwise create any new encumbrance on their equity interests in 21Vianet Technology without the prior written consent of 21Vianet China.

SH Zhiyan has substantially similar term the Nominee Shareholders of SH Zhiyan did not enter into any loan agreement to fund the capital injected in SH Zhiyan as mentioned above.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

Financial support letter

Pursuant to the financial support letter, 21Vianet Group, Inc. agreed to provide unlimited financial support to 21Vianet Technology for its operations and agreed to forego the right to seek repayment in the event 21Vianet Technology is unable to repay such funding.

SH Zhiyan has substantially similar term except that SH Edge Connect provides unlimited financial support to SH Zhiyan for its operations.

Despite the lack of technical majority ownership, there exists a parent-subsidary relationship between the Company and 21Vianet Technology through the irrevocable power of attorney agreement, whereby the Nominee Shareholders effectively assigned all of their voting rights underlying their equity interests in 21Vianet Technology to the Company. In addition, the Company, through 21Vianet China, obtained effective control over 21Vianet Technology through the ability to exercise all the rights of 21Vianet Technology's shareholders pursuant to the share pledge agreement and exclusive option agreement. The Company demonstrates its ability and intention to continue to exercise the ability to absorb substantially all of the expected losses through the financial support letter. In addition, the Company also demonstrates its ability to receive substantially all of the economic benefits of 21Vianet Technology through 21Vianet China through the consulting and service agreement. Thus, the Company is the primary beneficiary of 21Vianet Technology and consolidates 21Vianet Technology and its subsidiaries under Accounting Standards Codification ("ASC") Subtopic 810-10, *Consolidation: Overall* ("ASC 810-10"). Similar conclusion has been reached with respect to the VIE structures with the Company or the Company's subsidiaries, as the respective primary beneficiaries for other VIEs, i.e., BJ iJoy, WiFire Network and SH Zhiyan.

In the opinion of the Company's management and PRC counsel, (i) the ownership structure of the VIEs is in compliance with applicable PRC laws and regulations in any material respect, and (ii) each of the VIE Agreements is valid, legally binding and enforceable to each party of such agreements under the existing PRC laws and will not violate any PRC laws or regulations currently in effect.

However, there are substantial uncertainties regarding the interpretation and application of current and future PRC laws and regulations. Accordingly, the Company cannot be assured that PRC regulatory authorities will not ultimately take a contrary view to its opinion. If the current ownership structure of the Company and its contractual arrangements with the VIEs are found to be in violation of any existing or future PRC laws and regulations, the Company may be required to restructure its ownership structure and operations in the PRC to comply with the changing and new PRC laws and regulations. To the extent that changes and new PRC laws and regulations prohibit the Company's VIE arrangements from complying with the principles of consolidation, the Company would have to deconsolidate the financial position and results of operations of its VIEs. In the opinion of management, the likelihood of loss in respect of the Company's current ownership structure or the contractual arrangements with the VIEs is remote based on current facts and circumstances.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

(c) VIE disclosures

Except for certain property with carrying amounts of RMB134,415 (US\$20,600) that were pledged to secure banking borrowings granted to the Company (Note 13), there were no pledges or collateralization of the Consolidated VIEs' assets. Creditors of the Consolidated VIEs have no recourse to the general credit of the primary beneficiaries of the Consolidated VIEs, and such amounts have been parenthetically presented on the face of the consolidated balance sheets. The Consolidated VIEs operate the data centers and own facilities including data center buildings, leasehold improvements, fiber optic cables, computers and network equipment, which are recognized in the Company's consolidated financial statements. They also hold certain value-added technology licenses, registered copyrights, trademarks and registered domain names, including the official website, which are also considered as revenue-producing assets. However, none of such assets was recorded on the Company's consolidated balance sheets as such assets were all acquired or internally developed with insignificant cost and expensed as incurred. In addition, the Company also hires data center operation and marketing workforce for its daily operations and such costs are expensed when incurred. The Company has not provided any financial or other support that it was not previously contractually required to provide to the Consolidated VIEs during the periods presented.

(d) Cooperation with Warburg Pincus

In March 2017, the Company entered into an investment agreement with Warburg Pincus to establish a multi-stage joint venture and build a digital real estate platform in China. The Company seeded the initial JV with four existing high-performing IDC assets, and Warburg Pincus contributed direct capital and extensive industry network and resources in the real estate sector. The Company owns 51% of the equity interests in the four existing internet data center ("IDC") assets while Warburg Pincus owns the remaining 49%. On March 14, 2017, Shihua Investment was established by the Company and a subsidiary of Warburg Pincus, with the equity interest of 51% and 49%, respectively.

In March 2017, the Company and Warburg Pincus set up two joint ventures, Shihua Holdings 2 and Shihua DC Investment Management Limited ("Shihua Investment Management") (collectively, "Shihua DC Holdings") (Note 12), with the equity interest of 49% and 51%, respectively. The Company accounted for the investment in the two joint ventures under equity method investments for its ability to exercise significant influence.

In July 2019, the Company entered into restructuring agreements with Warburg Pincus. Pursuant to the restructuring agreement, Shihua Holdings 2 transferred 100% of the equity interest in some subsidiaries at the consideration equivalent to the subsidiaries' paid-in capital to Warburg Pincus. Thereafter, Shihua Holdings 2 repurchased and cancelled all Warburg Pincus's shares in Shihua Holdings 2. Upon completion of restructuring on August 20, 2019, the Company became the sole shareholder in Shihua Holdings 2, which was accounted for as an asset acquisition (Note 4).

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

The following tables represent the financial information of the Consolidated VIEs as of December 31, 2019 and 2020 and for the years ended December 31, 2018, 2019 and 2020 before eliminating the intercompany balances and transactions between the Consolidated VIEs and other entities within the Company:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
ASSETS			
Current assets:			
Cash and cash equivalents	591,503	737,556	113,035
Restricted cash	260,961	260,450	39,916
Accounts receivable (net of allowance for doubtful debt of RMB66,416 and RMB67,632 (US\$10,365) as of December 31, 2019 and 2020, respectively)	513,440	664,610	101,856
Prepaid expenses and other current assets	1,371,564	1,622,662	248,684
Amounts due from related parties	57,982	12,968	1,987
Total current assets	2,795,450	3,298,246	505,478
Non-current assets:			
Property and equipment, net	3,580,341	5,170,878	792,472
Intangible assets, net	151,722	342,288	52,458
Land use rights, net	58,588	46,719	7,160
Operating lease right-of-use assets, net	1,144,846	1,134,073	173,804
Goodwill	302,647	308,110	47,220
Restricted cash	66,119	27,719	4,248
Deferred tax assets, net	180,959	168,181	25,775
Amounts due from related parties	20,654	20,562	3,151
Other non-current assets	262,685	435,144	66,689
Long-term investments, net	189,571	172,593	26,451
Total non-current assets	5,958,132	7,826,267	1,199,428
Total assets	8,753,582	11,124,513	1,704,906
Current liabilities:			
Short-term bank borrowings	232,323	34,000	5,211
Accounts payable and notes payable	211,710	182,669	27,995
Accrued expenses and other payables	622,160	981,961	150,492
Advance from customers	1,068,692	1,041,594	159,631
Deferred revenue	52,088	58,066	8,899
Income tax payable	8,175	12,743	1,953
Amounts due to inter-companies ⁽¹⁾	2,786,838	4,248,422	651,099
Amounts due to related parties	56,977	50,193	7,692
Current portion of finance lease liabilities	220,363	362,760	55,595
Current portion of long-term borrowings	32,500	165,328	25,338
Current portion of deferred government grant	2,595	2,074	318
Current portion of operating lease liabilities	410,422	427,114	65,458
Total current liabilities	5,704,843	7,566,924	1,159,681

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

1. ORGANIZATION (CONTINUED)

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Non-current liabilities:			
Amounts due to inter-companies ⁽¹⁾	1,020,972	1,020,972	156,471
Amounts due to related parties	745,899	747,746	114,597
Long-term borrowings	79,500	570,135	87,377
Non-current portion of finance lease liabilities	549,669	299,399	45,885
Unrecognized tax benefits	1,991	68,317	10,470
Deferred tax liabilities	82,725	155,281	23,798
Non-current portion of deferred government grant	5,906	4,100	628
Non-current portion of operating lease liabilities	529,546	497,268	76,210
Total non-current liabilities	3,016,208	3,363,218	515,436
Total liabilities	8,721,051	10,930,142	1,675,117

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net revenues	2,532,854	2,858,176	3,885,141	595,424
Net profit	52,986	111,592	73,748	11,302

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net cash generated from operating activities	693,620	495,308	748,418	114,700
Net cash generated from (used in) investing activities	132,522	(1,247,764)	(1,943,358)	(297,833)
Net cash (used in) generated from financing activities	(423,467)	885,286	1,302,082	199,553
Net increase in cash and cash equivalents and restricted cash	402,705	132,830	107,142	16,420

- (1) Amounts due to inter-companies consist of intercompany payables to the other companies within the Company for the purchase of telecommunication resources and property and equipment on behalf of the Consolidated VIEs.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) Basis of presentation

The accompanying consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles (“U.S. GAAP”).

(b) Principles of consolidation

The consolidated financial statements include the financial statements of the Company, its subsidiaries and the Consolidated VIEs for which the Company or a subsidiary of the Company is the primary beneficiary. All significant inter-company transactions and balances between the Company, its subsidiaries and the Consolidated VIEs are eliminated upon consolidation. Results of acquired subsidiaries and its Consolidated VIEs are consolidated from the date on which control is transferred to the Company.

(c) Use of estimates

The preparation of the consolidated financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the period. Significant estimates and assumptions reflected in the Company’s financial statements include, but are not limited to, determining the valuation allowance for deferred tax assets, determining the fair value of convertible promissory notes and assessing the initial valuation of the assets acquired and liabilities assumed in acquisitions. Changes in facts and circumstances may result in revised estimates. Given the global economic climate and unforeseen effects from COVID-19 pandemic, the process of estimation has become more challenging. Actual results could differ from those estimates, and as such, differences may be material to the consolidated financial statements.

(d) Foreign currency

The functional currency of the Company and its overseas subsidiaries is the United States dollar (“US\$”), whereas the functional currency of the Company’s PRC subsidiaries and its Consolidated VIEs is the Chinese Renminbi (“RMB”) as determined based on the criteria of ASC Topic 830, *Foreign Currency Matters* (“ASC 830”). The Company uses the RMB as its reporting currency.

The financial statements of the Company and its overseas subsidiaries are translated from the functional currency to the reporting currency, RMB. Transactions denominated in foreign currencies are re-measured into the functional currency at the exchange rates prevailing on the transaction dates. Monetary assets and liabilities denominated in foreign currencies are re-measured at the exchange rates prevailing at the balance sheet date. Non-monetary items that are measured in terms of historical costs in foreign currency are re-measured using the exchange rates at the dates of the initial transactions. Exchange gains and losses are included in the consolidated statements of operations.

The Company uses the average exchange rate for the year and the exchange rate at the balance sheet date to translate the operating results and financial position, respectively. Translation differences are recorded in accumulated other comprehensive income (loss) within the statements of comprehensive loss.

(e) Convenience translation

Amounts in US\$ are presented for the convenience of the reader and are translated at the noon buying rate of US\$1.00 to RMB6.5250 on December 31, 2020, the last business day in fiscal year 2020, representing the noon buying rate set forth in the H.10 statistical release of the U.S. Federal Reserve Board. No representation is made that the RMB amounts could have been, or could be converted, realized or settled into US\$ at such rate or at any other rate.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(f) Cash and cash equivalents

Cash and cash equivalents consist of cash on hand and demand deposits placed with banks which are unrestricted as to withdrawal and use and have original maturities less than three months. All highly liquid investments with a stated maturity of 90 days or less from the date of purchase are classified as cash equivalents.

(g) Restricted cash

Restricted cash mainly represents amounts held by a few banks in escrow as security for credit facilities, the guarantee of compliance with the network and service requirements of the radio spectrum license awarded by the Hong Kong Telecommunication Authority, the deposits for finance lease, the deposits for a lawsuit with a third party, the deposits held in escrow for the advances received from end customers subscribing Office 365 and Windows Azure services (the disbursement of which shall be agreed by both Microsoft (China) Co., Ltd. (“Microsoft”) and the Company), the deposits for business operation, the deposits for loans.

(h) Short-term investments

All highly liquid investments with original maturities of greater than three months but less than twelve months, are classified as short-term investments. Interest income is included in earnings.

(i) Accounts receivable and allowance for doubtful debt

Prior to adopting ASC 326, *Financial Instruments-Credit Losses* (“ASC326”), accounts receivable are carried at net realizable value. An allowance for doubtful debt is recorded in the period when loss is probable based on an assessment of specific evidence indicating troubled collection, historical experience, accounts aging and other factors in accordance with ASC 310, *Receivables*. An accounts receivable is written off after all collection effort has ceased.

On January 1, 2020, the Company adopted ASC326 using modified-retrospective transition approach. Following the adoption of this guidance, a cumulative-effect adjustment in accumulated deficit of RMB2,740 was recognized as of January 1, 2020. For the year ended December 31, 2020, the Company recorded credit losses of RMB2,393 (US\$367).

Pursuant to ASC 326, an allowance for credit losses for financial assets, including accounts receivable, carried at amortized cost to present the net amount expected to be collected as of the balance sheet date. Such allowance is based on credit losses expected to arise over the life of the asset’s contractual term, which includes consideration of prepayments. Assets are written off when the Company determines that such financial assets are deemed uncollectible and are recognized as a deduction from the allowance for credit losses. Expected recoveries of amounts previously written off, not to exceed the aggregate of the amount previously written off, are included in determining the necessary reserve at the balance sheet date. The Company pools financial assets based on similar risk characteristics to estimate expected credit losses. The Company estimates expected credit losses on financial assets individually when those assets do not share similar risk characteristics. The Company closely monitors its accounts receivable including timely account reconciliations, detailed reviews of past due accounts, updated credit limits, and monthly analysis of the adequacy of their reserve for credit losses.

The Company utilizes a loss rate approach to determine lifetime expected credit losses for its financial assets. This method is used for calculating an estimate of losses based primarily on the Company’s historical loss experience. In determining loss rates, the Company evaluates information related to historical losses, adjusted for current conditions and further adjusted for the period of time that the Company can reasonably forecast. The Company has concluded that it can reasonably support a forecast period for the contractual life of its financial assets. Qualitative and quantitative adjustments related to current conditions and the reasonable and supportable forecast period consider the following: the customer or vendor’s creditworthiness, changes in the policy and procedures to establish customer credit limits, changes in the payment terms of receivables, existence and effect of any concentration of credit and changes in the level of such concentrations, and the effects of other external forces such as the current and forecasted direction of the economic and business environment.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Property and equipment

Property and equipment are stated at cost less accumulated depreciation and any recorded impairment. Property and equipment acquired in a business combination are recognized initially at fair value at the data of acquisition. Property and equipment are depreciated using the straight-line method over the estimated useful lives of the assets, as follows:

Category	Estimated useful life
Property	25-46 years
Leasehold improvements	Over the shorter of lease term or the estimated useful lives of the assets
Optical fibers	10-20 years
Computer and network equipment	1-10 years
Office equipment	2-8 years
Motor vehicles	2-8 years

Repair and maintenance costs are charged to expense as incurred, whereas the costs of betterments that extend the useful life of property and equipment are capitalized as additions to the related assets. Retirements, sale and disposals of assets are recorded by removing the cost and accumulated depreciation with any resulting gain or loss reflected in the consolidated statements of operations.

Property and equipment that are purchased or constructed which require a period of time before the assets are ready for their intended use are accounted for as construction-in-progress. Construction-in-progress is recorded at acquisition cost, including installation costs. Construction-in-progress is transferred to specific property and equipment accounts and commences depreciation when these assets are ready for their intended use.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Intangible assets

Intangible assets are carried at cost less accumulated amortization and any recorded impairment. Intangible assets acquired in a business combination are recognized initially at fair value at the date of acquisition. Intangible assets with finite useful lives are amortized using a straight-line method. These amortization methods reflect the estimated pattern in which the economic benefits of the respective intangible assets are to be consumed.

The Company has capitalized certain internal use software development costs in accordance with ASC Subtopic 350-40, *Intangibles-Goodwill and Other: Internal-Use Software* (“ASC 350-40”), amounting to RMB6,093, RMB13,189, and RMB8,684 (US\$1,331) for the years ended December 31, 2018, 2019 and 2020, respectively. The Company capitalizes certain costs relating to software acquired, developed, or modified solely to meet the Company’s internal requirements and for which there are no substantive plans to market the software. These costs mainly include the research staff costs directly associated with the internal-develop software projects during the application development stage. Capitalized internal-use software costs are included in “intangible assets, net”.

Intangible assets have weighted average useful lives from the date of purchase/ acquisition as follows:

Purchased software	5.1 years
Radio spectrum license	15 years
Operating permits*	29.3 years
Contract backlog*	4.9 years
Customer relationships*	8.8 years
Licenses*	15 years
Supplier relationships*	10 years
Trade Names*	20 years
Platform software*	5 years
Non-complete agreements*	5 years
Internal use software	3.8 years
Customer contract*	6.5 years

* Acquired in the acquisitions of subsidiaries.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Leases

Effective January 1, 2019, the Company adopted ASC Topic 842, *Lease* (“ASC 842”) using the modified retrospective method and did not restate the comparable periods. The Company determines if an arrangement is a lease at inception. Leases are classified as operating or finance leases in accordance with the recognition criteria in ASC 842-20-25. The Company’s leases do not contain any material residual value guarantees or material restrictive covenants.

The Company has elected the package of practical expedients, which allows the Company not to reassess (1) whether any expired or existing contracts as of the adoption date are or contain a lease, (2) lease classification for any expired or existing leases as of the adoption date and (3) initial direct costs for any expired or existing leases as of the adoption date. The Company has lease agreements with lease and non-lease components, which are generally accounted for separately. Lastly, the Company elected the short-term lease exemption for all contracts with lease term of 12 months or less.

At the commencement date of a lease, the Company determines the classification of the lease based on the relevant factors present and records a right-of-use (“ROU”) asset and lease liability for operating lease, and records property and equipment and finance lease liability for finance lease. ROU assets and property and equipment acquired through lease represent the right to use an underlying asset for the lease term, and operating lease liabilities and finance lease liabilities represent the obligation to make lease payments arising from the lease. ROU assets and lease liabilities are calculated as the present value of the lease payments not yet paid. If the rate implicit in the Company’s leases is not readily available, the Company uses an incremental borrowing rate based on the information available at the lease commencement date in determining the present value of lease payments. This incremental borrowing rate reflects the fixed rate at which the Company could borrow on a collateralized basis the amount of the lease payments in the same currency, for a similar term, in a similar economic environment. ROU assets include any lease prepayments and are reduced by lease incentives. Operating lease expense for lease payments is recognized on a straight-line basis over the lease term. Lease terms are based on the non-cancelable term of the lease and may contain options to extend the lease when it is reasonably certain that the Company will exercise that option.

Leases with an initial lease term of 12 months or less are not recorded on the consolidated balance sheets. Lease expense for these leases is recognized on a straight-line basis over the lease term.

(m) Land use right

The land use rights represent the operating lease prepayments for the rights to use the land in the PRC under ASC 842. Amortization of the prepayments is provided on a straight-line basis over the terms of the respective land use rights certificates.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Long-term investments

The Company's long-term investments primarily consist of equity investments without readily determinable fair value, equity method investments.

Pursuant to ASC Topic 321, *Investments—Equity Securities* ("ASC 321"), equity investments, except for those accounted for under the equity method and those that result in consolidation of the investee and certain other investments, are measured at fair value, and any changes in fair value are recognized in earnings. For equity securities without readily determinable fair value and do not qualify for the existing practical expedient in ASC Topic 820, *Fair Value Measurements and Disclosures* ("ASC 820"), to estimate fair value using the net asset value per share (or its equivalent) of the investment, the Company elected to use the measurement alternative to measure those investments at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer, if any. Equity securities with readily determinable fair value are measured at fair values, and any changes in fair value are recognized in earnings.

For equity investments measured at fair value with changes in fair value recorded in earnings, the Company does not assess whether those securities are impaired. For those equity investments that the Company elects to use the measurement alternative, the Company makes a qualitative assessment of whether the investment is impaired at each reporting date. If a qualitative assessment indicates that the investment is impaired, the entity has to estimate the investment's fair value in accordance with the principles of ASC 820. If the fair value is less than the investment's carrying value, the entity has to recognize an impairment loss in net loss equal to the difference between the carrying value and fair value.

Investments in equity investees represent investments in entities in which the Company can exercise significant influence but does not own a majority equity interest or control are accounted for using the equity method of accounting in accordance with ASC Subtopic 323-10, *Investments—Equity Method and Joint Ventures: Overall* ("ASC 323-10"). The Company applies the equity method of accounting that is consistent with ASC 323-10 in limited partnerships in which the Company holds a three percent or greater interest. Under the equity method, the Company initially records its investment at cost and prospectively recognizes its proportionate share of each equity investee's net profit or loss into its consolidated statements of operations. The difference between the cost of the equity investee and the amount of the underlying equity in the net assets of the equity investee is recognized as equity method goodwill included in equity method investments on the consolidated balance sheets. The Company evaluates its equity method investments for impairment under ASC 323-10. An impairment loss on the equity method investments is recognized in the consolidated statements of operations when the decline in value is determined to be other-than-temporary.

(o) Goodwill

Goodwill represents the excess of the purchase price over the amounts assigned to the fair value of the assets acquired and the liabilities assumed of an acquired business. In accordance with ASC Topic 350, *Goodwill and Other Intangible Assets* ("ASC 350"), recorded goodwill amounts are not amortized, but rather are tested for impairment annually or more frequently if there are indicators of impairment present.

In accordance with ASC 350, the Company assigned and assessed goodwill for impairment at the reporting unit level. A reporting unit is an operating segment or one level below the operating segment. As of December 31, 2018, 2019 and 2020, there is only hosting and related services and the Company as a whole is one reporting unit.

Pursuant to ASC 350, in 2019 and 2020, the Company performed a qualitative assessment for hosting and related services and completed its annual impairment test for goodwill that has arisen out of its acquisitions. The Company evaluated all relevant factors including, but not limited to, macroeconomic conditions, industry and market conditions, financial performance, and the share price of the Company. The Company weighed all factors in their entirety and concluded that it was not more-likely-than-not the fair value was less than the carrying amount of the reporting unit, and further impairment testing on goodwill was unnecessary. No impairment loss of goodwill in hosting and related services was recognized for the years ended December 31, 2018, 2019 and 2020.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(p) Impairment of long-lived assets

The Company evaluates long-lived assets, such as fixed assets and purchased or internally developed intangible assets with finite lives for impairment whenever events or changes in circumstances indicate the carrying value of an asset may not be recoverable in accordance with ASC Topic 360, *Property, Plant and Equipment*. When such events occur, the Company assesses the recoverability of the asset group based on the undiscounted future cash flows the asset group is expected to generate and recognizes an impairment loss when estimated undiscounted future cash flows expected to result from the use of the asset group plus net proceeds expected from disposition of the asset group, if any, is less than the carrying value of the asset group. If the Company identifies an impairment, the Company reduces the carrying amount of the asset group to its estimated fair value based on a discounted cash flow approach or, when available and appropriate, to comparable market values and the impairment loss, if any, is recognized in the consolidated statements of operations.

As of December 31, 2020, due to continuing losses, the Company recorded the long-lived assets impairment amounting to RMB81,619 (US\$12,509) for one of its asset groups, resulting from excess of the carrying amount of the asset group over the fair value of the asset group. The Company determined the fair value of the asset group using the income approach based on the discounted cash flows associated with the asset group. The discounted cash flows were based on a six-year projection for the asset group, which is consistent with the remaining useful life of its principal asset. The discount rate of 13% was derived and used in the valuations which reflect the market assessment of the risks specific to the Company and its industry and is based on its weighted average cost of capital. No impairment was recognized in other asset groups as there was no impairment indicator identified.

The impairment loss reduced the carrying amount of the long-lived assets of the group on a pro-rata basis using the relative carrying amount of those assets except that the loss allocated to an individual long-lived asset of the group shall not reduce the carrying amount of that asset below its fair value whenever that fair value is determinable without undue cost and effort.

The Company recorded impairment charges associated with its long-lived assets and acquired intangibles as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Impairment of equipment	—	—	35,793	5,486
Impairment of intangible assets	—	—	38,654	5,924
Impairment of other non-current assets	—	—	7,172	1,099

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(q) Fair value of financial instruments

The Company's financial instruments include cash and cash equivalents, restricted cash, short-term investments, accounts receivable and payable, other receivables and payables, bonds payable, short-term and long-term borrowings, available-for-sale investments, liability classified restricted share units ("RSU") and convertible promissory notes. Other than the bonds payable, long-term borrowings and convertible promissory notes, the carrying values of these financial instruments approximate their fair values due to their short-term maturities.

The carrying amounts of bonds payable and long-term borrowings approximate their fair values since they bear interest rates which approximate market interest rates. The Company carries the bonds payable at face value less unamortized debt discount and issuance cost on its consolidated balance sheets and measures the fair value for disclosure purposes only. The Company elected the fair value option of convertible promissory notes when it initially recognized as financial liability as the fair value better represents the value of the underlying liabilities. The contingent purchase considerations in both cash and shares and share-settled bonus are initially measured at fair value on the acquisition dates of the acquired businesses and the date of grant, respectively, and subsequently remeasured at the end of each reporting period with an adjustment for fair value recorded to the current period income/(expense). Convertible promissory notes are measured at fair value in accordance with ASC 825, *Financial Instruments* on the issuance date and subsequently remeasured at the end of each reporting period with an adjustment for fair value recorded to the current period income/(expense), however, any fair value changes related to instrument-specific credit risk are recorded to other comprehensive income/(loss).

(r) Revenue recognition

The Company provides hosting and related services including hosting of customers' servers and networking equipment, connecting customers' servers with internet backbones ("Hosting service"), virtual private network services providing encrypted secured connection to public internet ("VPN service") and other value-added services and public cloud service through strategic partnership with Microsoft.

On January 1, 2018, the Company adopted ASU No. 2014-09, *Revenue from Contracts with Customers* ("ASC 606"), which supersedes the revenue recognition requirements in ASC Topic 605, *Revenue Recognition* ("ASC 605"), using the modified retrospective transition method applied to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under ASC 606, while prior period amounts have not been adjusted and continue to be reported in accordance with historic accounting under ASC 605. The impact of adopting the new revenue standard was not material to consolidated financial statements and there was no adjustment to beginning retained earnings on January 1, 2018.

Under ASC 606, an entity recognizes revenue as the Company satisfies a performance obligation when its customer obtains control of promised goods or services, in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. To determine revenue recognition for arrangements that an entity determines are within the scope of ASC 606, the entity performs the following five steps: (i) identify the contract(s) with a customer; (ii) identify the performance obligations in the contract; (iii) determine the transaction price, including variable consideration, if any; (iv) allocate the transaction price to the performance obligations in the contract; and (v) recognize revenue when (or as) the entity satisfies a performance obligation. The Company only applies the five-step model to contracts when it is probable that the entity will collect the consideration to which it is entitled in exchange for the goods or services it transfers to the customer.

Once a contract is determined to be within the scope of ASC 606 at contract inception, the Company reviews the contract to determine which performance obligations it must deliver and which of these performance obligations are distinct. The Company recognizes revenue based on the amount of the transaction price that is allocated to each performance obligation when that performance obligation is satisfied or as it is satisfied.

The Company is a principal and records revenue on a gross basis when the Company is primarily responsible for fulfilling the service, has discretion in establishing pricing and controls the promised service before transferring that service to customers. Otherwise, the Company records revenue at the net amounts as commissions.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Revenue recognition (continued)

The Company's revenue recognition policies effective on the adoption date of ASC 606 are as follows:

Hosting services are services that the Company dedicates data center space to house customers' servers and networking equipment and provides tailored server administration services including operating system support and assistance with updates, server monitoring, server backup and restoration, server security evaluation, firewall services, and disaster recovery. The Company also provides interconnectivity services to connect customers with each other, internet backbones in China and other networks through Border Gateway Protocol, or BGP, network, or single-line, dual-line or multiple-line networks. Hosting services are typically provided to customers for a fixed amount over the contract service period and the related revenues are recognized on a straight-line basis over the term of the contract. For certain contracts where considerations are based on the usage of the Hosting services, the related revenues are recognized based on the consumption at the predetermined rate as the services are rendered throughout the contract term. The Company is a principal and records revenue for Hosting service on a gross basis.

VPN services are services that the Company extends customers' private networks by setting up secure and dedicated connections through the public internet. VPN services are provided to customers for a fixed amount over the contract service period and revenue are recognized on a straight-line basis over the term of the contract. The Company is a principal and records revenue for VPN service on a gross basis.

The Company partners with Microsoft to provide Cloud services that allow enterprise and individual customers to run their applications over the internet using the IT infrastructure. Cloud services are generally charged by the Company to the end customers for a fixed amount or based on the actual usage of the cloud resources at predetermined rates over the subscription period, which in general is one year. The Company fulfills its performance obligation of facilitating Microsoft to provide the Cloud services to the end customers by providing, but not limited to, contract processing management, billing, payment collection, maintenance, help desk supports and certain IT infrastructure services. These are considered as a series of distinct services that are substantially the same and have the same pattern of transfer to the customer; therefore, they are accounted for as a single performance obligation that is satisfied over time. The corresponding consideration that the Company is entitled to is recognized as revenue using a time-based method since this best depicts the pattern of the control transfer. Revenue from Cloud services consists of monthly incentive revenues received from Microsoft upon completion of certain conditions and gross billing amount received from end customers net of considerations remitted by the Company to Microsoft. When the contract is modified to add distinct services to the single performance obligation for additional fees, such changes are accounted for prospectively as a termination of the old contract and the creation of a new contract.

For certain arrangements, customers are required to pay the Company before the services are delivered. When either party to a revenue contract has performed, the Company recognizes a contract asset or a contract liability in the consolidated balance sheets, depending on the relationship between the Company's performance and the customer's payment. Contract liabilities were mainly related to fee received for Hosting services to be provided over the contract period, which were presented as deferred revenue on the consolidated balance sheets.

Deferred revenue represented the Company's obligation to transfer the goods or services to a customer for which the Company has received consideration (or an amount of consideration is due) from the customer. As of December 31, 2019 and 2020, the Company has deferred revenue amounting up to RMB57,625 and RMB63,245 (US\$9,693), respectively. Revenue recognized from opening deferred revenue balance was RMB46,730 (US\$7,162) for the year ended December 31, 2020.

The Company's certain Hosting service contains lease and non-lease components. The Company elected to adopt the practical expedient which allows lessors to combine lease and non-lease components and account for them as one component if 1) the timing and pattern of transfer of the lease component and non-lease component is the same; 2) the lease component should be classified as an operating lease if it were accounted for separately. The combined component is accounted for in accordance with the current lease accounting guidance ("ASC 842") if the lease component is predominant, and in accordance with the ASC 606 if the non-lease component is predominant. The Company has determined that the non-lease component is the predominant component in Hosting service. Therefore, the Company has accounted for the combined component in accordance with ASC 606.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Revenue recognition (continued)

The Company does not disclose the value of unsatisfied performance obligations as the Company's revenue contracts are (i) contracts with an original expected length of one year or less or (ii) contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for services performed.

(s) Cost of revenues

Cost of revenues consists primarily of telecommunication costs, depreciation of the Company's long-lived assets, amortization of acquired intangible assets, maintenance, data center rental expenses directly attributable to the provision of the IDC services, payroll and other related costs of operations.

(t) Advertising expenditures

Advertising expenditures are expensed as incurred and are included in sales and marketing expenses, which amounted to RMB7,968, RMB6,095 and RMB7,779 (US\$1,192) for the years ended December 31, 2018, 2019 and 2020, respectively.

(u) Research and development expenses

Research and development expenses consist primarily of payroll and related personnel costs for routine upgrades and related enhancements of the Company's services and network. Research and development expenses are expensed as incurred except for costs to develop internal-use software or add significant upgrades and enhancements resulting in additional functionality to internal-use software that meet the capitalization criteria in accordance with ASC Subtopic 350-40, *Intangibles-Goodwill and Other, Internal-Use Software*.

(v) Government grants

Government grants are provided by the relevant PRC municipal government authorities to subsidize the cost of certain research and development projects. The amount of such government grants is determined solely at the discretion of the relevant government authorities and there is no assurance that the Company will continue to receive these government grants in the future. Government grants are recognized when it is probable that the Company will comply with the conditions attached to them, and the grants are received. When the grant relates to an expense item, it is recognized in the consolidated statement of operations over the period necessary to match the grant on a systematic basis to the costs that it is intended to compensate, as a reduction of the related operating expense. When the grant relates to an asset, it is recognized as deferred government grants and released to the consolidated statement of operations in equal amounts over the expected useful life of the related asset, when operational, as a reduction of the related depreciation expense.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Capitalized interest

Interest costs are capitalized if they are incurred during the acquisition, construction or production of a qualifying asset and such costs could have been avoided if expenditures for these assets have not been made.

As a result of total interest costs capitalized during the period, the interest expense for the years ended December 31, 2018, 2019 and 2020, was as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Interest expense and amortization cost of bonds payable	150,098	223,832	223,785	34,297
Interest expense on convertible promissory notes	—	—	18,880	2,893
Interest expense on bank and other borrowings	19,395	14,212	39,424	6,042
Interest expense on finance leases	79,935	120,185	130,196	19,953
Total interest costs	249,428	358,229	412,285	63,185
Less: Total interest costs capitalized	(13,362)	(12,274)	(31,676)	(4,854)
Interest expense, net	236,066	345,955	380,609	58,331

(x) Income taxes

The Company accounts for income taxes using the liability method. Under this method, deferred tax assets and liabilities are determined based on the difference between the financial reporting and tax bases of assets and liabilities using enacted tax rates that will be in effect in the period in which the differences are expected to reverse. The carrying amount of deferred tax assets is reviewed on an entity-by-entity basis and is reduced by a valuation allowance to the extent that it is more-likely-than-not that the benefits of the deferred tax assets will not be realized in future years. The valuation allowance is determined based on the weight of positive and negative evidences including future reversals of existing taxable temporary differences, the adequacy of future taxable income exclusive of reversing temporary differences, and verifiable tax planning. The estimated future taxable income involves significant assumptions of forecasted revenue growth that take into consideration of the Company's historical financial results, its plan of expanding operating capacity as well as current industry trends. The effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date of the change in tax rate. All deferred income tax assets and liabilities are classified as non-current on the consolidated balance sheets.

The Company applies ASC Topic 740, *Accounting for Income Taxes* ("ASC 740"), to account for uncertainty in income taxes. ASC 740 prescribes a recognition threshold a tax position is required to meet before being recognized in the financial statements.

The Company has elected to classify interest and penalties related to unrecognized tax benefits, if and when required, as part of "income tax expenses" in the consolidated statements of operations.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(y) Share-based compensation

Share options and Restricted Share Units (“RSUs”) granted to employees are accounted for under ASC Topic 718, *Compensation—Stock Compensation* (“ASC 718”), which requires that share-based awards granted to employees be measured based on the grant date fair value and recognized as compensation expenses over the requisite service period and/or performance period (which is generally the vesting period) in the consolidated statements of operations. The Company accounts for forfeitures as they occur.

The Company has elected to recognize compensation expenses using the straight-line method for share-based awards granted with service conditions that have a graded vesting schedule. For share-based awards granted with performance conditions, the Company recognizes compensation expenses using the accelerated method. The Company commences recognition of the related compensation expenses if it is probable that the defined performance condition will be met. To the extent that the Company determines that it is probable that a different number of share-based awards will vest depending on the outcome of the performance condition, the cumulative effect of the change in estimate is recognized in the period of change. For share-based awards with market conditions, the probability to achieve market conditions is reflected in the grant date fair value. The Company recognized the related compensation expenses when the requisite service is rendered using the accelerate method.

On November 26, 2016, the Board approved a new incentive program to certain individuals with a new bonus scheme which will be settled by issuing a variable number of shares with a fair value equal to fixed dollar amount on the settlement date. The Company remeasures the fair value of such liability at each reporting period end through earnings until the actual settlement date, which is the date when the number of underlying shares were fixed and recorded the compensation cost over the remaining vesting term.

A cancellation of the terms or conditions of an equity award under original award in exchange for a new award should be treated as modification. The compensation costs associated with the modified awards are recognized if either the original vesting conditions or the new vesting conditions have been achieved. Total recognized compensation cost for the awards is at least equal to the fair value of the original awards at the grant date unless at the date of the modification the performance or service conditions of the original awards are not expected to be satisfied. The incremental compensation cost is measured as the excess of the fair value of the replacement awards over the fair value of original awards at the modification date. Therefore, in relation to the modified awards, the Company recognizes share-based compensation over the vesting periods of the new awards, which comprises (i) the amortization of the incremental portion of share-based compensation over the remaining vesting term, and (ii) any unrecognized compensation cost of original awards, using either the original term or the new term, whichever results in higher expenses for each reporting period. For a modification of a market condition, the incremental portion of share-based compensation and unrecognized compensation cost of original award are recognized over new vesting period. For modification of a liability award that remains a liability after modification, the liability award continues to be remeasured at fair value at each reporting date.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) Loss per share

In accordance with ASC Topic 260, *Earnings per Share* (“ASC 260”), basic loss per share is computed by dividing net loss attributable to ordinary shareholders by the weighted average number of unrestricted ordinary shares outstanding during the year using two-class method. Under the two-class method, net loss is allocated between ordinary shares and participating securities based on their participating rights. The company’s series A preferred shares (Note 17) are participating securities. Diluted loss per share is calculated by dividing net loss attributable to ordinary shareholders using two-class method as adjusted for the effect of dilutive ordinary equivalent shares, if any, by the weighted average number of ordinary and dilutive ordinary equivalent shares outstanding during the period. Contingently issuable shares, including performance-based share awards and contingent considerations to be settled in shares, are included in the computation of basic earnings per share only when there is no circumstance under which those shares would not be issued. Contingently issuable shares are included in the denominator of the diluted loss per share calculation as of the beginning of the period or as of the inception date of the contingent share arrangement, if later, only when dilutive and when all the necessary conditions have been satisfied as of the reporting period end. For contracts that may be settled in ordinary shares or in cash at the election of the Company, share settlement is presumed, pursuant to which incremental shares relating to the number of shares that would be required to settle the contract are included in the denominator of diluted loss per share calculation if the effect is more dilutive. Ordinary equivalent shares consist of the ordinary shares issuable upon the exercise of the share options, using the treasury stock method and shares issuable upon the conversion of the company’s series A preferred shares and convertible promissory notes using if converted method. Ordinary share equivalents are excluded from the computation of diluted loss per share if their effects would be anti-dilutive.

(aa) Share repurchase program

Pursuant to the Board of Directors’ resolutions on December 2, 2019, the Company’s management is authorized to repurchase, in one or more tranches, up to an aggregate of US\$20,000 of its own outstanding shares (including shares represented by ADSs) (each such transaction a “Repurchase”) over a period of 13 months ending on December 31, 2020.

The Company accounted for the repurchased shares as Treasury Stock at cost in accordance to ASC Subtopic 505-30, *Treasury Stock* (“ASC 505-30”), and the share repurchase is shown separately in the consolidated statement of shareholder’s equity, as the Company has not yet decided on the ultimate disposition of those ADSs acquired. When the Company decides to retire the treasury stock, the difference between the original issuance price and the repurchase price is debited into accumulated deficit.

For the years ended December 31, 2018, 2019 and 2020, the Company repurchased nil, 242,830 and nil ADSs for a consideration of nil, RMB11,840 and nil, respectively.

(bb) Comprehensive loss

Comprehensive loss is defined as the decrease in equity of the Company during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. Accumulated other comprehensive income of the Company includes only foreign currency translation adjustments related to the Company and its overseas subsidiaries, whose functional currency is US\$.

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2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(cc) Segment reporting

In accordance with ASC Topic 280, *Segment Reporting* (“ASC 280”), the Company had one reportable segment since the Company’s chief executive officer, who has been identified as the Company’s chief operating decision-maker (“CODM”) formerly relied on the results of operations of hosting and related services when making decisions on allocating resources and assessing performance of the Company, the Company has only one hosting and related services and the CODM reviews the operation result of the Company as a whole. Hosting and related services business focuses primarily on colocation, interconnectivity, cloud, VPN, hybrid IT and other value-added services.

As of December 31, 2018, 2019 and 2020, the Company only had one reporting segment. Because substantially all of the Company’s long-lived assets and revenues are located in and derived from the PRC, geographical segments are not presented.

(dd) Employee benefits

The full-time employees of the Company’s PRC subsidiaries are entitled to staff welfare benefits including medical care, housing fund, pension benefits and unemployment insurance, which are governmental mandated defined contribution plans. These entities are required to accrue for these benefits based on certain percentages of the employees’ respective salaries, subject to certain ceilings, in accordance with the relevant PRC regulations, and make cash contributions to the state-sponsored plans out of the amounts accrued.

(ee) Comparatives

Certain items reported in the prior year’s consolidated financial statements have been reclassified to conform with the current year’s presentation.

(ff) Recent accounting pronouncements

In March 2020, the FASB issued ASU 2020-04, *Reference Rate Reform* (Topic 848), which is elective, and provides for optional expedients and exceptions for applying GAAP to contracts, hedging relationships, and other transactions affected by reference rate reform if certain criteria are met. The amendments apply only to contracts and hedging relationships that reference LIBOR or another reference rate expected to be discontinued due to reference rate reform. These amendments are effective immediately and may be applied prospectively to contract modifications made and hedging relationships entered into or evaluated on or before December 31, 2022. The Company is currently evaluating the impact of reference rate reform and potential impact of adoption of these elective practical expedients on its condensed consolidated financial statements and will consider the impact of adoption during its analysis.

In August 2020, the FASB issued ASU No. 2020-06, *Accounting for Convertible Instruments and Contracts in an Entity’s Own Equity* (“ASU 2020-06”), which focuses on amending the legacy guidance on convertible instruments and the derivatives scope exception for contracts in an entity’s own equity. ASU 2020-06 simplifies an issuer’s accounting for convertible instruments by reducing the number of accounting models that require separate accounting for embedded conversion features. ASU 2020-06 also simplifies the settlement assessment that entities are required to perform to determine whether a contract qualifies for equity classification. Further, ASU 2020-06 enhances information transparency by making targeted improvements to the disclosures for convertible instruments and earnings-per-share (EPS) guidance, i.e., aligning the diluted EPS calculation for convertible instruments by requiring that an entity use the if-converted method and that the effect of potential share settlement be included in the diluted EPS calculation when an instrument may be settled in cash or shares, adding information about events or conditions that occur during the reporting period that cause conversion contingencies to be met or conversion terms to be significantly changed. This update will be effective for the Company’s fiscal years beginning after December 15, 2021, and interim periods within those fiscal years. Early adoption is permitted, but no earlier than fiscal years beginning after December 15, 2020, and interim periods within those fiscal years. Entities can elect to adopt the new guidance through either a modified retrospective method of transition or a fully retrospective method of transition. The Company expects to early adopt ASU 2020-06 beginning January 1, 2021 and does not expect any material impact on its financial statement at the date of adoption.

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3. CONCENTRATION OF RISKS

(a) Credit risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of cash and cash equivalents, short-term investments, accounts receivable, other receivables and amounts due from related parties. As of December 31, 2019 and 2020, the aggregate amount of cash and cash equivalents, restricted cash and short-term investments of RMB1,171,075 and RMB1,419,855 (US\$217,602), respectively, were held at major financial institutions located in the PRC, and US\$222,638 and US\$303,824 (RMB1,982,454), respectively, were deposited with major financial institutions located outside the PRC. Management believes that these financial institutions are of high credit quality and continually monitors the credit worthiness of these financial institutions. Historically, deposits in Chinese banks are secure due to the state policy on protecting depositors' interests. However, China promulgated a new Bankruptcy Law in August 2006 that came into effect on June 1, 2007, which contains a separate article expressly stating that the State Council may promulgate implementation measures for the bankruptcy of Chinese banks based on the Bankruptcy Law. Under the new Bankruptcy Law, a Chinese bank may go into bankruptcy. In addition, since China's accession to the World Trade Organization, foreign banks have been gradually permitted to operate in China and have been significant competitors against Chinese banks in many aspects, especially since the opening of the Renminbi business to foreign banks in late 2006. Therefore, the risk of bankruptcy of those Chinese banks in which the Company has deposits has increased. In the event of bankruptcy of one of the banks which holds the Company's deposits, the Company is unlikely to claim its deposits back in full since the bank is unlikely to be classified as a secured creditor based on PRC laws.

(b) Business, supplier, customer, and economic risk

The Company participates in a relatively dynamic and competitive industry that is heavily reliant operation excellence of the services. The Company believes that changes in any of the following areas could have a material adverse effect on the Company's future financial position, result of operations or cash flows:

- (i) **Business Risk**—Third parties may develop technological or business model innovations that address data center and network requirements in a manner that is, or is perceived to be, equivalent or superior to the Company's services. If competitors introduce services that compete with, or surpass the quality, price or performance of the Company's services, the Company may be unable to renew its agreements with existing customers or attract new customers at the prices and levels that allow the Company to generate reasonable rates of return on its investment.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

3. CONCENTRATION OF RISKS (CONTINUED)

(b) Business, supplier, customer, and economic risk (continued)

(ii) **Supplier Risk**—The Company's operations are dependent upon bandwidth and cabinet capacity provided by the third-party telecom carriers. There can be no assurance that the Company will be able to secure the cabinet and bandwidth supply from the third-party telecom carriers, neither the Company is adequately prepared for unexpected increases in bandwidth demands by its customers. The communications capacity the Company has leased, include cabinet and bandwidth, may become unavailable for a variety of reasons, such as physical interruption, technical difficulties, contractual disputes, or the financial health of its third-party providers. Any failure of these network providers to provide the capacity the Company requires may result in a reduction in, or interruption of, service to its customers. A significant portion of the Company's total bandwidth and cabinet resources are purchased from its five largest suppliers, who collectively accounted for 19%, 21% and 39% of the Company's total bandwidth and cabinet resources for the years ended December 31, 2018, 2019 and 2020, respectively.

(iii) **Customer Risk**—The success of the Company's business going forward will rely in part on Company's ability to continue to obtain and expand business from existing customers while also attracting new customers. The Company has a diversified base of customers covering its services and the revenue from the largest single entity customer accounted for less than 9% and 8% of the Company's total net revenues for the years ended December 31, 2018 and 2019, and two single entity customers generated more than 10% of the Company's total net revenues for the year ended December 31, 2020. Certain customers are local subsidiaries of a telecommunication carrier in China, which the Company views as separate customers as it negotiates with, maintain and support each of these entities given that each of them has the separate decision-making authority and services procurement budget. None of these customers on a stand-alone basis contributed more than 2% of the Company's revenues in any given year but in the aggregate, they contributed approximately 4%, 4% and 3% of the Company's total revenues for the years ended December 31, 2018, 2019 and 2020, respectively.

(iv) **Political, economic and social uncertainties**—The Company's operations could be adversely affected by significant political, economic and social uncertainties in the PRC. Although the PRC government has been pursuing economic reform policies for more than 20 years, no assurance can be given that the PRC government will continue to pursue such policies or that such policies may not be significantly altered, especially in the event of a change in leadership, social or political disruption or unforeseen circumstances affecting the PRC political, economic and social conditions. There is also no guarantee that the PRC government's pursuit of economic reforms will be consistent or effective.

(v) **Regulatory restrictions**—The applicable PRC laws, rules and regulations currently prohibit foreign ownership of companies that provide internet related services, including hosting and related services. Accordingly, the Company's subsidiary, 21Vianet China, is currently ineligible to apply for the required licenses for providing IDC services in China. As a result, the Company operates its IDC services in the PRC through its Consolidated VIEs which holds the licenses and permits required to provide IDC services in the PRC. The PRC Government may also choose at anytime to block access to certain website operators which could also materially impact the Company's ability to generate revenue.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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3. CONCENTRATION OF RISKS (CONTINUED)

(c) Currency convertibility risk

The Company transacts substantially all its business in RMB, which is not freely convertible into foreign currencies. On January 1, 1994, the PRC government abolished the dual-rate system and introduced a single rate of exchange as quoted daily by the People's Bank of China (the "PBOC"). However, the unification of the exchange rates does not imply that the RMB may be readily convertible into US\$ or other foreign currencies. All foreign exchange transactions continue to take place either through the PBOC or other banks authorized to buy and sell foreign currencies at the exchange rates quoted by the PBOC. Approval of foreign currency payments by the PBOC or other institutions requires submitting a payment application form together with suppliers' invoices, shipping documents and signed contracts.

(d) Foreign currency exchange rate risk

From July 21, 2005, the RMB is permitted to fluctuate within a narrow and managed band against a basket of certain foreign currencies. The depreciation (appreciation) of the RMB against US\$ was approximately 5.0%, 1.6% and (6.5%) in the years ended December 31, 2018, 2019 and 2020, respectively.

(e) Interest rate risk

The Company is exposed to interest rate risk on its interest-bearing assets and liabilities. As part of its asset and liability risk management, the Company reviews and takes appropriate steps to manage its interest rate exposures on its interest-bearing assets and liabilities. The Company has not been exposed to material risks due to changes in market interest rates, and not used any derivative financial instruments to manage the interest risk exposure during the periods presented.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

4. ACQUISITION AND DISPOSAL OF SUBSIDIARIES

Acquisitions in 2020

BJ JHC

On November 17, 2020, the Company through its subsidiaries, YF WOFE and 21Vianet Saturn, acquired 100% equity interests in Splendid Oriental Limited ("Splendid") which controls BJ JHC and its subsidiary BJ ST at a total cash consideration of RMB432,015 (US\$66,209). Among which, RMB200,000 (US\$30,651) is refundable if certain conditions are not achieved and is accounted as contingent consideration. The purpose of the transaction is to establish a new data center. As Splendid, BJ JHC and BJ ST do not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets. As of December 31, 2020, certain conditions in relation to RMB200,000 (US\$30,651) are not met and the corresponding asset is not recognized until the contingency is resolved. The carrying amount of the net identifiable assets were as follows:

	<u>RMB</u>	<u>US\$</u>
Net assets acquired:		
Property and equipment, net	279,556	42,843
Operating permits (<i>Note 9</i>)	110,418	16,922
Customer contract (<i>Note 9</i>)	33,208	5,089
Operating lease right-of-use assets, net	112,398	17,226
Deferred tax assets	3,150	483
Other non-current assets	4,428	678
Cash and cash equivalents	30,319	4,647
Other current assets	8,833	1,354
Other current liabilities	(90,805)	(13,916)
Operating lease liabilities	(120,120)	(18,409)
Finance lease liabilities	(84,082)	(12,886)
Deferred tax liabilities	(55,288)	(8,473)
Total consideration in cash	<u>232,015</u>	<u>35,558</u>

As of December 31, 2020, the Company, through its subsidiaries, YF WOFE and 21Vianet Saturn, made prepayments amounting to RMB844,309 (US\$129,396) to acquire potential equity interests for the purpose of establishing data centers. As the closing conditions have not been achieved and the prepayments were refundable if acquisition is not completed, the prepayments were recorded as other non-current assets on the consolidated balance sheet as of December 31, 2020.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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4. ACQUISITION AND DISPOSAL OF SUBSIDIARIES (CONTINUED)

Acquisition in 2020 (continued)

SH Shuzhong

On June 30, 2020, as part of its business strategy to expand the existing hosting service, the Company through its subsidiary, SH Shilian, acquired 100% of the equity interests in SH Shuzhong which primarily provides internet data center service from a third party selling shareholder, for a total cash consideration of RMB36,667 (US\$5,619). As SH Shuzhong is in operations and possess all the elements that are necessary to conduct normal operations as a business, such acquisition is accounted for as business combination. The initial accounting is incomplete as certain liabilities are provisional.

The following table summarizes the estimated fair values of the assets acquired and liabilities assumed as of the date of acquisition:

	<u>RMB</u>	<u>US\$</u>
Property and equipment, net	348,475	53,406
Operating lease right-of-use assets, net	81,034	12,419
Customer contract (Note 9)	33,500	5,134
Purchased software	23	4
Deferred tax assets	14,848	2,275
Other non-current assets	1,685	258
Other current assets	44,774	6,862
Total assets acquired	<u>524,339</u>	<u>80,358</u>
Other current liabilities	(406,932)	(62,365)
Operating lease liabilities	(45,034)	(6,902)
Deferred tax liabilities	(41,169)	(6,309)
Total liabilities assumed	<u>(493,135)</u>	<u>(75,576)</u>
Net assets acquired	31,204	4,782
Purchase consideration	36,667	5,619
Goodwill	<u>5,463</u>	<u>837</u>

The revenue and net profit since the acquisition date included in the consolidated statement of operations for the year ended December 31, 2020 were RMB41,928 (US\$6,426) and RMB5,579 (US\$855), respectively. The goodwill, which is not tax deductible, is primarily attributable to synergies expected to be achieved from the acquisition.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

4. ACQUISITION AND DISPOSAL OF SUBSIDIARIES (CONTINUED)

Acquisition in 2020 (continued)

Shulifang

On June 24, 2020, the Company through its subsidiary, SH Shilian, entered into a share purchase agreement to acquire 100% equity interests in Shulifang at a total cash consideration of RMB43,000 (US\$6,590) in installment upon achievement of certain conditions which is accounted as contingent consideration and the corresponding asset will only be recognized when the contingency is resolved. The purpose is to establish a new data center. As Shulifang does not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets. The transaction was closed on July 21, 2020. As of December 31, 2020, the condition of the last contingent consideration amounted to RMB10,000 (US\$1,533) was not yet met. The contingent consideration obligation is not accounted for until the contingency is resolved. Carrying amount of the net identifiable assets of Shulifang were as follows:

	RMB	US\$
Net assets acquired:		
Operating permits (<i>Note 9</i>)	45,134	6,917
Operating lease right-of-use assets, net	15,206	2,330
Other non-current assets	15,409	2,362
Cash and cash equivalents	53	8
Other current assets	601	91
Operating lease liabilities	(15,206)	(2,330)
Other current liabilities	(16,913)	(2,592)
Deferred tax liabilities	(11,284)	(1,729)
Total consideration in cash	<u>33,000</u>	<u>5,057</u>

LF Huahai

On September 11, 2020 and October 28, 2020, the Company through its subsidiaries, SH Shilian and 21Vianet Venus International Investment Limited (“21Vianet Venus”), acquired 69.93% and 30.07% equity interests in LF Huahai at a total cash consideration of RMB59,500 (US\$9,119) and RMB25,500 (US\$3,908), respectively. The purpose is to establish a new data center with the acquired property. As LF Huahai does not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets. Carrying amount of the net identifiable assets of LF Huahai were as follows:

	RMB	US\$
Net assets acquired:		
Operating permits (<i>Note 9</i>)	119,352	18,291
Operating lease right-of-use assets, net	183,174	28,073
Other non-current assets	27,524	4,218
Cash and cash equivalents	173	27
Other current assets	4,088	627
Other current liabilities	(35,600)	(5,456)
Operating lease liabilities	(183,873)	(28,180)
Deferred tax liabilities	(29,838)	(4,573)
Total consideration in cash	<u>85,000</u>	<u>13,027</u>

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

4. ACQUISITION AND DISPOSAL OF SUBSIDIARIES (CONTINUED)

Acquisitions in 2019

BJ Shuhai

On January 2, 2019, the Company through its subsidiary, 21Vianet Beijing acquired 100% equity interests in BJ Shuhai at a total cash consideration of RMB98,255 in installment upon achievement of certain conditions which is accounted as contingent consideration and the corresponding asset will only be recognized when the contingency is resolved. The purpose is to establish a new data center with the acquired property. As BJ Shuhai does not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets.

As of December 31, 2020, the condition of the last payment of the total consideration was not yet met. RMB30,000 in relation to the last payment was considered as a contingent consideration. The carrying amounts of the net identifiable assets of BJ Shuhai were as follows:

	RMB
Net assets acquired:	
Operating permits (Note 9)	100,380
Cash and cash equivalents	59
Other current assets	9,625
Right-of-use assets	129,937
Other current liabilities	(16,714)
Lease liabilities	(129,937)
Deferred tax liabilities	(25,095)
Total consideration in cash	<u>68,255</u>

Shihua Holdings 2

In March 2017, the Company and Warburg Pincus set up a joint venture, Shihua Holdings 2, with the equity interest of 49% and 51%, respectively (Note 12). The Company accounted for the investment in the joint venture under equity method investments for its ability to exercise significant influence.

In July 2019, the Company entered into restructuring agreements with Warburg Pincus and the transaction. Pursuant to the restructuring agreement, Shihua Holdings 2 transferred 100% of the equity interest in some subsidiaries at the consideration equivalent to the subsidiaries' paid-in capital to Warburg Pincus's wholly owned subsidiaries, Marble SH and Marble Holdings. Thereafter, Shihua Holdings 2 repurchased and cancelled all Warburg Pincus's shares in Shihua Holdings 2. Upon completion of restructuring on August 20, 2019, the Company became the sole shareholder in Shihua Holdings 2, including its wholly owned subsidiary, Hongming Logistics. As Shihua Holdings 2 and its subsidiaries do not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets. The carrying amounts of the net identifiable assets of Shihua Holdings 2 at the acquisition date were as follows:

	RMB
Net assets acquired:	
Property and land use right	150,880
Construction-in-progress	465
Cash and cash equivalents	67,563
Other current assets	1,333,329
Other current liabilities	(1,203,894)
Deferred tax liabilities	(33,096)
Total consideration*	<u>315,247</u>

* Consideration transferred is the carrying amount of the previously held 49% of equity interest.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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4. ACQUISITION AND DISPOSAL OF SUBSIDIARIES (CONTINUED)

Acquisition in 2019 (continued)

NT Chenghong

On December 24, 2019, the Company through its subsidiary, 21Vianet Beijing acquired 100% equity interests in NT Chenghong with total cash consideration of RMB80,000. The purpose of this transaction for the Company is to acquire the property to establish a new data center. As NT Chenghong does not possess all the elements that are necessary to conduct normal operations as a business and had not yet commenced operations, such acquisition is accounted for as an acquisition of assets. The carrying amounts of the net identifiable assets of NT Chenghong at the acquisition date were as follows:

	<u>RMB</u>
Net assets acquired:	
Construction-in-progress	158,471
Equipment	13
Cash and cash equivalents	129
Other current assets	11,840
Other current liabilities	(88,830)
Deferred tax liabilities	(1,623)
Total consideration in cash	<u>80,000</u>

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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5. ACCOUNTS AND NOTES RECEIVABLE, NET

Accounts and notes receivable and the allowance for doubtful debt consisted of the following:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Accounts receivable	722,840	913,902	140,062
Notes receivable	2,146	2,252	345
Allowance for doubtful debt	(67,828)	(68,921)	(10,563)
	<u>657,158</u>	<u>847,233</u>	<u>129,844</u>

As of December 31, 2019 and 2020, all accounts and notes receivable were due from third party customers. An analysis of the allowance for doubtful debt was as follows:

	For the years ended December 31,		
	2019	2020	
	RMB	RMB	US\$
Balance at beginning of the year	70,970	67,828	10,395
Cumulative adjustment for changes in accounting policy	—	2,740	420
Additional provision charged to expense	485	2,393	367
Write-off of accounts receivable	(3,627)	(4,040)	(619)
Balance at the end of the year	<u>67,828</u>	<u>68,921</u>	<u>10,563</u>

6. SHORT-TERM INVESTMENTS

Short-term investments consisted of the following as of December 31, 2019 and 2020:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Time deposits	<u>363,856</u>	<u>285,872</u>	<u>43,812</u>

The Company recorded interest income related to its short-term investments amounting to RMB7,303, RMB8,687 and RMB5,712 (US\$875) for the years ended December 31, 2018, 2019 and 2020, respectively, in the consolidated statements of operations.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

7. PREPAID EXPENSES AND OTHER CURRENT ASSETS

Prepaid expenses and other current assets consisted of the following:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Prepaid expenses	878,155	884,156	135,503
Tax recoverables	570,913	879,237	134,749
Deposits	17,391	31,774	4,870
Loan to third parties	73,557	19,107	2,928
Interest receivables	14,359	1,484	227
Staff advances	1,866	968	148
Others	61,908	49,458	7,580
	<u>1,618,149</u>	<u>1,866,184</u>	<u>286,005</u>

Prepaid expenses mainly represented the unamortized portion of prepayments made to Microsoft for the cloud computing services, the prepayments to telecommunication operators for bandwidth, data centers or cabinets and the prepayments for office expense.

8. PROPERTY AND EQUIPMENT, NET

Property and equipment, including those held under finance leases, consisted of the following:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
At cost:			
Property	899,609	1,511,429	231,637
Leasehold improvements	1,458,749	2,609,828	399,974
Computer and network equipment	3,539,709	4,899,577	750,893
Optical fibers	142,723	142,723	21,873
Office equipment	22,102	26,845	4,114
Motor vehicles	2,308	2,668	409
	<u>6,065,200</u>	<u>9,193,070</u>	<u>1,408,900</u>
Less: Accumulated depreciation	(2,514,800)	(3,285,138)	(503,469)
Impairment	—	(35,793)	(5,486)
	<u>3,550,400</u>	<u>5,872,139</u>	<u>899,945</u>
Construction-in-progress	1,893,165	2,234,286	342,419
	<u>5,443,565</u>	<u>8,106,425</u>	<u>1,242,364</u>

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

8. PROPERTY AND EQUIPMENT, NET (CONTINUED)

Depreciation expense was RMB566,491, RMB696,528 and RMB908,387 (US\$139,216) for the years ended December 31, 2018, 2019 and 2020, respectively, and were included in the following captions:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Cost of revenues	520,791	644,108	850,746	130,382
Sales and marketing expenses	986	2,107	2,399	368
General and administrative expenses	28,727	30,110	29,711	4,553
Research and development expenses	15,987	20,203	25,531	3,913
	<u>566,491</u>	<u>696,528</u>	<u>908,387</u>	<u>139,216</u>

The carrying amounts of the Company's property and equipment held under finance leases at respective balance sheet dates were as follows:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Property	365,353	921,970	141,298
Computer and network equipment	639,311	1,019,588	156,259
Optical fibers	142,723	137,924	21,138
	<u>1,147,387</u>	<u>2,079,482</u>	<u>318,695</u>
Less: Accumulated depreciation	<u>(408,196)</u>	<u>(661,796)</u>	<u>(101,425)</u>
	739,191	1,417,686	217,270
Construction-in-progress	659,014	92,545	14,183
	<u>1,398,205</u>	<u>1,510,231</u>	<u>231,453</u>

Depreciation of property, computer and network equipment and optical fibers under finance leases was RMB170,264, RMB216,664 and RMB255,458 (US\$39,151) for the years ended December 31, 2018, 2019 and 2020, respectively.

The carrying amounts of property and equipment pledged by the Company to secure borrowings (Note 13) granted to the Company at the respective balance sheet dates were as follows:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Property	137,585	264,784	40,580
Leasehold improvements	66,162	90,947	13,938
Computer and network equipment	—	40,871	6,264
Construction-in-progress	—	238,771	36,593

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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9. INTANGIBLE ASSETS, NET

The following table presented the Company's intangible assets as of the respective balance sheet dates:

	Purchased software	Radio spectrum license	Operating Permits	Contract backlog	Customer relationships	Licenses	Supplier relationships	Trade names	Customer contract	Non-competes agreements	Internal use software	Total
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB
Intangible assets, net January 1, 2019	47,254	72,908	—	5,162	112,961	3,883	17,070	90,591	—	44	5,440	355,313
Additions	11,128	—	100,380	—	—	—	—	—	—	—	13,189	124,697
Foreign currency translation difference	413	1,200	—	—	—	—	—	—	—	—	—	1,613
Amortization expense	(16,068)	(8,965)	(3,136)	(5,162)	(24,921)	(385)	(3,074)	(5,813)	—	(44)	(3,440)	(71,020)
Intangible assets, net December 31, 2019	42,727	65,123	97,244	—	88,040	3,498	13,996	84,778	—	—	15,189	410,595
Additions	12,893	—	274,904	—	—	—	—	—	66,708	—	8,684	363,189
Foreign currency translation difference	(32)	(4,213)	—	—	—	—	—	—	—	—	—	(4,245)
Amortization expense	(13,689)	(8,403)	(5,189)	—	(24,854)	(385)	(3,074)	(5,813)	(3,602)	—	(7,681)	(72,690)
Impairment	—	(38,654)	—	—	—	—	—	—	—	—	—	(38,654)
Intangible assets, net December 31, 2020	41,899	13,853	366,959	—	63,186	3,113	10,922	78,965	63,106	—	16,192	658,195
Intangible assets, net December 31, 2020 (US\$)	6,421	2,123	56,239	—	9,684	477	1,674	12,102	9,671	—	2,482	100,873

Contract backlog relate to the order placed by the customers that have yet to be delivered at the acquisition date. Customer relationships relate to the relationships that arose as a result of existing customer agreements acquired and is derived from the estimated net cash flows that are expected to be derived from the expected renewal of these existing customer agreements after subtracting the estimated net cash flows from other contributory assets. Customer contract related to existing customer agreements acquired and is derived from the estimated net cash flows that are expected to be derived over the contractual period of the existing customer agreements after subtracting the estimated net cash flows from other contributory assets. Licenses mainly represented the telecommunication service license in relation to virtual private network services. Supplier relationships relate to the relationships that arose as a result of existing bandwidth supply agreements with certain network operators, which were valued using a replacement cost method given the relative ease of replacement. Trade names mainly relate to the trade names of Dermot Entities. Operating permits relate to the government authorized high-capacity utilities from the assets acquisitions (Note 4).

The intangible assets are amortized using the straight-line method, which is the Company's best estimate of how these assets will be economically consumed over their respective estimated useful lives ranging from 1 to 36 years.

Amortization expenses were approximately RMB68,115, RMB71,028 and RMB72,690 (US\$11,140) for the years ended December 31, 2018, 2019 and 2020, respectively.

The annual estimated amortization expenses for the intangible assets for each of the next five years are as follows:

	RMB	US\$
2021	78,149	11,977
2022	63,039	9,661
2023	41,574	6,371
2024	31,923	4,892
2025	27,424	4,203
	242,109	37,104

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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10. LAND USE RIGHTS, NET

Land use rights held by the Company represent operating lease prepayments and are amortized over the remaining term of the respective rights.

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Cost	249,804	278,138	42,627
Accumulated amortization	(16,650)	(22,765)	(3,489)
Land use rights, net	<u>233,154</u>	<u>255,373</u>	<u>39,138</u>

The carrying amounts of land use rights pledged by the Company to secure borrowings (Note 13) granted to the Company at the respective balance sheet dates were as follows:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Land use rights	<u>15,989</u>	<u>141,000</u>	<u>21,609</u>

11. GOODWILL

The changes in the carrying amount of goodwill were as follows:

	For the years ended December 31,		
	2019	2020	
	RMB	RMB	US\$
Balance as of January 1	989,530	989,530	151,652
Additions	—	5,463	837
Balance as of December 31	<u>989,530</u>	<u>994,993</u>	<u>152,489</u>

As of December 31, 2018, 2019 and 2020, the Company has performed a qualitative assessment for hosting and related services and no impairment loss was recorded.

12. LONG-TERM INVESTMENTS, NET

The Company's long-term investments consisted of the following:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Equity investments without readily determinable fair values	43,824	17,137	2,626
Equity method investments	124,116	116,667	17,880
Available-for-sale debt investments	1,713	1,713	263
	<u>169,653</u>	<u>135,517</u>	<u>20,769</u>

Equity investments without readily determinable fair values

The Company disposed equity investments without readily determinable fair value at a consideration of RMB13,122 and RMB13,500 (US\$2,069) in 2019 and 2020, respectively.

The investment income comprised of dividend income of RMB406, RMB461 and RMB607 (US\$93), and disposal gain of RMB20,496, RMB5,536 and RMB257 (US\$39) for the years ended December 31, 2018, 2019 and 2020, respectively.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

12. LONG-TERM INVESTMENTS, NET (CONTINUED)

Equity investments without readily determinable fair values (continued)

The Company recorded an impairment loss of long-term investment amounting nil, nil and RMB13,030 (US\$1,997) for the years ended December 31, 2018, 2019 and 2020, respectively.

Equity method investments:

	As of December 31, 2018			Increase (decrease) during the year ended December 31, 2019			As of December 31, 2019		
	Cost of investments	Share equity gain (loss)	Investments in equity investee	Cost of investments	Share equity gain (loss)	Distribution/derecognize of share equity (gain) loss	Cost of investments	Share equity gain (loss)	Investments in equity investee
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB
Yizhuang Fund	101,000	25,681	126,681	—	1,671	(20,200)	101,000	7,152	108,152
Shihua DC Holdings	366,623	(33,658)	332,965	(337,555)	(17,718)	22,308	29,068	(29,068)	—
Jingliang Inter Cloud	6,000	(34)	5,966	—	(1,894)	—	6,000	(1,928)	4,072
Jingliang Century Cloud	4,000	—	4,000	—	—	—	4,000	—	4,000
Huaye Cloud	23,333	(6,319)	17,014	(23,333)	(11,534)	17,853	—	—	—
ZJK Energy	5,907	(2,157)	3,750	—	212	—	5,907	(1,945)	3,962
WiFire Entities	15,000	(15,000)	—	5,000	(5,000)	—	20,000	(20,000)	—
Qidi Chengxin	—	—	—	3,930	—	—	3,930	—	3,930
	<u>521,863</u>	<u>(31,487)</u>	<u>490,376</u>	<u>(351,958)</u>	<u>(34,263)</u>	<u>19,961</u>	<u>169,905</u>	<u>(45,789)</u>	<u>124,116</u>

	As of December 31, 2019			Increase (decrease) during the year ended December 31, 2020			As of December 31, 2020		
	Cost of investments	Share equity gain (loss)	Investments in equity investee	Cost of investments	Share equity gain (loss)	Distribution/derecognize of share equity (gain) loss	Cost of investments	Share equity gain (loss)	Investments in equity investee
	RMB	RMB	RMB	RMB	RMB	RMB	RMB	RMB	US\$
Yizhuang Fund	101,000	7,152	108,152	—	12,254	(17,723)	101,000	1,683	102,683
Shihua DC Holdings	29,068	(29,068)	—	(29,068)	—	29,068	—	—	—
Jingliang Inter Cloud	6,000	(1,928)	4,072	—	(903)	—	6,000	(2,831)	3,169
Jingliang Century Cloud	4,000	—	4,000	—	—	—	4,000	—	4,000
ZJK Energy	5,907	(1,945)	3,962	—	(803)	—	5,907	(2,748)	3,159
WiFire Entities	20,000	(20,000)	—	—	—	—	20,000	(274)	—
Qidi Chengxin	3,930	—	3,930	—	(274)	—	3,930	(274)	3,656
	<u>169,905</u>	<u>(45,789)</u>	<u>124,116</u>	<u>(29,068)</u>	<u>10,274</u>	<u>11,345</u>	<u>140,837</u>	<u>(24,170)</u>	<u>116,667</u>
									<u>17,880</u>

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12. LONG-TERM INVESTMENTS, NET (CONTINUED)

Equity method investments (continued):

The Company through its subsidiary, 21Vianet Beijing, entered into an agreement to invest in the Yizhuang Venture Investment Fund (“Yizhuang Fund”) as a limited partner since April 2012 with capital injection of RMB101,000 and held 27.694% of the investee as of December 31, 2018, 2019 and 2020. Given the Company holds more than three percent interest in the Yizhuang Fund as a limited partner, the investment is accounted for under the equity method as prescribed in ASC Subtopic 323-10, *Investments – Equity Method* (“ASC 323-10”). In December 2019 and 2020, the Company received distribution from Yizhuang Fund as return on investments with an amount of RMB20,200 and RMB17,723 (US\$2,716), respectively.

In March 2017, the Company through its subsidiary, 21Vianet HK, and Warburg Pincus jointly set up two JVs, Shihua Holdings 2 and Shihua Investment Management (collectively, “Shihua DC Holdings”). The Company injected capital of RMB133,639 and RMB13,537 to acquire 49% of equity interest in Shihua Holdings 2 and Shihua Investment Management, respectively. In the year of 2018, the Company increased the capital injection with the amount of RMB203,916 and RMB15,531 in Shihua Holdings 2 and Shihua Investment Management, respectively. In July 2019, the Company entered into restructuring agreements with Warburg Pincus. Pursuant to the restructuring agreements, Shihua Holdings 2 repurchased and cancelled Warburg Pincus’s share in Shihua Holdings 2. Upon completion of restructuring on August 20, 2019, Shihua Holdings 2 became a wholly-owned subsidiary of the Company (Note 4), thus RMB337,555 and RMB22,308 of cost of investment and accumulative share equity loss in Shihua Holdings 2 were derecognized as of December 31, 2019. Pursuant to the restructuring agreements, the Company and Warburg Pincus would inject additional capital on pro-rata basis to liquidate and terminate Shihua Investment Management. Therefore, the Company recognized additional share equity loss in Shihua Investment Management with an amount of RMB16,290 as of December 31, 2019.

In September 2017, after the disposal of 66.67% equity interest in the WiFire Entities, the Company held the remaining 33.33% equity interest in the WiFire Entities, which is accounted for equity method investment at fair value at the disposal date. In 2019, the Company increased capital injection of RMB5,000 in the WiFire Entities. As of December 31, 2020, the equity method investment balance is reduced to nil after the pickup of loss in the WiFire Entities.

In January 2018, the Company through its subsidiary, 21Vianet Beijing, and a third company jointly set up Beijing Jingliang Interconnected Cloud Technology Inc. (“Jingliang Inter Cloud”) and Jingliang Century Cloud Technology Inc. (“Jingliang Century Cloud”). The Company injected capital of RMB6,000 and RMB4,000 and the Company held 60% and 40% of equity interest in Jingliang Inter Cloud and Jingliang Century Cloud, respectively. Based on the article of association, the Company cannot exercise control over relevant activities of the investee, but it has the ability to exercise significant influence over Jingliang Inter Cloud’s operation and financial decisions.

In March 2018, the Company through its subsidiary, 21Vianet Beijing, acquired 50% equity interest in Guangdong Huaye Cloud Inc. (“Huaye Cloud”) with an amount of RMB23,333, with the ability to exercise significant influence. In November 2019, the Company disposed all its equity interest in Huaye Cloud with a total cash consideration of RMB23,333 and recognized investment loss with an amount of RMB17,853 and disposal gain with an amount of RMB17,853.

In December 2019, the Company through its subsidiary, 21Vianet Beijing, and a third company jointly set up Chengdu Qidi Chengxin Education Limit (“Qidi Chengxin”). The Company injected capital of RMB3,930 and hold 59% of equity interest in Qidi Chengxin. Based on the article of association, the Company cannot exercise control over relevant activities of the investee, but it has the ability to exercise significant influence over operation and financial decisions.

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NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

13. BORROWINGS

Borrowings were as follows as of the respective balance sheet dates:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Short-term bank borrowings	234,500	34,000	5,211
Long-term bank borrowings, current portion	32,500	68,500	10,498
Other long-term borrowings, current portion	—	111,828	17,138
	267,000	214,328	32,847
Long-term bank borrowings, non-current portion	79,500	605,119	92,738
Other long-term borrowings, non-current portion	—	281,877	43,200
Total borrowings	346,500	1,101,324	168,785

The short-term borrowings outstanding as of December 31, 2019 and 2020 bore a weighted average interest rate of 4.56% and 4.46% per annum, respectively, and were denominated in RMB. These borrowings were obtained from financial institutions and have terms of one year. The long-term borrowings (including current portion) outstanding as of December 31, 2019 and 2020 bore a weighted average interest rate of 5.28% and 5.61% per annum, respectively, and were denominated in RMB. These loans were obtained from financial institutions located in the PRC.

As of December 31, 2019 and 2020, unused loan facilities for bank and other borrowings amounted to RMB326,068 and RMB1,574,556 (US\$241,311), respectively.

Borrowings as of December 31, 2019 and 2020 were secured by the following:

December 31, 2019

Short-term bank borrowings (RMB)	Secured by
34,500	Unsecured borrowings.
200,000	Secured by restricted cash of RMB215,816.
234,500	
Long-term bank borrowings (including current portion) (RMB)	Secured by
112,000	Secured by a subsidiary's fixed assets and land-use right with net book value of RMB203,747 and RMB15,989, respectively (Note 8/Note 10).
112,000	

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13. BORROWINGS (CONTINUED)

December 31, 2020

Short-term bank borrowings (RMB)	Secured by
34,000	Unsecured borrowings.
<u>34,000</u>	
Long-term borrowings (including current portion) (RMB)	Secured by
404,781	Secured by subsidiary's property and equipment and land-use right with net book value of RMB505,004 (US\$77,395) and RMB40,034 (US\$6,135), respectively (Note 8/Note 10).
271,861	Secured by a subsidiary's property and equipment and land-use right with net book value of RMB130,369 (US\$19,980) and RMB100,966 (US\$15,474), respectively (Note 8/Note 10), and a subsidiary's stock.
190,682	Unsecured borrowing.
100,000	Secured by a subsidiary's stock and the restricted cash of RMB104,400 (US\$16,000).
100,000	Secured by a subsidiary's stock.
<u>1,067,324</u>	

14. ACCRUED EXPENSES AND OTHER PAYABLES

The components of accrued expenses and other payables were as follows:

	As of December 31,		
	2019	2020	
	RMB	RMB	US\$
Payables for purchase of property, equipment and software	554,693	1,148,742	176,052
Payroll and welfare payables	179,195	204,732	31,377
Amounts due to the original shareholders for acquired entities *	—	66,466	10,186
Payables for acquisitions	47,805	47,805	7,326
Accrued service fees	52,746	47,572	7,291
Payables for office supplies and utilities	24,562	38,485	5,898
Interest payables	58,961	37,799	5,793
Value-added tax and other taxes payable	14,523	10,473	1,605
Others	46,450	29,489	4,520
	<u>978,935</u>	<u>1,631,563</u>	<u>250,048</u>

* This represented the balance of unpaid cash consideration and the payables in other current liabilities due to original shareholders related to the acquisition of SH Shuzhong and LF Huahai (Note 4).

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15. LEASES

Leases are classified as operating leases or finance leases in accordance with ASC 842. The Company's operating leases mainly related to building, office facilities and equipment and the rights to use the land in the PRC. For leases with terms greater than 12 months, the Company records the related asset and liability at the present value of lease payments over the term. Certain leases include rental escalation clauses, renewal options and/or termination options, which are factored into the Company's determination of lease payments when appropriate.

	As of December 31,	
	2019	2020
Weighted average remaining lease term:		
Operating lease	9.4 years	12.2 years
Finance lease	15.3 years	14.6 years
Weighted average discount rate:		
Operating lease	6.09 %	6.56 %
Finance lease	8.43 %	8.63 %

Lease cost for finance leases capitalized were immaterial for the years ended December 31, 2019 and 2020.

	For the year ended December 31,		
	2019	2020	
	RMB	RMB	US\$
Lease cost			
Finance lease cost:			
Depreciation	216,664	255,458	39,151
Interest expenses	120,185	130,196	19,953
Operating lease cost	214,795	478,805	73,380
Total lease cost	<u>551,644</u>	<u>864,459</u>	<u>132,484</u>

Short-term lease cost and variable lease cost for operating leases and finance leases were immaterial for the years ended December 31, 2019 and 2020.

Other information related to leases was as follows:

	For the year ended December 31,		
	2019	2020	
	RMB	RMB	US\$
Cash paid for amounts included in the measurement of lease liabilities:			
Operating cash payments for operating leases	193,174	477,189	73,132
Financing cash payments for finance leases	333,614	376,232	57,660

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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15. LEASES (CONTINUED)

Future lease payments under operating leases and finance leases as of December 31, 2020 were as follows:

	<u>Operating Leases</u>		<u>Finance Leases</u>	
	<u>RMB</u>	<u>US\$</u>	<u>RMB</u>	<u>US\$</u>
2021	415,892	63,738	542,268	83,106
2022	221,680	33,974	293,643	45,003
2023	146,115	22,393	195,320	29,934
2024	103,891	15,922	124,389	19,063
2025	70,494	10,804	95,054	14,568
2026 and thereafter	1,115,382	170,940	1,678,170	257,191
Total future lease payments	<u>2,073,454</u>	<u>317,771</u>	<u>2,928,844</u>	<u>448,865</u>
Less: Imputed interest	<u>(728,543)</u>	<u>(111,654)</u>	<u>(1,286,619)</u>	<u>(197,183)</u>
Present value of future lease payments *	<u>1,344,911</u>	<u>206,117</u>	<u>1,642,225</u>	<u>251,682</u>

* Present value of future operating lease payments consisted of current portion of operating lease liabilities, non-current portion of operating lease liabilities and operating lease liabilities in amounts due to related parties, amounting to RMB452,272 (US\$69,314), RMB645,499 (US\$98,927) and RMB247,140 (US\$37,876) for the year ended December 31, 2020, respectively.

Present value of future finance lease payments consisted of current portion of finance lease liabilities, non-current portion of finance lease liabilities and finance lease liabilities in amounts due to related parties, amounting to RMB403,843 (US\$61,892), RMB688,128 (US\$105,460) and RMB550,254 (US\$84,330) for the year ended December 31, 2020, respectively.

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16. BONDS PAYABLE

On April 15, 2019, the Company issued and sold bonds with an aggregate principle amount of US\$300,000 at a coupon rate of 7.875% per annum (“2021 Notes”). The 2021 Notes will mature on October 15, 2021. The 2021 Notes were listed and quoted on the SGX-ST. Interest on the 2021 Notes is payable semi-annually in arrears on April 15 and October 15 in each year, beginning from October 15, 2019.

Net proceeds from 2021 Notes after deducting issuance costs were RMB1,976,474. The 2021 Notes are unsecured and rank senior in right of payment to any of the Company’s indebtedness that is expressly subordinated to the bonds; equal in right of payment to any of the Company’s liabilities that are not so subordinated, including the 2020 Notes; effectively junior in the right of payment to any secured indebtedness to the extent of the value of the assets securing such indebtedness; and structurally junior to all indebtedness and other liabilities (including accounts payables) of the Company’s subsidiaries and Consolidated VIEs.

On April 16, 2019, the Company repurchased US\$150,839 in principal amount of 2020 Notes, representing approximately 50.28% of the US\$300,000 total aggregate principal amount of the 2020 Notes outstanding as at such date. On August 12, 2019, the Company repurchased US\$18,000 in principal amount of 2020 Notes. The remaining outstanding 2020 Notes with principal amount of US\$131,161 continue to be the obligation of the Company. The Company recognized loss on debt extinguishment of RMB18,895 during the year ended December 31, 2019. On August 4, 2020, the Company repaid the remaining outstanding 2020 Notes with principal amount of US\$131,161.

The following table summarizes the aggregate required repayments of the principal amounts of the Company’s long-term borrowings, including the bonds payable, bank and other borrowings (Note 13) in the succeeding five years and thereafter:

	RMB	US\$
For the years ending December 31,		
2021	2,158,266	330,769
2022	222,796	34,145
2023	152,544	23,378
2024	189,988	29,117
2025	125,244	19,194
2026 and thereafter	222,119	34,041

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17. PERPETUAL CONVERTIBLE PREFERRED SHARES

In June 2020, the Company issued 150,000 Series A perpetual convertible preferred shares (the “Series A Preferred Shares”) at the subscription price of 1,000 US dollars per subscribed share for a total cash consideration of US\$150,000.

The significant terms of the Series A Preferred Shares are summarized as follows:

Dividends

From and after the original issuance date, cumulative dividends on each Series A Preferred Share will accrue in arrears at the dividend rate of 4.5% per annum on the original issuance price of US\$1,000 per subscribed share. All accrued dividends on any Series A Preferred Share will be paid in cash, when, as and if declared by the Board of Directors out of funds legally available therefor or upon a liquidation of the Company.

Holders of the Series A Preferred Shares will also be entitled to receive any dividends declared by the Board of Directors on a pro rata basis with the ordinary shares determined on an as-converted basis. The dividends or distributions shall be distributed among all holders of ordinary shares and Series A Preferred Shares in proportion to the number of ordinary shares that would be held by each such holder if all Series A Preferred Shares had been converted to ordinary shares as of the record date fixed for determining those entitled to receive such distribution.

For dividends on cumulative preferred stock classified in permanent equity, dividends are not recognized until declared by the Board of Directors. As of December 31, 2020, no dividend was declared by the Company and the cumulative dividend was RMB22,806 (US\$3,495).

Liquidation preference

In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Company, the holders of Series A Preferred Shares will be entitled to be paid out of the assets of the Company available for distribution to its shareholders before any distribution or payment out of the assets of the Company will be made to the holders of ordinary shares at a preferential amount in cash equal to the greater of (i) the aggregate original issuance price of US\$1,000 per Series A Preferred Shares, plus any unpaid, accrued and accumulated dividends on all such Series A Preferred Shares (whether or not declared) and (ii) the aggregate value that such holders of Series A Preferred Shares would have received had all holders of Series A Preferred Shares, immediately prior to such Liquidation, converted all Series A Preferred Shares then outstanding (together with any unpaid, accrued and accumulated dividends thereon) into Class A ordinary shares at the applicable conversion price then in effect.

If the Company has insufficient assets to pay the holders of the Series A Preferred Shares the full preferential amount, (a) the holders of the Series A Preferred Shares will share ratably in any distribution of the remaining assets of the Company in proportion to the respective full preferential amounts which would otherwise be payable to each such holder in full, and (b) the Company will not make or agree to make, or set aside for the benefit of the holders of ordinary shares, any payments to the holders of ordinary shares.

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17. PERPETUAL CONVERTIBLE PREFERRED SHARES (CONTINUED)

Conversion

Series A Preferred Shares can be converted at any time at the option of the holder into Class A ordinary shares by dividing the original issuance price plus any unpaid, accrued and accumulated dividends up to, but excluding, the conversion date by the conversion price in effect immediately prior to such conversion. Series A Preferred Shares will be mandatorily converted into Class A ordinary shares at any time after six months from the original issuance date when the daily volume-weighted average price of the ADS (“VWAP”) of certain period equals or exceeds the 200% of the conversion price per ADS (“Conversion Threshold”).

Conversion price is initially, US\$2.8333 per Class A Ordinary Shares or US\$17.00 per ADS and is subject to additional adjustments if the Company makes certain dilutive issuances of shares.

Voting

Each Series A Preferred Shares holder will be entitled to a number of vote equal to the number of Class A ordinary shares then issuable upon its conversion into Class A ordinary shares at the record date for determination of the shareholders entitled to vote on such matters, or, if no such record date is established, at the date when such vote is taken or any written consent of shareholders is solicited.

Accounting for the Series A Preferred Shares

The Series A Preferred Shares are classified as permanent equity and initially recorded at the issuance price at the time of closing. There were no embedded features that qualified for bifurcation and separate accounting in accordance with ASC 815-10, Derivatives and Hedging. As the time of closing, beneficial conversion features with the amount of RMB470,643 (US\$72,129) was recorded as a reduction to the respective preferred shares with an offsetting credit to additional paid-in capital. This amount was immediately accreted back as a deemed distribution to Series A perpetual convertible preferred shareholders.

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18. CONVERTIBLE PROMISSORY NOTES

During the year ended December 31, 2020, a group of investors led by Goldman Sachs Asia Strategic Pte. Ltd. (the “Purchasers”) subscribed and paid cash consideration of US\$200,000 in aggregate for the Company’s convertible promissory notes (the “Notes”). The Notes will mature in five years and, bear interest at the rate of 2% per annum from the issuance date which will be payable semiannually in arrears in cash.

Conversion

Purchasers have the option to convert all or a portion of the outstanding Notes and any accrued and unpaid interest, into ADSs at the conversion price at any time. The conversion price will initially be US\$12.00 per ADS or will be subject to customary adjustments when the decrease in VWAP exceeds certain threshold. In addition, the conversion price will be adjusted in the event when the Company makes certain dilutive issuances of shares.

Redemption upon maturity

Unless previously redeemed or converted, the Company shall redeem the Notes on the maturity date in an amount equal to the sum of (i) 115% of the then outstanding principal amount of the Notes and (ii) the interest accrued but unpaid on the maturity date. The Company may not redeem the Notes at its option prior to the maturity date.

Early redemption at the option of the Purchasers

If any portion of the outstanding principal amount of the Notes has not been converted by the third anniversary of the date of issuance of the Notes, the Purchasers at their sole discretion will have the right to require the Company to redeem, in whole or in part, the outstanding principal amount of the Notes which has not been converted previously in an amount equal to the sum of (i) 109% of the outstanding principal amount and (ii) the interest accrued but unpaid on the outstanding principal amount.

The Company elected to account for the Notes at fair value as a whole. Issuance costs including underwriting commissions and offering expenses were approximately RMB18,932 (US\$2,901), which were recognized in earnings as incurred.

In August and December 2020, Purchasers of the Notes exercised the right to convert 12,499,998 and 11,210,142 newly issued Class A ordinary shares at the conversion price of US\$12 per ADS. Upon conversion, the fair value of converted portion was RMB720,547 (US\$110,429) and issuance costs were approximately RMB2,939 (US\$450), which were credited to capital accounts with the changes in the fair value up to the conversion date recorded in earnings.

The interest expense on the convertible promissory was recorded based on the stated rate of 2% in the interest expense within the consolidated statements of operations. The Company elected the fair value option in accordance with ASC 825 to subsequently remeasure the Notes.

As of December 31, 2020, the fair value of the Notes was RMB3,014,057 (US\$461,924), and the changes in fair value of convertible promissory notes of RMB2,544,220 (US\$389,919) was recognized in the changes in the fair value of convertible promissory notes in the consolidated statement of operations for the year ended December 31, 2020. The fair value changes related to instrument-specific credit risk is nil for the year ended December 31, 2020.

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19. DEFERRED GOVERNMENT GRANTS

During the years ended December 31, 2018, 2019 and 2020, the Company received RMB500, nil and nil, respectively, in government grants from the relevant PRC government authorities for the use in construction of property and equipment. These grants are initially deferred and subsequently recognized in the consolidated statements of operations when the Company has complied with the conditions or performance obligations attached to the related government grants, if any, and the grants are no longer refundable. Grants that subsidize the construction cost of property and equipment are amortized over the life of the related assets as a reduction of the associated depreciation expense.

Movements of deferred government grants were as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Balance at beginning of the year	22,435	15,792	8,501	1,303
Additions	500	—	—	—
Recognized as a reduction of depreciation expense	(7,143)	(7,291)	(2,327)	(357)
Balance at end of the year	<u>15,792</u>	<u>8,501</u>	<u>6,174</u>	<u>946</u>

20. TREASURY STOCK

For the years ended December 31, 2018, 2019 and 2020, the Company repurchased the number of nil, 242,830 and nil ADSs pursuant to the share repurchase plans.

21. ACCUMULATED OTHER COMPREHENSIVE INCOME

The changes in accumulated other comprehensive income by component, net of tax of nil, were as follows:

	Foreign currency
	translation
	RMB
Balance as of January 1, 2018	(2,673)
Current year other comprehensive income	88,652
Balance as of December 31, 2018	85,979
Current year other comprehensive loss	(8,075)
Balance as of December 31, 2019	77,904
Current year other comprehensive loss	(133,439)
Balance as of December 31, 2020	<u>(55,535)</u>
Balance as of December 31, 2020, in US\$	<u>(8,511)</u>

22. MAINLAND CHINA EMPLOYEE CONTRIBUTION PLAN

As stipulated by the regulations of the PRC, full-time employees of the Company in the PRC participate in a government-mandated multiemployer defined contribution plan organized by municipal and provincial governments. Under the plan, certain pension benefits, medical care, unemployment insurance, employee housing fund and other welfare benefits are provided to employees. The Company is required to make contributions to the plan based on certain percentages of employees' salaries. The total expenses for the plan were RMB122,362, RMB121,266 and RMB77,982 (US\$11,951) for the years ended December 31, 2018, 2019 and 2020, respectively.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

23. SHARE-BASED COMPENSATION

Option granted to employees

In order to provide additional incentives to employees and to promote the success of the Company's business, the Company adopted a share incentive plan in 2010 (the "2010 Plan"). Under the 2010 Plan, the Company may grant options and RSUs to its employees, directors and consultants to purchase an aggregate of no more than 39,272,595 ordinary shares of the Company. The 2010 Plan was approved by the Board of Directors and shareholders of the Company on July 16, 2010. The 2010 Plan is administered by the Board of Directors or the Compensation Committee of the Board as set forth in the 2010 Plan (the "Plan Administrator"). All share options to be granted under the 2010 Plan have a contractual term of ten years and generally vest over 3 to 4 years in the grantee's option agreement.

In order to further promote the success and enhance the value, the Company adopted a share incentive plan in 2014 (the "2014 Plan"). Under the 2014 Plan, the Company may issue an aggregate of no more than 20,461,380 shares ("Maximum Number") and such Maximum Number should be automatically increased by a number that is equal to 15% of the number of new shares issued by the Company from time to time. The maximum aggregate number of ordinary shares to be issued under 2014 Plan was subsequently amended to 39,606,817, as approved by the Board of Directors and shareholders of the Company on October 30, 2015. All share options, restricted shares and restricted share units to be granted under the 2014 Plan have a contractual term of ten years and generally vest over 3 to 4 years in the grantee's option agreement.

In order to continuously attract and retain talents, the Company adopted a share incentive plan in 2020 (the "2020 Plan"). Under the 2020 Plan, the Company is authorized to issue an aggregate of 46,560,708 Class A ordinary shares of the Company (equal to the sum of (i) 5% of the Company's share capital as of the date hereof, calculated on an as-converted basis by taking into consideration all the convertible promissory notes issued and to be issued by the Company, and (ii) 7,562,532 Class A ordinary shares reserved under the "2010 Plan" and "2014 Plan" for future grants) will be reserved for future issuance. After adoption of the 2020 Plan, the Company will cease to grant any new awards under the 2010 Plan and 2014 Plan while the 2010 Plan and 2014 Plan and outstanding awards granted thereunder will remain effective and can be amended by the Company from time to time pursuant to the applicable terms thereto. The 2020 Plan was approved by the Board of Directors and shareholder of the Company on May 13, 2020.

The Company granted 487,368, 464,120 and 314,842 RSUs in 2018, 2019 and 2020, respectively, with performance conditions whereby a predetermined number will vest upon the assignment of an annual performance review in accordance with predetermined performance targets for the grantees over a one or four-year period. As it is probable for the Company to estimate the annual performance review ratings for the individual grantees, the Company recognized the related compensation expenses using the accelerated recognition method.

The Company granted 2,188,226, 64,000 and 1,848,701 RSUs in 2018, 2019 and 2020, respectively, with performance conditions whereby a predetermined number will vest upon with the achievement of predetermined operation performance targets for the Company. As it is probable for the Company to estimate the operation performance for the Company, the Company recognized the related compensation expenses using the accelerated recognition method.

The Company granted 547,056, 16,000 and nil RSUs in the years ended 2018, 2019 and 2020, respectively, with market conditions whereby a predetermined number will vest upon with the achievement of predetermined share price targets for the Company. The probability to achieve market condition is reflected in the grant date fair value of the award and thus compensation cost is recognized when the requisite service is rendered using the accelerated method.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

23. SHARE-BASED COMPENSATION (CONTINUED)

Option granted to employees (continued)

The compensation expenses related to remaining unvested share options shall be recognized over the remaining requisite service period or the performance review period. As of December 31, 2020, options to purchase 508,866 of ordinary shares were outstanding.

The following table summarized the Company's employee share option activity under the 2010 Plan:

	Number of options	Weighted average exercise price (US\$)	Weighted average remaining contractual term (Years)	Aggregate intrinsic value (US\$)
Outstanding, January 1, 2020	1,445,345	0.51	1.3	—
Exercised	(459,168)	0.69		
Forfeited	(477,311)	0.53		
Outstanding, December 31, 2020	<u>508,866</u>	0.33	0.8	2,774
Vested and expected to vest at December 31, 2020	<u>508,866</u>	0.33	0.8	2,774
Exercisable as of December 31, 2020	<u>508,866</u>	0.33	0.8	2,774

The aggregate intrinsic value is calculated as the difference between the exercise price of the underlying awards and the fair value of the underlying stock at each reporting date, for those awards that have an exercise price below the estimated fair value of the Company's shares. As of December 31, 2020, the Company had options outstanding to purchase an aggregate of 508,866 shares with an exercise price below the fair value of the Company's shares, resulting in an aggregate intrinsic value of RMB18,100 (US\$2,774).

The aggregate fair value of the outstanding options at the grant date was determined to be RMB6,014 (US\$922) as of December 31, 2020 and such amount is recognized as share-based compensation expenses using the straight-line method for all employee share options granted with graded vesting based on service conditions and the accelerated method for share options granted with graded vesting based on performance conditions. The total fair value of share options exercised during the years ended December 31, 2018, 2019 and 2020 was US\$239, US\$42 and US\$594, respectively. The aggregate intrinsic value of options exercised during the years ended December 31, 2018, 2019 and 2020 was US\$248, US\$22, and US\$2,336, respectively.

As of December 31, 2020, the Company has recorded all the share-based compensation expenses in relation to outstanding share options.

The following table summarized the Company's RSUs activity under the 2014 and 2020 Plan:

	Number of RSUs	Weighted average grant date fair value (US\$)	Weighted average remaining contractual life (Years)	Aggregate intrinsic value (US\$)
Unvested, January 1, 2020	2,696,129	6.83	7.8	
Granted	2,163,543	22.62		
Vested	(433,905)	8.91		
Forfeited	(333,310)	6.59		
Unvested, December 31, 2020	<u>4,092,457</u>	<u>14.95</u>	<u>8.2</u>	<u>141,967</u>

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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23. SHARE-BASED COMPENSATION (CONTINUED)

Option granted to employees (continued)

Share-based compensation expenses for RSUs are measured based on the closing fair market value of the Company's ADS on the date of grant and the reporting date for liability classified RSUs, respectively. The aggregate fair value of the unvested RSUs as of December 31, 2020 was RMB926,335 (US\$141,967), and such amount is recognized as share-based compensation expenses using the straight-line method for the RSUs with graded vesting based on service conditions and the accelerated method for the RSUs with graded vesting based on performance conditions, market conditions and share-settled bonuses. The weighted average grant date fair value of RSUs granted during the years ended December 31, 2018, 2019 and 2020 was US\$6.39, US\$7.67 and US\$22.62, respectively. The total fair value of RSUs vested during the years ended December 31, 2018, 2019 and 2020 was US\$9,422, US\$6,185 and US\$3,866, respectively.

As of December 31, 2020, there was RMB219,998 (US\$33,716) of unrecognized share-based compensation expenses related to RSUs which is expected to be recognized over a weighted average vesting period of 2.5 years. Total unrecognized share-based compensation expenses may be adjusted for future changes when actual forfeitures incurred.

Total share-based compensation expenses relating to share options and RSUs granted to employees recognized for the years ended December 31, 2018, 2019 and 2020 were as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Cost of revenues	2,668	1,884	15,251	2,337
Sales and marketing expenses	2,139	354	38,247	5,862
General and administrative expenses	53,346	40,501	82,672	12,670
Research and development expenses	1,385	1,177	634	97
	<u>59,538</u>	<u>43,916</u>	<u>136,804</u>	<u>20,966</u>

24. TAXATION**Enterprise income tax ("EIT")***Cayman Islands*

The Company is incorporated in the Cayman Islands and conducts its primary business operations through the subsidiaries and VIEs in the PRC and Hong Kong. Under the current laws of the Cayman Islands, the Company is not subject to tax on income or capital gain arising in Cayman Islands.

British Virgin Islands

Subsidiaries in British Virgin Islands are not subject to tax on income or capital gains under the current laws of the British Virgin Islands. Additionally, upon payments of dividends by the Company to its shareholders, no British Virgin Islands withholding tax will be imposed.

Hong Kong

Subsidiaries in Hong Kong are subject to Hong Kong profits tax rate of 16.5% for the years ended December 31, 2018, 2019 and 2020. Additionally, upon payments of dividends by the Company to its shareholders, no HK withholding tax will be imposed.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

24. TAXATION (CONTINUED)

Enterprise income tax (“EIT”) (continued)

Taiwan

DYX Taiwan branch is incorporated in Taiwan and is subject to Taiwan profits tax rate of 20%, 20% and 20% respectively for the years ended December 31, 2018, 2019 and 2020.

The PRC

The Company’s PRC subsidiaries are incorporated in the PRC and subject to the statutory rate of 25% on the taxable income in accordance with the Enterprise Income Tax Law (The “EIT Law”), which was effective since January 1, 2008, except for certain entities eligible for preferential tax rates.

Dividends, interests, rent or royalties payable by the Company’s PRC subsidiaries, to non-PRC resident enterprises, and proceeds from any such non-resident enterprise investor’s disposition of assets (after deducting the net value of such assets) shall be subject to 10% withholding tax, unless the respective non-PRC resident enterprise’s jurisdiction of incorporation has a tax treaty or arrangements with China that provides for a reduced withholding tax rate or an exemption from withholding tax.

21Vianet Beijing was qualified for a High and New Technology Enterprise (“HNTE”) since 2008 and is eligible for a 15% preferential tax rate. In October 2014, 21Vianet Beijing obtained a new certificate and reapplied the certificate in October 2017 and 2020, with a validity term of three years. In accordance with the PRC Income Tax Laws, an enterprise awarded with the HNTE certificate may enjoy a reduced EIT rate of 15%. For the years ended December 31, 2018, 2019 and 2020, the tax rate for 21Vianet Beijing was 15%, 15% and 15%, respectively.

In April 2011, Xi’an Sub, a subsidiary located in Shaanxi Province, was qualified for a preferential tax rate of 15% and started to apply this rate from then on. The preferential tax rate is awarded to companies that are located in West Regions of China which operate in certain encouraged industries. For the years ended December 31, 2018, 2019 and 2020, the tax rate assessed for Xi’an Sub was 15%, 15% and 15%, respectively.

In October 2015, SH Blue Cloud, a subsidiary located in Shanghai, was qualified for a HNTE and became eligible for 15% preferential tax rate. The certificate was reapplied in November 2018 with a validity term of three years. Accordingly, for the years ended December 31, 2018, 2019 and 2020, SH Blue Cloud enjoyed a preferential tax rate of 15%.

In November 2016, SZ DYX, a subsidiary located in Guangdong Province, was qualified for a HNTE and became eligible for 15% preferential tax rate effective for three consecutive years and the certificate was reapplied in November 2019 with a validity term of three years. Accordingly, for the years ended December 31, 2018, 2019 and 2020, SZ DYX enjoyed a preferential tax rate of 15%.

The New EIT Law also provides that enterprises established under the laws of foreign countries or regions and whose “place of effective management” is located within the PRC are considered PRC tax resident enterprises and subject to PRC income tax at the rate of 25% on worldwide income. The definition of “place of effective management” refers to an establishment that exercises, in substance, overall management and control over the production and business, personnel, accounting, properties, etc. of an enterprise.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

24. TAXATION (CONTINUED)

Enterprise income tax (“EIT”) (continued)

The PRC (continued)

As of December 31, 2020, the administrative practice associated with interpreting and applying the concept of “place of effective management” is unclear. If the Company is deemed as a PRC tax resident, it will be subject to 25% PRC EIT under the New EIT Law on its worldwide income, meanwhile the dividend it receives from another PRC tax resident company will be exempted from 25% PRC income tax. The Company will continue to monitor changes in the interpretation or guidance of this law.

Loss before income taxes consisted of:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Non-PRC	(214,063)	(178,762)	(2,708,101)	(415,033)
PRC	51,738	2,953	137,178	21,023
	<u>(162,325)</u>	<u>(175,809)</u>	<u>(2,570,923)</u>	<u>(394,010)</u>

Income tax expenses comprised of:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Current	(44,187)	(70,324)	(131,844)	(20,206)
Deferred	19,776	64,887	22,508	3,450
	<u>(24,411)</u>	<u>(5,437)</u>	<u>(109,336)</u>	<u>(16,756)</u>

The reconciliation of tax computed by applying the statutory income tax rate of 25% for the years ended December 31, 2018, 2019 and 2020 applicable to the PRC operations to income tax expenses were as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Loss before income taxes	(162,325)	(175,809)	(2,570,923)	(394,010)
Income tax benefits computed at applicable tax rates (25%)	40,581	43,952	642,731	98,503
Non-deductible expenses	(2,834)	(23,082)	(4,117)	(631)
Research and development expenses	25,906	19,688	32,777	5,023
Preferential rate	11,701	20,213	26,554	4,070
Current and deferred tax rate differences	37,934	(8,699)	(36,391)	(5,577)
International rate differences	(63,525)	(77,066)	(711,962)	(109,113)
Tax exempted income	—	754	1,087	167
PRC withholding tax	—	—	(10,263)	(1,573)
Unrecognized tax benefits (expenses)	1,472	1,728	(58,449)	(8,958)
Change in valuation allowance	(79,694)	25,423	6,465	991
Prior year provision to return true up	4,048	(8,348)	2,232	342
Income tax expenses	<u>(24,411)</u>	<u>(5,437)</u>	<u>(109,336)</u>	<u>(16,756)</u>

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

24. TAXATION (CONTINUED)

Deferred Tax

The significant components of deferred taxes were as follows:

	As of December 31,		
	2019 RMB	2020 RMB	US\$
Deferred tax assets			
Non-current			
Allowance for doubtful debt	48,568	39,886	6,113
Impairment of long-lived assets	—	13,467	2,064
Impairment of long-term investment	—	2,150	330
Accrued expense	21,139	24,986	3,829
Tax losses	146,996	171,211	26,239
Property and equipment	20,567	22,631	3,468
Intangible assets	3,691	5,765	884
Finance lease	395,555	390,925	59,912
Deferred government grant	1,189	1,357	208
Operating lease	269,468	292,210	44,783
Loss picked up on equity method investments	56,706	57,201	8,766
Valuation allowance	(158,638)	(170,104)	(26,070)
Total deferred tax assets, net of valuation allowance	805,241	851,685	130,526
Deferred tax liabilities			
Non-current			
Intangible assets	104,217	186,258	28,545
Property and equipment	81,424	143,873	22,050
Capitalized interest expense	15,146	19,339	2,963
Finance lease	326,407	313,102	47,985
Operating lease	269,468	292,210	44,783
Investment in subsidiaries	—	10,263	1,573
Gain picked up from equity method investments	1,785	252	39
Total non-current deferred tax liabilities	798,447	965,297	147,938
Net deferred tax assets (liabilities)	6,794	(113,612)	(17,412)
Analysis as:			
Deferred tax assets	209,366	185,481	28,426
Deferred tax liabilities	202,572	299,093	45,838
Net deferred tax assets (liabilities)	6,794	(113,612)	(17,412)

As of December 31, 2020, the Company has net tax operating losses from its PRC subsidiaries and its Consolidated VIEs, as per filed tax returns, of RMB710,815 (US\$108,937), which will expire between 2021 to 2030.

As of December 31, 2020, the undistributed earnings of the Company's PRC subsidiaries the Company intends to permanently reinvested were RMB1,262,028 (US\$193,414). In 2020, other than these indefinitely reinvested amount, the Company has other operation or distribution plan for the new VIE, SH Zhiyan. As of December 31, 2020, the related PRC withholding tax liability accrued was RMB10,263 (US\$1,573).

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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24. TAXATION (CONTINUED)

Unrecognized Tax Benefits

As of December 31, 2019 and 2020, the Company recorded unrecognized tax benefits of RMB2,443 and RMB68,696 (US\$10,528), respectively.

The unrecognized tax benefits and its related interest are primarily related to non-deductible expenses and accrued expenses. RMB58,916 of the total unrecognized tax benefits, ultimately recognized, will impact the effective tax rate. It is possible that the amount of uncertain tax benefits will change in the next 12 months, however, an estimate of the range of the possible outcomes cannot be made at this time.

A roll-forward of unrecognized tax benefits principle was as follows:

	For the years ended December 31,		
	2019	2020	
	RMB	RMB	US\$
Balance at beginning of year	4,509	1,722	264
Reversal based on tax positions related to prior years	(3,266)	(629)	(96)
Additions based on tax positions related to the current year	479	61,491	9,423
Balance at end of year	<u>1,722</u>	<u>62,584</u>	<u>9,591</u>

For the years ended December 31, 2018, 2019 and 2020, the Company reversed (recorded) interest expense of RMB (2,761), RMB (1,447) and RMB5,391 (US\$826), respectively. Accumulated interest expense recorded by the Company was RMB721 and RMB6,112 (US\$937) as of December 31, 2019 and 2020, respectively. As of December 31, 2020, the tax years ended December 31, 2015 through 2020 for the PRC subsidiaries remain open for statutory examination by the PRC tax authorities.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

25. RELATED PARTY TRANSACTIONS

a) Related parties *

Name of related parties	Relationship with the Company
Xiaomi Ventures Limited (“Xiaomi”), Xiaomi Communication Technology Co.,Ltd., and its subsidiary, Beijing Xiaomi Mobile Software Co., Ltd.(collectively, “Xiaomi Group”) ⁽²⁾	A company controlled by principal shareholder of the Company before December 30, 2020
King Venture Holdings Limited (“King Venture”) and Beijing Kingsoft Cloud Network Technology Co., Ltd. (“BJ Kingsoft”) ⁽¹⁾	A company controlled by principal shareholder of the Company before December 30, 2020
Beijing Cheetah Mobile Technology Co., Ltd.(“BJ Cheetah”) ⁽¹⁾	A company controlled by principal shareholder of the Company before December 30, 2020
Unisvnet Technology Co., Ltd. (“Unisvnet”)	A company controlled by controlling shareholder of the Company
Beijing Tuspark Harmonious Investment Development Co., Ltd. (“Tuspark Harmonious”)	A company controlled by controlling shareholder of the Company
Ziguang Financial Leasing Co., Ltd. (“Ziguang Finance Leasing”)	A company controlled by principal shareholder of the Company
Qidi Bus (Beijing) Technology Co., Ltd. (“Qidi Tech”)	A company controlled by controlling shareholder of the Company
Beijing Qidi Yefeng Investment Co., Ltd. (“Beijing Qidi Yefeng”)	A company controlled by controlling shareholder of the Company
Beijing Huaqing Property Management Co., Ltd. (“Beijing Huaqing”)	A company controlled by controlling shareholder of the Company
Shanghai Shibei Hi-Tech Co., Ltd. (“SH Shibei”)	Noncontrolling shareholder of a subsidiary
Marble Stone SH Group Limited (“Marble SH”) ⁽⁴⁾	A company controlled by minority shareholder of the Company
Marble Stone Holdings Limited (“Marble Holdings”) ⁽⁴⁾	A company controlled by minority shareholder of the Company
Shanghai Puping Information Technology Co., Ltd. (“Shanghai Puping”) ⁽⁴⁾	A company controlled by minority shareholder of the Company
Shihua DC Investment Holdings 2 Limited (“Shihua Holdings 2”)	Equity investee of the Company in 2018 and wholly-owned subsidiary since August 20, 2019 (Note 4)
Beijing Chengyishidai Network Engineering Technology Co., Ltd.(“CYSD”) ⁽³⁾	Equity investee of the Company
WiFire (Beijing) Technology Co., Ltd. (“WiFire BJ”) ⁽³⁾	Equity investee of the Company
Beijing Fastweb Network Technology Co., Ltd. (“BJ Fastweb”) ⁽³⁾	Equity investee of the Company
Shanghai Fawei Technology Co., Ltd. (“SH Fawei”) ⁽³⁾	Equity investee of the Company
Wuhan Fastweb Cloud Computing Co., Ltd. (“WH Fastweb”) ⁽³⁾	Equity investee of the Company
Beijing Bozhi Ruihai Network Technology Co., Ltd. (“BZRH”) ⁽³⁾	Equity investee of the Company
WiFire (Shanghai) Network Technology Co., Ltd. (“SH Guotong”) ⁽³⁾	Equity investee of the Company
Jingliang Interconnected Cloud Technology Co., Ltd. (“Jingliang Inter Cloud”)	Equity investee of the Company
Beijing Taiji Data Tech Co., Ltd. (“Taiji”)	Equity investee of the Company in 2018, 2019 and wholly-owned subsidiary since January 31, 2020
Shihua DC Investment Management Limited (“Shihua Investment Management”)	Equity investee of the Company in 2018, 2019 and wholly-owned subsidiary since January 31, 2020
Shihua DC Investment Management Group Limited (“Shihua Investment Group”)	Equity investee of the Company in 2018, 2019 and wholly-owned subsidiary since January 31, 2020
Apurimac Partners Limited (“APL”)	A company controlled by an officer of the Company
Asialeads Capital (Cayman) Limited	A company in which a director of the Company acts as an executive

* These are the related parties that have engaged in significant transactions with the Company for the years ended December 31, 2018, 2019 and 2020.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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25. RELATED PARTY TRANSACTIONS (CONTINUED)

- a) Related parties (continued)
- (1) These companies are ultimately controlled by the same party. King Venture made a significant investment in the Company in 2015. These companies ceased to be related parties as the Company repurchased the shares from King Venture on December 30, 2020.
 - (2) These companies are ultimately controlled by the same party. Xiaomi made a significant investment in the Company in 2015. These companies ceased to be related parties as the Company repurchased the shares from King Venture on December 30, 2020.
 - (3) These entities were disposed by the Company in September 2017, included in WiFire Entities, and determined by the Company as related parties as of December 31, 2018, 2019 and 2020.
 - (4) These entities are controlled by Waburg Pincus, a significant minority shareholder of the Company.
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21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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25. RELATED PARTY TRANSACTIONS (CONTINUED)

b) Other than disclosed elsewhere, the Company had the following significant related party transactions for the years ended December 31, 2018, 2019 and 2020:

	For the years ended December 31,			
	2018	2019	2020	2020
	RMB	RMB	RMB	US\$
Services provided to:				
-Xiaomi Group	374,085	437,694	527,679	80,870
-Qidi Tech	—	7,427	3,478	533
-Jingliang Inter Cloud	—	—	880	135
-BJ Cheetah	2,079	169	98	15
-BJ Kingsoft	6,281	3,475	43	7
-Taiji	13,681	7,899	—	—
-WiFire BJ	16,490	1,934	—	—
-Unisvnet	1,011	—	—	—
-Others	4,493	1,494	305	47
Services provided by:				
-CYSD	18,667	38,918	38,918	5,964
-BJ Kingsoft	13,204	3,492	16,867	2,585
-APL	—	—	8,124	1,245
-Jingliang Inter Cloud	3,477	8,829	4,956	760
-Beijing Huaqing	—	—	4,389	673
-Taiji	7,095	19,942	—	—
-DCSS	5,238	—	—	—
-BZRH	4,239	—	—	—
-WiFire BJ	4,066	—	—	—
-Others	6,396	5,866	796	122
Loan to:				
-Shanghai Piping	—	—	62,531	9,583
-Taiji	—	1,500	—	—
Interest income from loan to:				
-BJ Fastweb	700	700	—	—
Lease deposit paid to:				
-Ziguang Finance Leasing	2,042	6,154	135	21
-Tuspark Harmonious	11,472	—	—	—
Lease payment paid to:				
-Tuspark Harmonious	—	68,832	43,703	6,698
-Ziguang Finance Leasing	4,897	17,156	30,776	4,717
-Beijing Qidi Yefeng	—	—	4,516	692
Cash consideration for shares repurchase				
-King Venture	—	—	130,472	19,996

During the year ended December 31, 2020, the company entered into an agreement with Asialeads Capital (Cayman) Limited purchased the Company's convertible promissory notes for total gross proceeds of US\$50,000.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

25. RELATED PARTY TRANSACTIONS (CONTINUED)

c) The Company had the following related party balances as of December 31, 2019 and 2020:

	As of December 31,		
	2019 RMB	2020 RMB	2020 US\$
Amounts due from related parties:			
Current:			
-Shanghai Puping	—	62,531	9,583
-SH Shibe	9,800	9,800	1,502
-Ziguang Finance Leasing	—	2,042	313
-Marble SH ⁽²⁾	100,106	—	—
-Shihua Investment Group ⁽³⁾	82,542	—	—
-Xiaomi Group	39,778	—	—
-Marble Holdings ⁽²⁾	29,736	—	—
-Shihua Investment Management ⁽³⁾	27,905	—	—
-Taiji	9,499	—	—
-Qidi Tech	1,249	—	—
-Others	1,050	1,146	176
	<u>301,665</u>	<u>75,519</u>	<u>11,574</u>
Non-current:			
-Tuspark Harmonious	11,863	11,863	1,818
-Ziguang Finance Leasing	8,195	6,289	964
-Beijing Qidi Yefeng	—	1,124	172
-Others	596	1,286	197
	<u>20,654</u>	<u>20,562</u>	<u>3,151</u>
Amounts due to related parties:			
Current:			
-Ziguang Finance Leasing	27,160	31,681	4,855
-Tuspark Harmonious	24,917	13,557	2,078
-Beijing Qidi Yefeng	—	4,410	676
-Shihua Investment Group ⁽³⁾	84,021	—	—
-Shihua Investment Management ⁽³⁾	22,484	—	—
-WiFire BJ ⁽¹⁾	6,330	—	—
-BJ Kingsoft	1,073	—	—
-APL	—	783	120
-Others	950	576	88
	<u>166,935</u>	<u>51,007</u>	<u>7,817</u>
Non-current:			
-Tuspark Harmonious	698,511	715,992	109,731
-Ziguang Finance Leasing	47,388	22,247	3,409
-Beijing Qidi Yefeng	—	9,507	1,457
	<u>745,899</u>	<u>747,746</u>	<u>114,597</u>

- (1) In 2019, RMB20,367 of amounts due from/to WiFire Entities were offset according to the multi-party debt offset agreement signed in 2019. The remaining RMB52,142 of amounts due from WiFire Entities was fully impaired considering low collectability.
- (2) Amounts due from Marble SH and Marble Holdings represented the unpaid cash consideration to the Company for acquiring the 100% equity interest in certain of Shihua Holdings 2's subsidiaries in 2019 (Note 4).
- (3) Amounts due from/to Shihua Investment Management and Shihua Investment Group were generated from the assets acquisition of Shihua Holdings 2 (Note 4).

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

26. RESTRICTED NET ASSETS

The Company's ability to pay dividends is primarily dependent on the Company receiving distributions of funds from its subsidiaries. Relevant PRC statutory laws and regulations permit payments of dividends by the Company's PRC subsidiaries only out of their retained earnings, if any, as determined in accordance with PRC accounting standards and regulations. The results of operations reflected in the consolidated financial statements prepared in accordance with U.S. GAAP differ from those reflected in the statutory financial statements of the Company's PRC subsidiaries.

In accordance with the PRC Regulations on Enterprises with Foreign Investment and the articles of association of the Company's PRC subsidiaries, a foreign-invested enterprise established in the PRC is required to provide certain statutory reserves, namely general reserve fund, the enterprise expansion fund and staff welfare and bonus fund which are appropriated from net profit as reported in the enterprise's PRC statutory accounts. A foreign-invested enterprise is required to allocate at least 10% of its annual after-tax profit to the general reserve until such reserve has reached 50% of its respective registered capital based on the enterprise's PRC statutory accounts. Appropriations to the enterprise expansion fund and staff welfare and bonus fund are at the discretion of the board of directors for all foreign-invested enterprises. The aforementioned reserves can only be used for specific purposes and are not distributable as cash dividends. 21Vianet China was established as a foreign-invested enterprise and, therefore, is subject to the above mandated restrictions on distributable profits. As of December 31, 2019, and 2020, the Company's PRC subsidiaries had appropriated RMB60,469 and RMB74,462 (US\$11,412), respectively, in its statutory reserves.

As a result of these PRC laws and regulations subject to the limit discussed above that require annual appropriations of 10% of after-tax income to be set aside, prior to payment of dividends as general reserve fund, the Company's PRC subsidiaries are restricted in their ability to transfer a portion of their net assets to the Company. Amounts restricted include paid-in capital, additional paid in capital and statutory reserve funds of the Company's PRC subsidiaries and the equity of the Consolidated VIEs, as determined pursuant to PRC generally accepted accounting principles, totaling an aggregate of RMB9,885,573 (US\$1,515,030) as of December 31, 2020.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

27. LOSS PER SHARE

Basic and diluted loss per share for each of the years presented were calculated as follows:

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Numerator:				
Net loss	(186,736)	(181,246)	(2,680,259)	(410,766)
Net profit attributable to noncontrolling interest	(18,329)	(1,046)	(29,088)	(4,458)
Net loss attributable to the Company	(205,065)	(182,292)	(2,709,347)	(415,224)
Plus undeclared cumulative dividend on perpetual convertible preferred shares	—	—	(22,806)	(3,495)
Deemed distribution to perpetual convertible preferred shareholders	—	—	(470,643)	(72,129)
Adjusted net loss attributable to ordinary shareholders	<u>(205,065)</u>	<u>(182,292)</u>	<u>(3,202,796)</u>	<u>(490,848)</u>
Denominator:				
Weighted average number of shares outstanding—basic	674,732,130	668,833,756	716,888,919	716,888,919
Weighted average number of shares outstanding—diluted	674,732,130	668,833,756	716,888,919	716,888,919
Loss per share—Basic:				
Net loss	<u>(0.30)</u>	<u>(0.27)</u>	<u>(4.47)</u>	<u>(0.69)</u>
	<u>(0.30)</u>	<u>(0.27)</u>	<u>(4.47)</u>	<u>(0.69)</u>
Loss per share—Diluted:				
Net loss	<u>(0.30)</u>	<u>(0.27)</u>	<u>(4.47)</u>	<u>(0.69)</u>
	<u>(0.30)</u>	<u>(0.27)</u>	<u>(4.47)</u>	<u>(0.69)</u>

In 2018, 2019 and 2020, the Company issued nil, 6,700,002 and nil ordinary shares to its share depository bank which will be used to settle stock option awards upon their exercise, respectively. No consideration was received by the Company for this issuance of ordinary shares. These ordinary shares are legally issued and outstanding but are treated as escrowed shares for accounting purposes and therefore, have been excluded from the computation of loss per share. Any ordinary shares not used in the settlement of stock option awards will be returned to the Company.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

28. SHARE CAPITAL

Holders of Class A Ordinary Shares, Class B Ordinary Shares and Class C Ordinary Shares are entitled to the same rights except for voting and conversion rights. In respect of matters requiring a shareholder's vote, each Class A Ordinary Share is entitled to one vote right, each Class B Ordinary Share is entitled to ten votes, and each Class C Ordinary Share is entitled to one vote and certain veto rights. Each Class B Ordinary Share and Class C Ordinary Share is convertible into one Class A Ordinary Share at any time by the holder. Class A Ordinary Shares are not convertible into Class B Ordinary Share and Class C Ordinary Shares under any circumstances. Upon any transfer of Class B Ordinary Shares and Class C Ordinary Shares by a holder to any person or entity which is not an affiliate of such holder, such Class B Ordinary Shares and Class C Ordinary Share will be automatically converted into an equal number of Class A Ordinary Shares.

For the years ended December 31, 2018 and 2019, 3,070,500 and 304,200 Class A ordinary shares were issued to settle the share options exercised and RSUs vested. For the year ended December 31, 2020, 104,304 Class A ordinary shares issued to settle RSUs vested in prior years were repurchased and cancelled.

In October 2019, the Company issued 60,000 newly created Class C ordinary shares to Personal Group Limited, a British Virgin Islands company wholly owned by Mr. Sheng Chen, the executive chairman of our board of directors, at a price of US\$1.35 per share, to execute business strategies over the long term under the leadership of the Company's board and senior management.

In August 2020, the Company completed a public offering in which the Company offered and sold 19,550,000 ADSs (or 117,300,000 Class A ordinary shares), including 2,550,000 ADSs (or 15,300,000 Class A ordinary shares) purchased by the underwriters by exercising their option. The Company raised a total of RMB2,680,421 (US\$410,792) in proceeds from this public offering, net of underwriting discounts and commissions and other issuance costs.

In 2020, Purchaser of the convertible promissory notes exercised the right to convert approximately 23.7% of the total principal amount issued to 23,710,140 newly issued Class A ordinary shares at the conversion price of US\$12 per ADS.

29. FAIR VALUE MEASUREMENTS

The Company applies ASC 820. ASC 820 defines fair value, establishes a framework for measuring fair value and expands disclosures about fair value measurements. ASC 820 requires disclosures to be provided on fair value measurement.

ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

Level 1 — Observable inputs that reflect quoted prices (unadjusted) for identical assets or liabilities in active markets.

Level 2 — Include other inputs that are directly or indirectly observable in the marketplace.

Level 3 — Unobservable inputs which are supported by little or no market activity.

ASC 820 describes three main approaches to measuring the fair value of assets and liabilities: (1) market approach; (2) income approach; and (3) cost approach. The market approach uses prices and other relevant information generated from market transactions involving identical or comparable assets or liabilities. The income approach uses valuation techniques to convert future amounts to a single present value amount. The measurement is based on the value indicated by current market expectations about those future amounts. The cost approach is based on the amount that would currently be required to replace an asset.

Cash equivalents, time deposits and bonds payable are classified within Level 1 because they are valued by using quoted market prices.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

29. FAIR VALUE MEASUREMENTS (CONTINUED)

The contingent considerations for the acquired businesses, convertible promissory notes, liability classified RSU and long-term investments are classified within Level 3. The contingent considerations are based on the achievement of certain financial targets in accordance with the sales and purchase agreements for the various periods, as well as other non-financial measures. The fair value of liability classified RSU was estimated using the share price and exchange rate that the Company estimates to be settled in shares. The fair value of convertible promissory notes is measured using binomial tree pricing model that involves several parameters including the Company's stock price, stock price volatility determined from the Company's historical stock prices, the remaining maturity term and the discount rate.

The Company measures equity investments elected to use the measurement alternative at fair value on a nonrecurring basis, in the cases of an impairment charge is recognized, fair value of an investment is remeasured in an acquisition/a disposal, and an orderly transaction for identical or similar investments of the same issuer was identified.

Assets and liabilities measured at fair value on a recurring basis were summarized below:

	Fair value measurement using:			Fair value at December 31, 2019 RMB
	Quoted prices in active markets for identical assets (Level 1) RMB	Significant other observable inputs (Level 2) RMB	Unobservable inputs (Level 3) RMB	
Cash equivalents:				
- Time deposits	117,825	—	—	117,825
Short-term investments:				
- Time deposits	363,856	—	—	363,856
Long-term investments				
- Available-for-sale debt securities	—	—	1,713	1,713
Assets	481,681	—	1,713	483,394
Short-term borrowings:				
- Current portion of bonds payable	912,416	—	—	912,416
Long-term borrowings:				
- Bonds payable	2,089,114	—	—	2,089,114
Other liabilities:				
- Liability classified RSU	—	—	2,109	2,109
Liabilities	3,001,530	—	2,109	3,003,639

	Fair value measurement using:			Fair value at December 31, 2020	
	Quoted prices in active markets for identical assets (Level 1) RMB	Significant other observable inputs (Level 2) RMB	Unobservable inputs (Level 3) RMB	RMB	US\$
Cash equivalents:					
- Time deposits	645,879	—	—	645,879	98,985
Short-term investments:					
- Time deposits	285,872	—	—	285,872	43,812
Long-term investments:					
- Available-for-sale debt securities	—	—	1,713	1,713	263
Assets	931,751	—	1,713	933,464	143,060
Short-term borrowings:					
- Current portion of bonds payable	1,998,088	—	—	1,998,088	306,220
Convertible promissory notes	—	—	3,014,057	3,014,057	461,924
Other liabilities:					
- Liability classified RSU	—	—	—	—	—
Liabilities	1,998,088	—	3,014,057	5,012,145	768,144

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

29. FAIR VALUE MEASUREMENTS (CONTINUED)

The following table presented a reconciliation of all liabilities measured at fair value on a recurring basis using significant unobservable inputs (level 3):

	Liability classified	
	RSU	
	RMB	
Fair value at January 1, 2019		4,970
Reclassification to equity		(2,861)
Reversal		—
Transfers in and/or out of Level 3		—
Fair value at December 31, 2019		<u>2,109</u>
Reclassification to equity		(2,109)
Reversal		—
Transfers in and/or out of Level 3		—
Fair value at December 31, 2020		<u>—</u>
Fair value at December 31, 2020 (US\$)		<u>—</u>
	Convertible promissory notes	
	RMB	US\$
Convertible promissory notes fair value (Note 18)	1,409,385	215,998
Foreign exchange loss	(219,001)	(33,564)
Changes in the fair value	2,544,220	389,919
Reclassification to equity	(720,547)	(110,429)
Transfers in and/or out of Level 3	—	—
Fair value at December 31, 2020	<u>3,014,057</u>	<u>461,924</u>

Assets measured at fair value on a non-recurring basis

The Company measures certain non-financial assets on a nonrecurring basis. The Company's non-financial long-lived assets, such as intangible assets, goodwill and fixed assets, would be measured at fair value only if they were determined to be impaired on an other-than-temporary basis. The fair values of non-financial long-lived assets were measured under income approach, based on the Company's best estimation which primarily includes significant unobservable inputs (level 3) such as future cash flows and discount rate.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

30. COMMITMENTS AND CONTINGENCIES***Capital commitments***

As of December 31, 2020, the Company has the following commitments to purchase certain computer and network equipment and construction-in-progress:

	<u>RMB</u>	<u>US\$</u>
For the year ending December 31, 2021	1,678,273	257,207
2022 and thereafter	—	—
	<u>1,678,273</u>	<u>257,207</u>

Bandwidth and cabinet capacity purchase commitments

As of December 31, 2020, the Company has outstanding purchase commitments in relation to bandwidth and cabinet capacity consisting of the following:

	<u>RMB</u>	<u>US\$</u>
For the year ending December 31, 2021	706,715	108,309
2022	149,331	22,886
2023	6,458	990
2024	2,189	335
2025 and thereafter	6,512	998
	<u>871,205</u>	<u>133,518</u>

Income Taxes

As of December 31, 2020, the Company has recognized an accrual of RMB68,696 (US\$10,528) for unrecognized tax benefits and its interest (Note 24). The final outcome of the tax uncertainty is dependent upon various matters including tax examinations, interpretation of tax laws or expiration of status of limitation. However, due to the uncertainties associated with the status of examinations, including the protocols of finalizing audits by the relevant tax authorities, there is a high degree of uncertainty regarding the future cash outflows associated with these tax uncertainties.

Securities Litigation

In 2014, the Company and certain of its officers and directors were named as defendants in two putative securities class actions filed in U.S. federal district courts in Texas, the complaints in both actions alleged that certain of the Company's financial statements and other public disclosures contained misstatements or omissions and asset claims under the U.S. securities laws. In 2016, the Company filed a motion to dismiss the complaint and in 2017, the magistrate judge issued a report and recommendation to deny the Company's motion to dismiss.

On April 9, 2018, the lead plaintiff of the putative class action filed an unopposed motion for preliminary approval of settlement for both of the aforementioned class actions, requesting that, among others, the Court preliminarily approve a settlement agreement that the parties reached to settle the case for RMB58,808. On November 9, 2018, the Court approved the settlement and issued final judgment, ending the case. The Company has paid the settlement amount as of December 31, 2018.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

30. COMMITMENTS AND CONTINGENCIES (CONTINUED)

Operating litigation

In March 2019, a third-party supplier filed a lawsuit against the Company, alleging that the Company had not fully fulfilled its obligations under a network infrastructure cooperation agreement entered into in 2013.

On October 30, 2020, the court announced the first judgement settlement and the settlement came into force from November 18, 2020. The Company assessed that the settlement is probable and recorded an estimated loss of RMB1,628 (US\$250) within accrued expenses and other payables in the consolidated balance sheet as of December 31, 2020.

In the ordinary course of business, the Company may from time to time be involved in legal proceedings and litigations. As of December 31, 2020, the Company did not consider an unfavorable outcome in any material respects in the outstanding legal proceedings and litigations to be probable.

31. SUBSEQUENT EVENTS

In January 2021, the Company has issued a zero-coupon rate convertible senior notes for a total aggregate principal amount of US\$600,000. The convertible notes will mature in five years from the date of issuance if not converted.

On March 1, 2021, 150,000 Series A perpetual convertible preferred shares has been converted into 54,570,816 Class A Ordinary Shares.

In April 2021, the Company repurchased from Tuspark Innovation Venture Ltd., (“Tuspark”) 48,634,493 Class B ordinary shares for an aggregate purchase price of approximately US\$260 million. The repurchase price will be at US\$5.346 per ordinary share, or US\$32.076 per ADS. The director appointed by Tuspark has resigned from the board of directors of the Company. Immediately following the consummation of the transaction, all of the remaining Class B ordinary shares held by Tuspark have been converted into the same number of Class A ordinary shares of the Company. Tuspark has also agreed to sell and transfer additional ordinary shares to Beacon Capital Group Inc., a company affiliated with Mr. Josh Sheng Chen, at the same price. If this additional share transfer is consummated, Tuspark will retain a small shareholding of less than 5% in the Company.

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

32. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION

Condensed balance sheets

	Notes	As of December 31,		
		2019	2020	
		RMB	RMB	US\$
ASSETS				
Current assets				
Cash and cash equivalents		243,989	62,116	9,520
Short-term investments		138,848	—	—
Prepaid expenses and other current assets		105,597	97,391	14,925
Amounts due from subsidiaries	(b)	6,128,595	9,320,580	1,428,441
Total current assets		6,617,029	9,480,087	1,452,886
Non-current assets				
Investments in subsidiaries		1,446,563	2,169,222	332,448
Total non-current assets		1,446,563	2,169,222	332,448
Total assets		8,063,592	11,649,309	1,785,334
LIABILITIES AND SHAREHOLDERS' EQUITY				
Current liabilities:				
Accrued expenses and other payables		57,612	49,648	7,609
Account payables		56	52	8
Interest payable		58,525	37,353	5,725
Current portion of bonds payable		911,147	1,943,619	297,873
Amount due to related parties		—	783	120
Amounts due to subsidiaries	(b)	22,471	38,863	5,955
Total current liabilities		1,049,811	2,070,318	317,290
Non-current liabilities				
Bonds payable	(c)	2,060,708	—	—
Convertible promissory notes		—	3,014,057	461,924
Total non-current liabilities		2,060,708	3,014,057	461,924
Total liabilities		3,110,519	5,084,375	779,214
Shareholders' equity:				
Class A Ordinary shares (par value of US\$0.00001 per share; 1,200,000,000 and 1,199,790,000 shares authorized; 505,253,850 and 672,024,600 shares issued and outstanding as of December 31, 2019 and 2020, respectively)		34	44	7
Class B Ordinary shares (par value of US\$0.00001 per share; 300,000,000 and 300,000,000 shares authorized; 174,649,638 and 145,875,113 shares issued and outstanding as of December 31, 2019 and 2020, respectively)		12	12	2
Class C Ordinary shares (par value of US\$0.00001 per share; 60,000 and 60,000 shares authorized; 60,000 and 60,000 shares issued and outstanding as of December 31, 2019 and 2020, respectively)		—	—	—
Series A perpetual convertible preferred shares (par value of US\$0.00001 per share; nil and 150,000 shares issued and outstanding as of December 31, 2019 and 2020, respectively)		—	1,047,468	160,531
Additional paid-in capital		9,202,567	13,083,119	2,005,076
Accumulated other comprehensive loss (income)		77,904	(55,535)	(8,511)
Accumulated deficit		(3,977,921)	(7,160,651)	(1,097,418)
Treasury stock		(349,523)	(349,523)	(53,567)
Total shareholders' equity		4,953,073	6,564,934	1,006,120
Total liabilities and shareholders' equity		8,063,592	11,649,309	1,785,334

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

32. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION (CONTINUED)

Condensed statements of operations

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Operating Expenses				
General and administrative expenses	(65,949)	(44,490)	(94,175)	(14,433)
Changes in the fair value of contingent purchase consideration payables	13,905	—	—	—
Operating loss	(52,044)	(44,490)	(94,175)	(14,433)
Other loss	(262,186)	(274,572)	(168,656)	(25,846)
Changes in the fair value of convertible promissory notes	—	—	(2,544,220)	(389,919)
Share of profits from subsidiaries and Consolidated VIEs	109,165	136,770	97,704	14,974
Net loss attributable to 21Vianet Group, Inc.	(205,065)	(182,292)	(2,709,347)	(415,224)
Income tax expense	—	—	—	—
Net loss	(205,065)	(182,292)	(2,709,347)	(415,224)

Condensed statements of comprehensive loss

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net loss	(205,065)	(182,292)	(2,709,347)	(415,224)
Other comprehensive income (loss), net of tax of nil:				
Foreign currency translation adjustments, net of tax of nil	88,652	(8,075)	(133,439)	(20,450)
Other comprehensive income (loss), net of tax of nil:	88,652	(8,075)	(133,439)	(20,450)
Comprehensive loss	(116,413)	(190,367)	(2,842,786)	(435,674)
Comprehensive loss attributable to 21Vianet Group, Inc.	(116,413)	(190,367)	(2,842,786)	(435,674)

Condensed statements of cash flows

	For the years ended December 31,			
	2018	2019	2020	
	RMB	RMB	RMB	US\$
Net cash used in operating activities	(166,068)	(142,989)	(743,944)	(114,014)
Net cash used in investing activities	(203,651)	(1,011,257)	(3,036,370)	(465,344)
Net cash generated from financing activities	43,145	807,765	3,598,441	551,485
Net decrease in cash and cash equivalents and restricted cash	(326,574)	(346,481)	(181,873)	(27,873)
Cash and cash equivalents and restricted cash at beginning of the year	917,044	590,470	243,989	37,393
Cash and cash equivalents and restricted cash at end of the year	590,470	243,989	62,116	9,520

21VIANET GROUP, INC.
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(Amounts in thousands of RMB and US\$, unless otherwise stated)

32. PARENT COMPANY ONLY CONDENSED FINANCIAL INFORMATION (CONTINUED)

(a) Basis of presentation

In the Company-only financial statements, the Company's investment in subsidiaries is stated at cost plus equity in undistributed earnings of subsidiaries since inception.

The Company records its investment in its subsidiary under the equity method of accounting as prescribed in ASC 323-10, *Investment-Equity Method and Joint Ventures*, and such investment is presented on the balance sheets as "Investments in subsidiaries" and the share of the subsidiaries' profit or loss is presented as "Share of profits of subsidiaries and Consolidated VIEs" on the statements of operations.

The subsidiaries did not pay any dividends to the Company for the years presented.

Certain information and footnote disclosures normally included in financial statements prepared in accordance with U.S. GAAP have been condensed or omitted and as such, these Company-only financial statements should be read in conjunction with the Company's consolidated financial statements.

(a) Related party transactions

The Company had the following related party balances as of December 31, 2019 and 2020:

	As of December 31,		
	2019 RMB	2020 RMB	US\$
Amounts due from subsidiaries			
- 21Vianet HK	5,855,452	7,043,586	1,079,477
- WiFire Open Network Group Ltd.	147,326	2,157,285	330,618
- HongKong Fastweb Holdings Co., Ltd.	67,088	62,780	9,621
- 21V Mobile	58,018	56,265	8,623
- WiFire Group	698	652	100
- Others	13	12	2
	<u>6,128,595</u>	<u>9,320,580</u>	<u>1,428,441</u>
Amounts due to subsidiaries			
- 21Vianet Beijing	19,449	35,783	5,484
- Others	3,022	3,080	471
	<u>22,471</u>	<u>38,863</u>	<u>5,955</u>

21Vianet Group, Inc.

and

Citicorp International Limited, as Trustee

INDENTURE

dated as of January 26, 2021

US\$600,000,000 0.00% CONVERTIBLE SENIOR NOTES DUE 2026

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INDENTURE dated as of January 26, 2021 between 21VIANET GROUP, INC., a Cayman Islands exempted company, as issuer (the “**Company**,” as more fully set forth in Section 1.01) and Citicorp International Limited, as trustee (the “**Trustee**,” as more fully set forth in Section 1.01).

WITNESSETH:

WHEREAS, for its lawful corporate purposes, the Company has duly authorized the issuance of its 0.00% Convertible Senior Notes due 2026 (the “**Notes**”), initially in an aggregate principal amount not to exceed US\$600,000,000 and, any additional Notes issued in accordance with Section 2.10, and in order to provide the terms and conditions upon which the Notes are to be authenticated, issued and delivered, the Company has duly authorized the execution and delivery of this Indenture; and

WHEREAS, the Form of Note, the certificate of authentication to be borne by each Note, the Form of Notice of Conversion, the Form of Fundamental Change Repurchase Notice, the Form of Repurchase Notice and the Form of Assignment and Transfer to be borne by the Notes are to be substantially in the forms hereinafter provided; and

WHEREAS, all acts and things necessary to make the Notes, when executed by the Company and authenticated and delivered by the Trustee, as in this Indenture provided, the valid, binding and legal obligations of the Company, and this Indenture a valid agreement according to its terms, have been done and performed, and the execution of this Indenture and the issuance hereunder of the Notes have in all respects been duly authorized.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

That in order to declare the terms and conditions upon which the Notes are, and are to be, authenticated, issued and delivered, and in consideration of the premises and of the purchase and acceptance of the Notes by the Holders thereof, the Company covenants and agrees with the Trustee for the equal and proportionate benefit of the respective Holders from time to time of the Notes (except as otherwise provided below), as follows:

ARTICLE 1
DEFINITIONS

Section 1.01 *Definitions*. The terms defined in this Section 1.01 (except as herein otherwise expressly provided or unless the context otherwise requires) for all purposes of this Indenture and of any indenture supplemental hereto shall have the respective meanings specified in this Section 1.01. The words “herein,” “hereof,” “hereunder,” and words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision. The terms defined in this Article include the plural as well as the singular.

“**Additional ADSs**” shall have the meaning specified in Section 14.03(a).

“**Additional Amounts**” shall have the meaning specified in Section 4.07(a).

“**ADS**” means an American Depositary Share, issued pursuant to the Deposit Agreement or Restricted Issuance Agreement, as applicable, representing six Ordinary Shares of the Company as of the date of this Indenture, and deposited with the ADS Custodian, subject to Section 10.03 and Section 14.07.

“**ADS Custodian**” means Citibank, N.A., with respect to the ADSs delivered pursuant to the Deposit Agreement or the Restricted Issuance Agreement, as applicable, or any successor entity thereto.

“**ADS Depository**” means Citibank, N.A., as depository for the ADSs, or any successor entity thereto.

“**ADS Price**” shall have the meaning specified in Section 14.03(c).

“**Affiliate**” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control,” when used with respect to any specified Person means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“**Affiliated Holder**” means any of (i) Mr. Sheng Chen and his estate, spouse, heirs and lineal descendants, (ii) any company, limited liability company, partnership, trust, foundation or other entity or investment vehicle for which any of the persons in clause (i) retains sole voting and dispositive power (or shared voting and/or dispositive power with other Affiliated Holders) with respect to the Company’s Common Equity (or ADSs) held by such company, partnership, trust, foundation or other entity or investment vehicle, and the trustees, legal representatives, beneficiaries and/or beneficial owners of such company, limited liability company, partnership, trust, foundation or other entity or investment vehicle, (iii) any not-for-profit entity where the acquisition or the Company’s Common Equity (including ADSs) is directed by any of the persons in clause (i), and (iv) any entity wholly-owned by any person described in clause (i).

“**Agents**” means the Paying Agent, the Transfer Agent, the Note Registrar, the Conversion Agent and the Bid Solicitation Agent, in each case, unless the Company is acting in such capacity.

“**Applicable PRC Rate**” means (i) in the case of deduction or withholding of People’s Republic of China income tax, 10%, (ii) in the case of deduction or withholding of, or reduction for, People’s Republic of China value added tax (including any related local levies), 6.72%, or (iii) in the case of deduction or withholding of, or reduction for, both People’s Republic of China income tax and People’s Republic of China value added tax (including any related local levies), 16.72%.

“**applicable taxes**” shall have the meaning specified in Section 4.07(a).

“**Authenticating Agent**” shall have the meaning specified in Section 2.11.

“Bid Solicitation Agent” means the Company or any Person appointed by the Company to solicit bids for the Trading Price in accordance with Section 14.01(b)(i). The Company shall initially act as the Bid Solicitation Agent.

“Board of Directors” means the board of directors of the Company or a committee of such board duly authorized to act for it hereunder.

“Board Resolution” means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors, and to be in full force and effect on the date of such certification, and delivered to the Trustee.

“Business Day” means, with respect to any Note, each Monday, Tuesday, Wednesday, Thursday and Friday that is not a day on which banking institutions in the State of New York or the Cayman Islands are authorized or obligated by law or executive order to close or be closed.

“Capital Stock” means, for any entity, any and all shares, interests, rights to purchase, warrants, options, participations or other equivalents of or interests in (however designated) stock issued by that entity.

“Cash Settlement” shall have the meaning specified in Section 14.02(a).

“Change in Tax Law” shall have the meaning specified in Section 16.01.

“Clause A Distribution” shall have the meaning specified in Section 14.04(c).

“Clause B Distribution” shall have the meaning specified in Section 14.04(c).

“Clause C Distribution” shall have the meaning specified in Section 14.04(c).

“close of business” means 5:00 p.m. (New York City time).

“Code” means the U.S. Internal Revenue Code of 1986, as amended.

“Combination Settlement” shall have the meaning specified in Section 14.02(a).

“Commission” means the U.S. Securities and Exchange Commission.

“Common Equity” of any Person means ordinary share capital or common stock of such Person that is generally entitled (a) to vote in the election of directors of such Person or (b) if such Person is not a corporation, to vote or otherwise participate in the selection of the governing body, partners, managers or others that will control the management or policies of such Person.

“Company” shall have the meaning specified in the first paragraph of this Indenture, and subject to the provisions of Article 11, shall include its successors and assigns.

“Company Notice” shall have the meaning specified in Section 15.01(a).

“Company Order” means a written order of the Company, signed by its Officer and delivered to the Trustee.

“**Consolidated Affiliated Entity**” means, with respect to any Person, any corporation, association or other entity which is or is required to be consolidated with such Person under Accounting Standards Codification subtopic 810-10, Consolidation: Overall (including any changes, amendments or supplements thereto), and the Subsidiaries of such Person, corporation, association or entity or, if such Person prepares its financial statements in accordance with accounting principles other than the accounting principles generally accepted in the United States of America, the equivalent of Accounting Standards Codification subtopic 810-10, Consolidation: Overall under such accounting principles.

“**Conversion Agent**” shall have the meaning specified in Section 4.02.

“**Conversion Date**” shall have the meaning specified in Section 14.02(c).

“**Conversion Obligation**” shall have the meaning specified in Section 14.01.

“**Conversion Price**” means as of any time, US\$1,000, *divided by* the Conversion Rate as of such time.

“**Conversion Rate**” shall have the meaning specified in Section 14.01.

“**Corporate Trust Office**” means the designated corporate trust office of the Trustee at which at any particular time its corporate trust business shall be administered, which office at the date hereof is located at 20th Floor Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong, or such other address as the Trustee may designate from time to time by notice to the Holders and the Company, or the designated corporate trust office of any successor trustee (or such other address as such successor trustee may designate from time to time by notice to the Holders and the Company).

“**Daily Conversion Value**” means, for each of the 40 consecutive Trading Days during the Observation Period, 2.5% of the product of (a) the Conversion Rate on such Trading Day and (b) the Daily VWAP for such Trading Day.

“**Daily Measurement Value**” means the Specified Dollar Amount (if any), *divided by* 40.

“**Daily Settlement Amount**,” for each of the 40 consecutive Trading Days during the Observation Period, shall consist of:

(a) cash in an amount equal to the lesser of (i) the Daily Measurement Value and (ii) the Daily Conversion Value on such Trading Day; and

(b) if the Daily Conversion Value on such Trading Day exceeds the Daily Measurement Value, a number of ADSs equal to (i) the difference between the Daily Conversion Value and the Daily Measurement Value, *divided by* (ii) the Daily VWAP for such Trading Day.

“**Daily VWAP**” means, for each of the 40 consecutive Trading Days during the relevant Observation Period, the per ADS volume-weighted average price as displayed under the heading “Bloomberg VWAP” on Bloomberg page “VNET <equity> AQR” (or its equivalent successor if

such page is not available) in respect of the period from the scheduled open of trading until the scheduled close of trading of the primary trading session on such Trading Day (or if such volume-weighted average price is unavailable, the market value of one ADS on such Trading Day determined, using a volume-weighted average method, by a nationally recognized independent investment banking firm retained for this purpose by the Company). The **“Daily VWAP”** shall be determined without regard to after-hours trading or any other trading outside of the regular trading session trading hours.

“Default” means any event that is, or after notice or passage of time, or both, would be, an Event of Default.

“Default Settlement Method” means initially Combination Settlement with a Specified Dollar Amount per \$1,000 principal amount of Notes of \$1,000 and shall subsequently be the Settlement Method designated by the Company pursuant to Section 14.02(a) (iii).

“Defaulted Amounts” means any amounts on any Note (including, without limitation, the Redemption Price, the Repurchase Price, the Fundamental Change Repurchase Price, principal and interest) that are payable but are not punctually paid or duly provided for.

“Deposit Agreement” means the deposit agreement dated as of April 20, 2011 by and among the Company, the ADS Depository and the holders and beneficial owners of the ADSs delivered thereunder, as supplemented by a letter agreement for restricted ADSs between the Company and the ADS Depository (the **“Restricted Issuance Agreement”**), and as further amended and supplemented from time to time.

“Depository” means, with respect to each Global Note, the Person specified in Section 2.05(c) as the Depository with respect to such Notes, until a successor shall have been appointed and become such pursuant to the applicable provisions of this Indenture, and thereafter, **“Depository”** shall mean or include such successor.

“Distributed Property” shall have the meaning specified in Section 14.04(c).

“DTC” means The Depository Trust Company, a New York corporation.

“Effective Date” shall have the meaning specified in Section 14.03(c), except that, as used in Section 14.04 and Section 14.05, **“Effective Date”** means the first date on which ADSs trade on the applicable exchange or in the applicable market, regular way, reflecting the relevant share split or share combination, as applicable.

“Event of Default” shall have the meaning specified in Section 6.01.

“Ex-Dividend Date” means the first date on which the ADSs trade on the applicable exchange or in the applicable market, regular way, without the right to receive the issuance, dividend or distribution in question, from the Company or, if applicable, from the seller of the ADSs on such exchange or market (in the form of due bills or otherwise) as determined by such exchange or market.

“**Exchange Act**” means the Securities Exchange Act of 1934, as amended, and the rules and regulations promulgated thereunder.

“**Expiring Rights**” means any rights (other than in connection with a stockholders rights plan), options or warrants to purchase Ordinary Shares or ADSs that expire on or prior to the Maturity Date.

“**FATCA**” shall have the meaning specified in Section 4.07(a)(i)(D).

“**Form of Assignment and Transfer**” shall mean the “Form of Assignment and Transfer” attached as Attachment 4 to the Form of Note.

“**Form of Fundamental Change Repurchase Notice**” shall mean the “Form of Fundamental Change Repurchase Notice” attached as Attachment 2 to the Form of Note.

“**Form of Note**” shall mean the “Form of Note” attached hereto as Exhibit A.

“**Form of Notice of Conversion**” shall mean the “Form of Notice of Conversion” attached as Attachment 1 to the Form of Note.

“**Form of Repurchase Notice**” shall mean the “Form of Repurchase Notice” attached as Attachment 3 to the Form of Note.

“**Fractional ADS**” shall have the meaning specified in Section 14.02(a).

“**Fundamental Change**” shall be deemed to have occurred at the time after the Notes are originally issued if any of the following occurs:

(a) (A) a “person” or “group” within the meaning of Section 13(d) of the Exchange Act, other than the Company, its Subsidiaries, the employee benefit plans of the Company and its Subsidiaries, the Permitted Holder and the Affiliated Holder, has become, and files a Schedule TO or any schedule, form or report under the Exchange Act disclosing that such Person or group has become, the direct or indirect “beneficial owner,” as defined in Rule 13d-3 under the Exchange Act, of: (i) the Company’s ordinary share capital (including ordinary share capital held in the form of ADSs) representing more than 50% of the voting power of the Company’s ordinary share capital, or (ii) more than 50% of the Company’s outstanding Ordinary Shares (including Ordinary Shares held in the form of ADSs), or (B) any of the Permitted Holder or the Affiliated Holder (or any other “person” or “group” within the meaning of Section 13(d) of the Exchange Act subject to aggregation of the Company’s ordinary share capital with such person) has become, and files a Schedule TO or any schedule, form or report under the Exchange Act disclosing that such person has become, the direct or indirect “beneficial owner,” as defined in Rule 13d-3 under the Exchange Act, of more than 25% of the Company’s outstanding Ordinary Shares (including Ordinary Shares held in the form of ADSs), excluding from the numerator and denominator for the purpose of the calculation under clause (B) of this definition any Ordinary Shares issuable (or issued, as the case may be) upon conversion of the Class B ordinary shares of the Company “beneficially owned” (within the meaning of Rule 13d-3 of the Exchange Act) by the Permitted Holder as of

the date of the Offering Memorandum and any Ordinary Shares after the date of the Offering Memorandum issuable (or issued, as the case may be) to any Affiliated Holder;

(b) the consummation of (A) any recapitalization, reclassification or change of the Ordinary Shares or the ADSs (other than changes resulting from a subdivision or combination or a change in par value) as a result of which the Ordinary Shares or the ADSs would be converted into, or exchanged for, stock, other securities, other property or assets; (B) any share exchange, consolidation or merger of the Company pursuant to which the Ordinary Shares or the ADSs will be converted into cash, securities or other property; or (C) any sale, lease or other transfer in one transaction or a series of transactions of all or substantially all of the consolidated assets of the Company, its Subsidiaries and its Consolidated Affiliated Entities, taken as a whole, to any Person other than one of the Company's wholly-owned Subsidiaries; *provided, however*, that a transaction described in clause (A) or (B) in which the holders of all classes of the Company's ordinary share capital (including ordinary share capital held in the form of ADSs) immediately prior to such transaction own, directly or indirectly, more than 50% of all classes of Common Equity of the continuing or surviving corporation or transferee or the parent thereof immediately after such transaction in substantially the same proportions vis-a-vis each other as such ownership immediately prior to such transaction shall not be a Fundamental Change pursuant to this clause (b);

(c) the shareholders of the Company approve any plan or proposal for the liquidation or dissolution of the Company;

(d) the ADSs (or other Common Equity or ADSs in respect of Common Equity underlying the Notes) cease to be listed or quoted on any of The New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors); or

(e) any change in or amendment to the laws, regulations and rules of the People's Republic of China or the official interpretation or official application thereof (a "**Change in Law**") that results in (x) the Company, its Subsidiaries and its Consolidated Affiliated Entities (collectively, the "**Company Group**") (as in existence immediately subsequent to such Change in Law), as a whole, being legally prohibited from operating substantially all of the business operations conducted by the Company Group (as in existence immediately prior to such Change in Law) as of the last date of the period described in the Company's consolidated financial statements for the most recent fiscal quarter and (y) the Company's being unable to continue to derive substantially all of the economic benefits from the business operations conducted by the Company Group (as in existence immediately prior to such Change in Law) in the same manner as reflected in the Company's consolidated financial statements for the most recent fiscal quarter; *provided* that the Company has not furnished to the Trustee on or before the 20th calendar day after the date of such Change in Law an opinion from an independent financial advisor or an independent legal counsel stating either (x) that the Company is able to continue to derive substantially all of the economic benefits from the business operations conducted by the Company Group (as in existence immediately prior to such Change in Law), taken as a whole, as reflected in the Company's consolidated financial statements

for the most recent fiscal quarter (including after giving effect to any corporate restructuring or reorganization plan of the Company Group) or (y) that such Change in Law would not materially adversely affect the Company's ability to make principal and Special Interest payments, if any, on the Notes when due or to effect the conversion of the Notes in accordance with this Indenture;

provided, however, that a transaction or event described in clause (b) above shall not constitute a Fundamental Change, if at least 90% of the consideration received or to be received by holders of the ADSs, excluding cash payments for Fractional ADSs and cash payments in respect of dissenters' appraisal rights, in connection with such transaction or event consists of shares of Common Equity or ADSs in respect of Common Equity that are listed or quoted on any of The New York Stock Exchange, The Nasdaq Global Select Market or The Nasdaq Global Market (or any of their respective successors) or will be so listed or quoted when issued or exchanged in connection with such transaction or event that would otherwise constitute a Fundamental Change under clause (b) of the definition thereof and as a result of such transaction or event, the Notes become convertible into such consideration, excluding cash payments for Fractional ADSs; and *provided further* that an event that is not considered a Fundamental Change pursuant to this proviso shall not be a Fundamental Change solely because such event could also be subject to clause (a) above.

"Fundamental Change Company Notice" shall have the meaning specified in Section 15.02(c).

"Fundamental Change Repurchase Date" shall have the meaning specified in Section 15.02(a).

"Fundamental Change Repurchase Notice" shall have the meaning specified in Section 15.02(b)(i).

"Fundamental Change Repurchase Price" shall have the meaning specified in Section 15.02(a).

"Global Note" shall have the meaning specified in Section 2.05(b).

"Holder," as applied to any Note, or other similar terms (but excluding the term "beneficial holder"), means any Person in whose name at the time a particular Note is registered on the Note Register.

"Indenture" means this instrument as originally executed or, if amended or supplemented as herein provided, as so amended or supplemented.

"Last Date of Original Issuance" means (a) with respect to any Notes issued pursuant to the Offering Memorandum, and any Notes issued in exchange therefor or in substitution thereof, the date the Company first issues such Notes; and (b) with respect to any additional Notes issued as described under Section 2.10 and any Notes issued in exchange therefor or in substitution thereof, either (i) the later of (x) the date such Notes are originally issued and (y) the last date any Notes are originally issued as part of the same offering pursuant to the exercise of an option granted to the initial purchaser(s) of such Notes to purchase additional Notes; or (ii) such other date as is

specified in an Officer's Certificate delivered to the Trustee before the original issuance of such Notes.

"Last Reported Sale Price" of the ADSs (or such other security for which a closing price must be determined) on any date means the closing sale price per ADS (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the ADSs (or such other security) are traded. If the ADSs (or such other security) are not listed for trading on a U.S. national or regional securities exchange on the relevant date, the **"Last Reported Sale Price"** shall be the last quoted bid price for the ADSs in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization, and, if the ADSs (or such other security) are not so quoted, the **"Last Reported Sale Price"** shall be the average of the mid-point of the last bid and ask prices for the ADSs (or such other security) on the relevant date from each of at least three nationally recognized independent investment banking firms selected by the Company for this purpose. For the avoidance of doubt, if a Fundamental Change described in clause (d) of the definition thereof has occurred and the Newly Listed Equity has been accepted for listing on a Permitted Exchange, the **"Last Reported Sale Price"** will be determined based on the closing sale price of the Company's Newly Listed Equity on the principal Permitted Exchange, with such changes to the foregoing definition (including the deletion of the immediately preceding sentence in this paragraph) as the Company's Board of Directors determines in good faith are necessary to reflect the replacement of ADS (or other security) with Newly Listed Equity as set forth in a supplemental indenture to be executed by the Company and Trustee as described under Section 10.03. The **"Last Reported Sale Price"** shall be determined without regard to after-hours trading or any other trading outside of regular trading session hours.

"Make-Whole Fundamental Change" means any transaction or event described in clause (a), (b), (d) or (e) of the definition of Fundamental Change (determined after giving effect to any exceptions to or exclusions from such definition, including in the *proviso* immediately succeeding clause (e) of the definition thereof, but without regard to the *proviso* in clause (b) of the definition thereof).

"Market Disruption Event" means, for the purposes of determining amounts due upon conversion, (a) a failure by the primary U.S. national or regional securities exchange or market on which the ADSs are listed or admitted for trading to open for trading during its regular trading session or (b) the occurrence or existence prior to 1:00 p.m., New York City time, on any Scheduled Trading Day for the ADSs for more than one half-hour period in the aggregate during regular trading hours of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the relevant stock exchange or otherwise) in the ADSs or in any options contracts or futures contracts relating to the ADSs.

"Maturity Date" means February 1, 2026.

"Measurement Period" shall have the meaning specified in Section 14.01(b)(i).

"Merger Event" shall have the meaning specified in Section 14.07(a).

“**New Listing Reference Date**” shall have the meaning specified in Section 10.03.

“**Newly Listed Equity**” means the Ordinary Shares, other Common Equity or the Reference Property of the Company that have been accepted for listing on a Permitted Exchange.

“**Note**” or “**Notes**” shall have the meaning specified in the first paragraph of the recitals of this Indenture.

“**Note Register**” shall have the meaning specified in Section 2.05(a).

“**Note Registrar**” shall have the meaning specified in Section 2.05(a).

“**Notes Fungibility Date**” means the date, if any, following the Resale Restriction Termination Date on which all of the Rule 144A Notes are no longer Restricted Securities, do not bear the restrictive legend required by Section 2.05(c) and are assigned an identical, unrestricted CUSIP number.

“**Notice of Conversion**” shall have the meaning specified in Section 14.02(b).

“**Observation Period**” with respect to any Note surrendered for conversion means: (i) subject to clause (ii), if the relevant Conversion Date occurs prior to August 1, 2025, the 40 consecutive Trading Day period beginning on, and including, the third Trading Day immediately succeeding such Conversion Date; (ii) if the relevant Conversion Date occurs on or after the date of the Company’s issuance of a Tax Redemption Notice or Optional Redemption Notice with respect to the Notes pursuant to Section 16.01 or Section 16.02 and prior to the close of business on the second Business Day prior to the relevant Tax Redemption Date or Optional Redemption Date, as applicable, the 40 consecutive Trading Days beginning on, and including, the 41st Scheduled Trading Day immediately preceding such Tax Redemption Date or Optional Redemption Date, as applicable; and (iii) subject to clause (ii), if the relevant Conversion Date occurs on or after August 1, 2025, the 40 consecutive Trading Days beginning on, and including, the 41st Scheduled Trading Day immediately preceding the Maturity Date.

“**Offering Memorandum**” means the preliminary offering memorandum dated January 20, 2021, as supplemented by the pricing term sheet dated January 21, 2021, relating to the offering and sale of the Notes.

“**Officer**” means, with respect to the Company, the President, the Chief Executive Officer, the Chief Financial Officer the Treasurer, the Secretary, any Executive or Senior Vice President or any Vice President (whether or not designated by a number or numbers or word or words added before or after the title “Vice President”).

“**Officer’s Certificate**,” when used with respect to the Company, means a certificate that is delivered to the Trustee and that is signed by an Officer of the Company. Each such certificate shall include the statements provided for in Section 17.06 if and to the extent required by the provisions of such Section. The Officer giving an Officer’s Certificate pursuant to Section 4.09 shall be the principal executive, financial or accounting officer of the Company.

“**open of business**” means 9:00 a.m. (New York City time).

“**Opinion of Counsel**” means an opinion in writing signed by legal counsel, who may be counsel to the Company, or other counsel who is reasonably acceptable to the Trustee, that is delivered to the Trustee, which opinion may contain customary exceptions and qualifications as to the matters set forth therein. Each such opinion shall include the statements provided for in Section 17.06 if and to the extent required by the provisions of such Section 17.06.

“**Optional Redemption Date**” shall have the meaning specified in Section 16.02(b).

“**Optional Redemption Notice**” shall have the meaning specified in Section 16.02(b).

“**Ordinary Shares**” means Class A ordinary shares of the Company, par value US\$0.00001 per share, at the date of this Indenture, subject to Section 10.03 and Section 14.07.

“**outstanding**,” when used with reference to Notes, shall, subject to the provisions of Section 8.04, mean, as of any particular time, all Notes authenticated and delivered by the Trustee under this Indenture, except:

- (a) Notes theretofore canceled by the Paying Agent or accepted by the Note Registrar for cancellation;
- (b) Notes, or portions thereof, that have become due and payable and in respect of which monies in the necessary amount shall have been deposited with the Trustee or with any Paying Agent (other than the Company) or shall have been set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent);
- (c) Notes that have been paid pursuant to Section 2.06 or Notes in lieu of which, or in substitution for which, other Notes shall have been authenticated and delivered pursuant to the terms of Section 2.06 unless proof satisfactory to the Trustee is presented that any such Notes are held by protected purchasers in due course;
- (d) Notes converted pursuant to Article 14 and required to be cancelled pursuant to Section 2.08;
- (e) Notes redeemed pursuant to Article 16; and
- (f) Notes repurchased by the Company pursuant to the third sentence of Section 2.10.

“**Paying Agent**” shall have the meaning specified in Section 4.02.

“**Paying Agent Office**” means the designated office of the Paying Agent at which at any time this Indenture shall be administered, which office at the date hereof is located at 388 Greenwich Street, 14th Floor, New York, New York, 10013, USA, Attention: Agency and Trust, Facsimile: +1 201 258 3567, or such other address as the Paying Agent may designate from time to time by notice to the Holders and the Company, or the designated office of any successor paying agent (or such other address as such successor paying agent may designate from time to time by notice to the Holders and the Company).

“**Permitted Exchange**” means Singapore Exchange, Stock Exchange of Hong Kong or London Stock Exchange (or any of their respective successors).

“**Permitted Holder**” means Tuspark Innovation Venture Ltd., together with any other “person” or “group” subject to aggregation of the Company’s ordinary share capital (including ordinary share capital held in the form of ADSs) with the aforementioned person under Section 13(d) of the Exchange Act.

“**Person**” means an individual, a corporation, a limited liability company, an association, a partnership, a joint venture, a joint stock company, a trust, an unincorporated organization or a government or an agency or a political subdivision thereof.

“**Physical Notes**” means permanent certificated Notes in registered form issued in denominations of US\$1,000 principal amount and integral multiples thereof.

“**Physical Settlement**” shall have the meaning specified in Section 14.02(a).

“**PRC**” means the People’s Republic of China, excluding, for the purpose of this Indenture only, Taiwan, Hong Kong, and Macau.

“**Predecessor Note**” of any particular Note means every previous Note evidencing all or a portion of the same debt as that evidenced by such particular Note; and, for the purposes of this definition, any Note authenticated and delivered under Section 2.06 in lieu of or in exchange for a mutilated, lost, destroyed or stolen Note shall be deemed to evidence the same debt as the mutilated, lost, destroyed or stolen Note that it replaces.

“**Record Date**” means, with respect to any dividend, distribution or other transaction or event in which the holders of the ADSs (or other applicable security) have the right to receive any cash, securities or other property or in which the ADSs (or other applicable security) are exchanged for or converted into any combination of cash, securities or other property, the date fixed for determination of holders of the ADSs (or other applicable security) entitled to receive such cash, securities or other property (whether such date is fixed by the Board of Directors, statute, contract or otherwise).

“**Redemption Notice**” means a Tax Redemption Notice or an Optional Redemption Notice, as the context requires.

“**Redemption Price**” shall have the meaning each specified in Section 16.01 and Section 16.02, as the context requires.

“**Redemption Reference Date**” shall have the meaning specified in Section 14.03(g).

“**Redemption Reference Price**” shall have the meaning specified in Section 14.03(g).

“**Reference Property**” shall have the meaning specified in Section 14.07(a).

“**Relevant Jurisdiction**” shall have the meaning specified in Section 4.07(a).

“**Relevant Taxing Jurisdiction**” shall have the meaning specified in Section 4.07(a).

“**Repurchase Date**” shall have the meaning specified in Section 15.01(a).

“**Repurchase Expiration Time**” shall have the meaning specified in Section 15.01(a).

“**Repurchase Notice**” shall have the meaning specified in Section 15.01(a).

“**Repurchase Price**” shall have the meaning specified in Section 15.01(a).

“**Resale Restriction Termination Date**” shall have the meaning specified in Section 2.05(c).

“**Responsible Officer**” means, when used with respect to the Trustee, any officer within the Corporate Trust Office of the Trustee, including any vice president, assistant vice president, assistant secretary, assistant treasurer, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such Person’s knowledge of and familiarity with the particular subject and, in each case, who shall have direct responsibility for the administration of this Indenture.

“**Restricted Issuance Agreement**” shall have the meaning specified in the definition of “Deposit Agreement.”

“**Restricted Securities**” shall have the meaning specified in Section 2.05(c).

“**Rule 144**” means Rule 144 as promulgated under the Securities Act.

“**Rule 144A**” means Rule 144A as promulgated under the Securities Act.

“**Rule 144A Notes**” means the notes initially offered and sold pursuant to Rule 144A.

“**Scheduled Trading Day**” means a day that is scheduled to be a Trading Day on the principal U.S. national or regional securities exchange or market on which the ADSs are listed or admitted for trading. If the ADSs are not so listed or admitted for trading,

“**Scheduled Trading Day**” means a Business Day.

“**Securities Act**” means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.
“**Settlement Amount**” has the meaning specified in Section 14.02(a)(v).

“**Settlement Method**” means, with respect to any conversion of Notes, Physical Settlement, Cash Settlement or Combination Settlement, as elected (or deemed to have been elected) by the Company.

“**Settlement Method Election Deadline**” shall have the meaning specified in Section 14.02(a)(iii).

“**Settlement Notice**” has the meaning specified in Section 14.02(a)(iii).

“**Significant Subsidiary**” means a Subsidiary of the Company that meets the definition of “significant subsidiary” in Article 1, Rule 1-02 of Regulation S-X under the Exchange Act. Each of the Company’s Consolidated Affiliated Entities will be deemed to be a “subsidiary” for purposes of the definition of “significant subsidiary” in Article 1, Rule 1-02 of Regulation S-X.

“**Special Interest**” means all amounts, if any, payable pursuant to Section 4.06(d), Section 4.06(e) and Section 6.03, as applicable.

“**Special Interest Payment Date**” means, if and to the extent that Special Interest is payable on the Notes, each February 1 and August 1 of each year or, if the relevant date is not a Business Day, the immediately following Business Day, beginning on August 1, 2021.

“**Special Interest Record Date**,” with respect to any Special Interest Payment Date, shall mean the January 15 or July 15 (whether or not such day is a Business Day) immediately preceding the applicable February 1 or August 1 Special Interest Payment Date, respectively.

“**Specified Dollar Amount**” means the maximum cash amount per US\$1,000 principal amount of Notes to be received upon conversion as specified in the Settlement Notice related to any converted Notes (or deemed specified pursuant to Section 14.02(a)(iii)).

“**Spin-Off**” shall have the meaning specified in Section 14.04(c).

“**Subsidiary**” means, with respect to any Person, any corporation, association, partnership or other business entity of which more than 50% of the total voting power of shares of Capital Stock or other interests (including partnership interests) entitled (without regard to the occurrence of any contingency) to vote in the election of directors, managers, general partners or trustees thereof is at the time owned or controlled, directly or indirectly, by (i) such Person; (ii) such Person and one or more Subsidiaries of such Person; or (iii) one or more Subsidiaries of such Person.

“**Successor Company**” shall have the meaning specified in Section 11.01(a).

“**Tax Redemption Date**” shall have the meaning specified in Section 16.01(b).

“**Tax Redemption Notice**” shall have the meaning specified in Section 16.01(b)

“**Tender/Exchange Offer Consideration**” shall have the meaning specified in Section 14.04(e).

“**Trading Day**” means a day on which (i) trading in the ADSs (or other security for which a closing sale price must be determined) generally occurs on The Nasdaq Global Select Market or, if the ADSs (or such other security) are not then listed on The Nasdaq Global Select Market, on the principal other U.S. national or regional securities exchange on which the ADSs (or such other security) are then listed or, if the ADSs (or such other security) are not then listed on a U.S. national or regional securities exchange, on the principal other market on which the ADSs (or such other security) are then traded and (ii) a Last Reported Sale Price for the ADSs (or closing sale price for such other security) is available on such securities exchange or market; *provided* that if the ADSs (or such other security) are not so listed or traded, “Trading Day”

means a Business Day; and *provided further*, that for the purposes of determining the Settlement Amounts due upon conversion only, “Trading Day” means a day on which (i) there is no Market Disruption Event and (ii) trading in the ADSs generally occurs on The Nasdaq Global Select Market or, if the ADSs are not then listed on The Nasdaq Global Select Market, on the principal other U.S. national or regional securities exchange on which the ADSs are then listed or, if the ADSs are not then listed on a U.S. national or regional securities exchange, on the principal other market on which the ADSs are then listed or admitted for trading, except if the ADSs are not so listed or admitted for trading, “Trading Day” means a “Business Day.”

“**Trading Price**” means, with respect to the Notes and any date of determination, the average of the secondary market bid quotations obtained by the Bid Solicitation Agent for US\$2,000,000 principal amount of Notes at approximately 3:30 p.m., New York City time, on such determination date from three independent nationally recognized securities dealers the Company selects for this purpose; *provided* that if three such bids cannot reasonably be obtained by the Bid Solicitation Agent but two such bids are obtained, then the average of the two bids shall be used, and if only one such bid can reasonably be obtained by the Bid Solicitation Agent, that one bid shall be used. If the Bid Solicitation Agent cannot reasonably obtain at least one bid for US\$2,000,000 principal amount of Notes from a nationally recognized securities dealer on any determination date, then the Trading Price per US\$1,000 principal amount of Notes on such determination date shall be deemed to be less than 98% of the product of the Last Reported Sale Price of the ADSs and the Conversion Rate.

“**transfer**” shall have the meaning specified in Section 2.05(c).

“**Transfer Agent**” shall have the meaning specified in Section 2.05(a).

“**Trigger Event**” shall have the meaning specified in Section 14.04(c).

“**Trust Indenture Act**” means the Trust Indenture Act of 1939, as amended, as it was in force at the date of execution of this Indenture; *provided, however*, that in the event the Trust Indenture Act of 1939 is amended after the date hereof, the term “Trust Indenture Act” shall mean, to the extent required by such amendment, the Trust Indenture Act of 1939, as so amended.

“**Trustee**” means the Person named as the “Trustee” in the first paragraph of this Indenture until a successor trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder.

“**unit of Reference Property**” shall have the meaning specified in Section 14.07(a).

“**Valuation Period**” shall have the meaning specified in Section 14.04(c).

Section 1.02 *References to Interest*. All reference to interest on, or in respect of, any Note in this Indenture shall be deemed to refer solely to Special Interest if, in such context, Special Interest is, was or would be payable pursuant to any of Section 4.06(d), Section 4.06(e) and Section 6.03, or to any such interest payable on any Defaulted Amounts as set forth in Section 2.03(c). Unless the context otherwise requires, any express mention of Special Interest

in any provision hereof shall not be construed as excluding Special Interest in those provisions hereof where such express mention is not made.

ARTICLE 2
ISSUE, DESCRIPTION, EXECUTION, REGISTRATION AND EXCHANGE OF NOTES

Section 2.01 *Designation and Amount.* The Notes shall be designated as the “0.00% Convertible Senior Notes due 2026.” The aggregate principal amount of Notes that may be authenticated and delivered under this Indenture is initially limited to US\$600,000,000, subject to any additional Notes issued in accordance with Section 2.10 and except for Notes authenticated and delivered upon registration or transfer of, or in exchange for, or in lieu of, other Notes pursuant to Section 2.05, Section 2.06, Section 2.07, Section 10.04, Section 14.02, Section 10.05, Section 15.04 and Section 16.02.

Section 2.02 *Form of Notes.* The Notes and the Trustee’s certificate of authentication to be borne by such Notes shall be substantially in the respective forms set forth in Exhibit A, the terms and provisions of which shall constitute, and are hereby expressly incorporated in and made a part of this Indenture. To the extent applicable, the Company and the Trustee, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and to be bound thereby.

Any Global Note may be endorsed with or have incorporated in the text thereof such legends or recitals or changes not inconsistent with the provisions of this Indenture as may be required by the Depositary, or as may be required to comply with any applicable law or any regulation thereunder or with the rules and regulations of any securities exchange or automated quotation system upon which the Notes may be listed or traded or designated for issuance or to conform with any usage with respect thereto, or to indicate any special limitations or restrictions to which any particular Notes are subject.

Any of the Notes may have such letters, numbers or other marks of identification and such notations, legends or endorsements as the Officer executing the same may approve (execution thereof to be conclusive evidence of such approval) and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any securities exchange or automated quotation system on which the Notes may be listed or designated for issuance, or to conform to usage or to indicate any special limitations or restrictions to which any particular Notes are subject.

Each Global Note shall represent such principal amount of the outstanding Notes as shall be specified therein and shall provide that it shall represent the aggregate principal amount of outstanding Notes from time to time endorsed thereon and that the aggregate principal amount of outstanding Notes represented thereby may from time to time be increased or reduced to reflect redemptions, repurchases, cancellations, conversions, transfers or exchanges permitted hereby. Any endorsement of a Global Note to reflect the amount of any increase or decrease in the amount of outstanding Notes represented thereby shall be made by the Note Registrar in such manner and upon instructions given by the Holder of such Notes in accordance with this Indenture. Payment of principal (including the Redemption Price, the Repurchase Price and the

Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, a Global Note shall be made to the Holder of such Note on the date of payment, unless a record date or other means of determining Holders eligible to receive payment is provided for herein.

Section 2.03 *Date and Denomination of Notes; No Regular Interest; Special Interest and Defaulted Amounts.* (a) The Notes shall be issuable in registered form without coupons in denominations of US\$1,000 principal amount and integral multiples thereof. Each Note shall be dated the date of its authentication and shall not bear interest, and the principal amount of the Notes shall not accrete. Special Interest, if any, on the Notes shall be computed on the basis of a 360-day year composed of twelve 30-day months and, for partial months, on the basis of the number of days actually elapsed in a 30-day month.

(b) The Person in whose name any Note (or its Predecessor Note) is registered on the Note Register at the close of business on any Special Interest Record Date with respect to any Special Interest Payment Date shall be entitled to receive any Special Interest payable on such Special Interest Payment Date. Special Interest, if any, shall be payable at the office or agency of the Company maintained by the Company for such purposes in the Borough of Manhattan, The City of New York, which shall initially be the Paying Agent Office, or, if any Note is a Global Note, in accordance with the procedures of the Depository. Special Interest, if any, on Physical Notes shall be payable (A) if Citibank, N.A. acts as the Paying Agent, to each Holder by wire transfer in immediately available funds to the account within the United States specified by the Holder, and (B) if the Company acts as the paying agent, (i) to Holders having an aggregate principal amount of US\$5,000,000 or less, by check mailed (at the Company's expense) to the Holders of such Notes and (ii) to Holders having an aggregate principal amount of more than US\$5,000,000, either by check mailed (at the Company's expense) to each Holder or, upon application by such a Holder to the Note Registrar not later than the relevant Special Interest Record Date (provided that such application contains the information reasonable necessary to make such payment by wire transfer), by wire transfer in immediately available funds to that Holder's account within the United States, which application shall remain in effect until the Holder notifies, in writing, the Note Registrar to the contrary. The Company shall pay or cause the Paying Agent to pay Special Interest, if any, on any Global Note by wire transfer of immediately available funds to the account of the Depository or its nominee.

(c) Any Defaulted Amounts shall forthwith cease to be payable to the Holder on the relevant payment date and shall not accrue interest unless Special Interest was payable pursuant to this Indenture on the relevant payment date, in which case such Defaulted Amounts shall accrue interest per annum at the then-applicable rate of Special Interest *plus* one percent, subject to the enforceability thereof under applicable law, from, and including, such relevant payment date, and such Defaulted Amounts together with any such interest thereon shall be paid by the Company, at its election in each case, as provided in clause (i) or (ii) below:

(i) The Company may elect to make payment of any Defaulted Amounts to the Persons in whose names the Notes (or their respective Predecessor Notes) are registered at the close of business on a special record date for the payment of such Defaulted Amounts, which shall be fixed in the following manner. The Company shall notify the Trustee and the Paying Agent in writing of the amount of the Defaulted

Amounts proposed to be paid on each Note and the date of the proposed payment (which shall be not less than 25 days after the receipt by the Trustee of such notice, unless the Trustee in its sole and absolute discretion shall consent to an earlier date), and at the same time the Company shall deposit with the Paying Agent an amount of money equal to the aggregate amount to be paid in respect of such Defaulted Amounts on or prior to the date of the proposed payment, such money when deposited to be held for the benefit of the Persons entitled to such Defaulted Amounts as in this clause provided. Thereupon the Company shall fix a special record date for the payment of such Defaulted Amounts which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment, and not less than 10 days after the receipt by the Trustee and the Paying Agent of the notice of the proposed payment. The Company shall promptly notify the Trustee and the Paying Agent in writing of such special record date and shall cause notice of the proposed payment of such Defaulted Amounts and the special record date therefor to be delivered, to each Holder, not less than 10 days prior to such special record date. Notice of the proposed payment of such Defaulted Amounts and the special record date therefor having been so delivered, such Defaulted Amounts shall be paid to the Persons in whose names the Notes (or their respective Predecessor Notes) are registered at the close of business on such special record date and shall no longer be payable pursuant to the following clause (ii) of this Section 2.03(c).

(ii) The Company may make payment of any Defaulted Amounts in any other lawful manner not inconsistent with the requirements of any securities exchange or automated quotation system on which the Notes may be listed or designated for issuance, and upon such notice as may be required by such exchange or automated quotation system.

Section 2.04 Execution, Authentication and Delivery of Notes. The Notes shall be signed in the name and on behalf of the Company by the manual, electronic or facsimile signature of its Chief Executive Officer, President, Chief Financial Officer, Treasurer, Secretary or any of its Executive or Senior Vice Presidents. With the delivery of this Indenture, the Company is furnishing, and from time to time thereafter may furnish, a certificate substantially in the form of Exhibit B (an “**Authorization Certificate**”) identifying and certifying the incumbency and specimen (and/or facsimile) signatures of its active authorized Officers. Until the Trustee and the Agents receive a subsequent Authorization Certificate, the Trustee and the Agents shall be entitled to conclusively rely on the last Authorization Certificate delivered to it for purposes of determining the relevant authorized Officers. Typographical and other minor errors or defects in any signature shall not affect the validity or enforceability of any Note which has been duly authenticated and delivered by the Trustee.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Notes executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Notes and the Trustee in accordance with such Company Order shall authenticate and deliver such Notes, without any further action by the Company hereunder; provided that, subject to Section 17.06, the Trustee shall receive an Officer’s Certificate and an Opinion of Counsel of the Company with respect to the issuance, authentication and delivery of such Notes.

The Company Order shall specify the amount of Notes to be authenticated (including the initial amount of Rule 144A Notes), and the applicable rate at which interest will accrue on such Notes, the date on which the original issuance of such Notes is to be authenticated, the date from which interest will begin to accrue, the date or dates on which interest on such Notes will be payable and the date on which the principal of such Notes will be payable and other terms relating to such Notes. The Trustee shall thereupon authenticate and deliver said Notes to or upon the written order of the Company (as set forth in such Company Order).

The Trustee shall have the right to decline to authenticate and deliver any Notes under this Section (a) unless and until it receives from the Company a Company Order instructing it to so authenticate and deliver such Notes and, if requested by the Trustee, an Officer's Certificate and an Opinion of Counsel in accordance with and to the extent required under Section 17.06 hereof, and including a statement that the Notes, when authenticated and delivered by the Trustee, will constitute valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to customary exceptions; (b) if the Trustee determines that such action may not lawfully be taken; or (c) if the Trustee determines that such action would expose the Trustee to personal liability, unless indemnity and/or security and/or pre-funding satisfactory to the Trustee against such liability is provided to the Trustee and the Note Registrar.

Only such Notes as shall bear thereon a certificate of authentication substantially in the form set forth on the Form of Note, executed manually or electronically by an authorized officer of the Trustee, shall be entitled to the benefits of this Indenture or be valid or obligatory for any purpose. Such certificate by the Trustee upon any Note executed by the Company shall be conclusive evidence that the Note so authenticated has been duly authenticated and delivered hereunder and that the Holder is entitled to the benefits of this Indenture.

In case any Officer of the Company who shall have signed any of the Notes shall cease to be such Officer before the Notes so signed shall have been authenticated and delivered by the Trustee, or disposed of by the Company, such Notes nevertheless may be authenticated and delivered or disposed of as though the Person who signed such Notes had not ceased to be such Officer of the Company; and any Note may be signed on behalf of the Company by such Persons as, at the actual date of the execution of such Note, shall be the Officers of the Company, although at the date of the execution of this Indenture any such Person was not such an Officer.

Section 2.05 *Exchange and Registration of Transfer of Notes; Restrictions on Transfer; Depositary.* (a) The Company shall cause to be kept at the Paying Agent Office a register (the register maintained in such office or in any other office or agency of the Company designated pursuant to Section 4.02, the "**Note Register**") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Notes and of transfers of Notes. Such register shall be in written form or in any form capable of being converted into written form within a reasonable period of time. Citibank, N.A. is hereby initially appointed the "**Note Registrar**" and "**Transfer Agent**" for the purpose of registering Notes and transfers of Notes as herein provided. The Company may appoint one or more co-Note Registrars in accordance with Section 4.02.

Prior to the Notes Fungibility Date, upon surrender for registration of transfer of any Rule 144A Note, to the Note Registrar or any co-Note Registrar, and satisfaction of the requirements

for such transfer set forth in this Section 2.05, the Company shall execute, and, upon receipt of a Company Order, the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Rule 144A Notes, of any authorized denominations and of a like aggregate principal amount and bearing such restrictive legends as may be required by this Indenture. Following the Notes Fungibility Date, upon surrender for registration of transfer of any Note to the Note Registrar or any co-Note Registrar, and satisfaction of the requirements for such transfer set forth in this Section 2.05, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Notes of any authorized denominations and of a like aggregate principal amount and not bearing the restrictive legends required by Section 2.05(c).

Prior to the Notes Fungibility Date, Rule 144A Notes may be exchanged for other Rule 144A Notes of any authorized denominations and of a like aggregate principal amount, upon surrender of the Rule 144A Notes to be exchanged at any such office or agency maintained by the Company pursuant to Section 4.02. Whenever any Rule 144A Notes are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver the Rule 144A Notes that the Holder making the exchange is entitled to receive, bearing registration numbers not contemporaneously outstanding. Following the Notes Fungibility Date, Notes may be exchanged for other Notes of any authorized denominations and of a like aggregate principal amount but not bearing the restrictive legend required by Section 2.05(c), upon surrender of the Notes to be exchanged at any such office or agency maintained by the Company pursuant to Section 4.02. Whenever any Notes are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Notes that the Holder making the exchange is entitled to receive, bearing registration numbers not contemporaneously outstanding.

All Notes presented or surrendered for registration of transfer or for exchange, repurchase or conversion shall (if so required by the Company, the Trustee, the Note Registrar or any co- Note Registrar) be duly endorsed, or be accompanied by a written instrument or instruments of transfer in form satisfactory to the Company and duly executed, by the Holder thereof or its attorney-in-fact duly authorized in writing.

No service charge shall be imposed by the Company, the Trustee, the Transfer Agent, the Note Registrar, any co-Note Registrar or the Paying Agent for any exchange or registration of transfer of Notes, but the Company may require a Holder to pay a sum sufficient to cover any documentary, stamp, issue, transfer or similar tax required in connection therewith as a result of the name of the Holder of new Notes issued upon such exchange or registration of transfer being different from the name of the Holder of the old Notes surrendered for exchange or registration of transfer. The Company shall pay the ADS Depository's fees for issuance of all ADSs deliverable upon conversion.

None of the Company, the Trustee, the Note Registrar or any co-Note Registrar shall be required to exchange or register a transfer of (i) any Notes surrendered for conversion or, if a portion of any Note is surrendered for conversion, such portion thereof surrendered for conversion, (ii) any Notes, or a portion of any Note, surrendered for repurchase (and not withdrawn) in accordance with Article 15 or (iii) any Notes selected for redemption in accordance with Article 16.

All Notes issued upon any registration of transfer or exchange of Notes in accordance with this Indenture shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture as the Notes surrendered upon such registration of transfer or exchange.

The Trustee and the Agents shall have no responsibility or obligation to any direct or indirect participant or any other Person with respect to the accuracy of the books or records, or the acts or omissions, of the Depositary or its nominee or of any participant or member thereof, with respect to any ownership interest in the Notes or with respect to the delivery to any direct or indirect participant or other Person (other than the Depositary and any other registered Holder of Notes) of any notice (including any notice of redemption pursuant to Article 16) or the payment of any amount, under or with respect to such Notes. All notices and communications to be given to the Holders and all payments to be made to Holders under the Notes shall be given or made only to or upon the order of the registered Holders (which shall be the Depositary or its nominee in the case of a Global Note). The rights of beneficial owners in any Global Note shall be exercised only through the Depositary subject to the customary procedures of the Depositary. The Trustee and the Agents shall be entitled to conclusively rely and shall be fully protected in relying upon information furnished by the Depositary with respect to its direct or indirect participants.

The Trustee and the Agents shall not have any obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Note (including any transfers between or among the members of, or participant in, the Depositary or among the beneficial owners in any Global Note(s)) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by, the terms of this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

(b) So long as the Notes are eligible for book-entry settlement with the Depositary, unless otherwise required by law, subject to the fourth paragraph from the end of Section 2.05(c) all Notes shall be represented by one or more Notes in global form (each, a “**Global Note**”) registered in the name of the Depositary or the nominee of the Depositary. The transfer and exchange of beneficial interests in a Global Note that does not involve the issuance of a Physical Note shall be effected through the Depositary in accordance with this Indenture (including the restrictions on transfer set forth herein) and the procedures of the Depositary therefor.

(c) Every Note that bears or is required under this Section 2.05(c) to bear the legend set forth in this Section 2.05(c) (together with any ADSs (including the Ordinary Shares represented thereby) delivered upon conversion of the Notes that are required to bear the legend set forth in Section 2.05(d), collectively, the “**Restricted Securities**”) shall be subject to the restrictions on transfer set forth in this Section 2.05(c) (including the legend set forth below), unless such restrictions on transfer shall be eliminated or otherwise waived by written consent of the Company, and the Holder of each such Restricted Security, by such Holder’s acceptance thereof, agrees to be bound by all such restrictions on transfer. As used in this Section 2.05(c) and Section 2.05(d), the term “**transfer**” encompasses any sale, pledge, transfer or other disposition whatsoever of any Restricted Security.

Until the date (the “**Resale Restriction Termination Date**”) that is the later of (1) the date that is one year after the Last Date of Original Issuance of the Notes, or such shorter period of time as permitted by Rule 144 under the Securities Act or any successor provision thereto, and (2) such later date, if any, as may be required by applicable law, any certificate evidencing such Note (and all securities issued in exchange therefor or substitution thereof, other than ADSs (including the Ordinary Shares represented thereby) issued upon conversion thereof, which shall bear the legend set forth in Section 2.05(d), if applicable) shall bear a legend in substantially the following form (unless such Notes have been transferred pursuant to a registration statement that has become or been declared effective under the Securities Act and that continues to be effective at the time of such transfer, or pursuant to the exemption from registration provided by Rule 144 under the Securities Act or any similar provision then in force under the Securities Act, or unless otherwise agreed by the Company in writing, with notice thereof to the Transfer Agent):

THIS SECURITY, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION OF THIS SECURITY, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”), AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF OR OF A BENEFICIAL INTEREST HEREIN, THE ACQUIRER:

(1) REPRESENTS THAT IT AND ANY ACCOUNT FOR WHICH IT IS ACTING IS A “QUALIFIED INSTITUTIONAL BUYER” (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT AND THAT IT AND ANY SUCH ACCOUNT IS NOT, AND HAS NOT BEEN FOR THE IMMEDIATELY PRECEDING THREE MONTHS, AN AFFILIATE OF 21VIANET GROUP, INC. (THE “COMPANY”), AND

(2) AGREES FOR THE BENEFIT OF THE COMPANY THAT IT WILL NOT OFFER, SELL, PLEDGE OR OTHERWISE TRANSFER THIS SECURITY, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION OF THIS SECURITY, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY, OR ANY BENEFICIAL INTEREST HEREIN OR THEREIN PRIOR TO THE DATE THAT IS THE LATER OF (X) ONE YEAR AFTER THE LAST ORIGINAL ISSUE DATE HEREOF OR SUCH SHORTER PERIOD OF TIME AS PERMITTED BY RULE 144 UNDER THE SECURITIES ACT OR ANY SUCCESSOR PROVISION THERETO AND (Y) SUCH LATER DATE, IF ANY, AS MAY BE REQUIRED BY APPLICABLE LAW, EXCEPT:

(A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, OR

(B) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT, OR

(C) TO A QUALIFIED INSTITUTIONAL BUYER IN COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT, OR

(D) PURSUANT TO AN EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE).

PRIOR TO THE REGISTRATION OF ANY TRANSFER IN ACCORDANCE WITH (2)(D) ABOVE, THE COMPANY, THE ADS DEPOSITARY AND THE TRANSFER AGENT FOR THE NOTES RESERVE THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. NO REPRESENTATION IS MADE AS TO THE AVAILABILITY OF ANY EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT.

NO AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY OR PERSON THAT HAS BEEN AN AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY DURING THE THREE IMMEDIATELY PRECEDING MONTHS MAY PURCHASE, OTHERWISE ACQUIRE OR OWN THIS NOTE, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION HEREOF, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY, OR A BENEFICIAL INTEREST HEREIN OR THEREIN.

No transfer of any Note prior to the Resale Restriction Termination Date will be registered by the Note Registrar unless the applicable box on the Form of Assignment and Transfer has been checked.

Any Note (or security issued in exchange or substitution therefor) as to (i) which such restrictions on transfer shall have expired in accordance with their terms, (ii) that has been transferred pursuant to a registration statement that has become effective or been declared effective under the Securities Act and that continues to be effective at the time of such transfer or (iii) that has been sold pursuant to the exemption from registration provided by Rule 144 or any similar provision then in force under the Securities Act, may, upon surrender of such Note for exchange to the Note Registrar in accordance with the provisions of this Section 2.05, be exchanged for a new Note or Notes, of like tenor and aggregate principal amount, which shall not bear the restrictive legend required by this Section 2.05(c) and shall not be assigned a restricted CUSIP number. The Company shall be entitled to instruct the Trustee and the Agents in writing to so surrender any Global Note as to which such restrictions on transfer shall have expired in accordance with their terms for exchange, and, upon such instruction, the Paying Agent shall so surrender such Global Note for exchange; and any new Global Note so exchanged

therefor shall not bear the restrictive legend specified in this Section 2.05(c) and shall not be assigned a restricted CUSIP number. The Company shall promptly notify the Trustee and the Agents in writing upon the occurrence of the Resale Restriction Termination Date and after a registration statement, if any, with respect to the Notes or the ADSs (including the Ordinary Shares represented thereby) issued upon conversion of the Notes has been declared effective under the Securities Act. In addition, the Company may effect the removal of the restrictive legend specified in this Section 2.05(c) upon the Company's delivery to the Trustee of written notice to such effect, whereupon the restrictive legend set forth above and affixed on any Note shall be deemed, in accordance with the terms of the certificate representing such Note, to be removed therefrom without further action by the Company, the Trustee, the Holder(s) thereof or any other Person; at such time, such Note shall be deemed to be assigned an unrestricted CUSIP number as provided in the certificate representing such Note, it being understood that (i) the Depository of any Global Note may require a mandatory exchange or other process to cause such Global Note to be identified by an unrestricted CUSIP number in the facilities of such Depository and (ii) if such Note is a Global Note and the Depository thereof requires a mandatory exchange (or other process) to cause such Global Note to be identified by "unrestricted" CUSIP in the facilities of such Depository, then for purposes of Section 4.06(e) hereof, such Global Note will not be deemed to be identified by an "unrestricted" CUSIP number until such time as such mandatory exchange (or other process) is effected.

Notwithstanding any other provisions of this Indenture (other than the provisions set forth in this Section 2.05(c)), a Global Note may not be transferred as a whole or in part except (i) by the Depository to a nominee of the Depository or by a nominee of the Depository to the Depository or another nominee of the Depository or by the Depository or any such nominee to a successor Depository or a nominee of such successor Depository and (ii) for transfers of portions of a Global Note in certificated form made upon request of a member of, or a participant in, the Depository (for itself or on behalf of a beneficial owner) by written notice given to the Transfer Agent by or on behalf of the Depository in accordance with customary procedures of the Depository and in compliance with this Section 2.05(c).

The Depository shall be a clearing agency registered under the Exchange Act. The Company initially appoints The Depository Trust Company to act as Depository with respect to each Global Note. Initially, each Global Note shall be issued to the Depository, registered in the name of Cede & Co., as the nominee of the Depository, and deposited with Citibank, N.A. as custodian for DTC and registered in the name of Cede & Co., as nominee of DTC.

If (i) the Depository notifies the Company at any time that the Depository is unwilling or unable to continue as depository for the Global Notes and a successor depository is not appointed within 90 days, (ii) the Depository ceases to be registered as a clearing agency under the Exchange Act and a successor depository is not appointed within 90 days or (iii) an Event of Default with respect to the Notes has occurred and is continuing and, subject to the Depository's applicable procedures, a beneficial owner of any Note requests that its beneficial interest therein be issued as a Physical Note, the Company shall execute, and the Trustee, upon receipt of an Officer's Certificate and a Company Order for the authentication and delivery of Notes, shall authenticate and deliver (x) in the case of clause (iii), a Physical Note to such beneficial owner in a principal amount equal to the principal amount of such Note corresponding to such beneficial owner's beneficial interest and (y) in the case of clause (i) or (ii), Physical Notes to each

beneficial owner of the related Global Notes (or a portion thereof) in an aggregate principal amount equal to the aggregate principal amount of such Global Notes in exchange for such Global Notes, and upon delivery of the Global Notes to the Note Registrar such Global Notes shall be canceled.

Physical Notes issued in exchange for all or a part of the Global Note pursuant to this Section 2.05(c) shall be registered in such names and in such authorized denominations as the Depositary, pursuant to instructions from its direct or indirect participants or otherwise, or, in the case of clause (iii) of the immediately preceding paragraph, the relevant beneficial owner, shall instruct the Note Registrar in writing. Upon execution and authentication, the Note Registrar shall deliver such Physical Notes to the Persons in whose names such Physical Notes are so registered.

At such time as all interests in a Global Note have been converted, canceled, repurchased, redeemed or transferred, such Global Note shall be, upon receipt thereof, canceled by the Note Registrar in accordance with standing procedures and existing instructions of the Depositary. At any time prior to such cancellation, if any interest in a Global Note is exchanged for Physical Notes, converted, canceled, repurchased, redeemed or transferred to a transferee who receives Physical Notes therefor or any Physical Note is exchanged or transferred for part of such Global Note, the principal amount of such Global Note shall, in accordance with the standing procedures and existing instructions of the Depositary, be appropriately reduced or increased, as the case may be, and an endorsement shall be made on such Global Note, by the Note Registrar, to reflect such reduction or increase.

None of the Company, the Trustee, the Agents, any agent of the Company or any agent of the Trustee or the Agents shall be liable to any beneficial owner of a Global Note, a member of, or a participant in, the Depositary or any other Person for any aspect of the records relating to or payments or delivery of any securities or property to be made on account of beneficial ownership interests of a Global Note or maintaining, supervising or reviewing any records relating to such beneficial ownership interests or for the delivery to any beneficial owner of a Global Note, a member of, or a participant in, the Depositary or any other Person (other than the Depositary) of any notice (including any Fundamental Change Repurchase Notice or notice of redemption).

None of the Company, the Trustee, the Agents or any agent of the Company or the Trustee or the Agents shall have responsibility or liability for any act or omission of the Depositary. All notices and communications to be given to the Holders and all payments to be made to Holders in respect of the Notes shall be given or made only to, or upon the order of, the registered Holder(s) (which shall be the Depositary or its nominee in the case of a Global Note).

(d) Until the Resale Restriction Termination Date, any certificate representing ADSs (including the Ordinary Shares represented thereby) issued upon conversion of such Note shall bear a legend in substantially the following form (unless the Note or such ADSs (including the Ordinary Shares represented thereby) has been transferred pursuant to a registration statement that has become or been declared effective under the Securities Act and that continues to be effective at the time of such transfer, or pursuant to the exemption from registration provided by Rule 144 or any similar provision then in force under the Securities Act, or such ADS or the Ordinary Shares represented thereby have been issued upon conversion of Notes that have been

transferred pursuant to a registration statement that has become or been declared effective under the Securities Act and that continues to be effective at the time of such transfer, or pursuant to the exemption from registration provided by Rule 144 under the Securities Act or any similar provision then in force under the Securities Act, or unless otherwise agreed by the Company with written notice thereof to the Note Registrar and any transfer agent for the ADSs):

THE AMERICAN DEPOSITARY SHARES EVIDENCED HEREBY AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF OR OF A BENEFICIAL INTEREST HEREIN, THE ACQUIRER:

(1) REPRESENTS THAT IT AND ANY ACCOUNT FOR WHICH IT IS ACTING IS A "QUALIFIED INSTITUTIONAL BUYER" (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT AND THAT IT AND ANY SUCH ACCOUNT IS NOT, AND HAS NOT BEEN FOR THE IMMEDIATELY PRECEDING THREE MONTHS, AN AFFILIATE OF 21VIANET GROUP, INC. (THE "COMPANY"), AND

(2) AGREES FOR THE BENEFIT OF THE COMPANY THAT IT WILL NOT OFFER, SELL, PLEDGE OR OTHERWISE TRANSFER THIS SECURITY AND THE ORDINARY SHARES REPRESENTED THEREBY, OR ANY BENEFICIAL INTEREST HEREIN OR THEREIN PRIOR TO THE DATE THAT IS THE LATER OF (X) ONE YEAR AFTER THE LAST ORIGINAL ISSUE DATE OF THE SERIES OF NOTES UPON THE CONVERSION OF WHICH THIS SECURITY WAS ISSUED OR SUCH SHORTER PERIOD OF TIME AS PERMITTED BY RULE 144 UNDER THE SECURITIES ACT OR ANY SUCCESSOR PROVISION THERETO AND (Y) SUCH LATER DATE, IF ANY, AS MAY BE REQUIRED BY APPLICABLE LAW, EXCEPT:

- (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, OR
- (B) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT, OR
- (C) TO A QUALIFIED INSTITUTIONAL BUYER IN COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT, OR

(D) PURSUANT TO AN EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE).

PRIOR TO THE REGISTRATION OF ANY TRANSFER IN ACCORDANCE WITH (2)(D) ABOVE, THE COMPANY, THE ADS DEPOSITARY AND THE TRANSFER AGENT FOR THE COMPANY'S AMERICAN DEPOSITARY SHARES RESERVE THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. NO REPRESENTATION IS MADE AS TO THE AVAILABILITY OF ANY EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT.

NO AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY OR PERSON THAT HAS BEEN AN AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY DURING THE THREE IMMEDIATELY PRECEDING MONTHS MAY PURCHASE, OTHERWISE ACQUIRE OR OWN THE AMERICAN DEPOSITARY SHARES EVIDENCED HEREBY OR A BENEFICIAL INTEREST HEREIN OR THEREIN.

Any such ADSs as to which such restrictions on transfer shall have expired in accordance with their terms may, upon surrender of the certificates representing such ADSs for exchange in accordance with the procedures of the ADS Depositary, be exchanged for a new certificate or certificates for a like aggregate number of ADSs, which shall not bear the restrictive legend required by this Section 2.05(d).

(e) Any Note or ADS delivered upon the conversion or exchange of any Note that is repurchased or owned by any Affiliate of the Company may not be resold by such Affiliate (or a Holder that was the Company's Affiliate at any time during three months preceding the resale) unless registered under the Securities Act or resold pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act in a transaction that results in such Note or ADS, as the case may be, no longer being a "restricted security" (as defined under Rule 144 under the Securities Act). The Company shall cause any Note that is repurchased or owned by it to be surrendered to the Paying Agent for cancellation in accordance with Section 2.08.

Section 2.06 *Mutilated, Destroyed, Lost or Stolen Notes.* In case any Note shall become mutilated or be destroyed, lost or stolen, the Company in its discretion may execute, and upon its written request, the Trustee shall authenticate and deliver, a new Note, bearing a registration number not contemporaneously outstanding, in exchange and substitution for the mutilated Note, or in lieu of and in substitution for the Note so destroyed, lost or stolen. In every case the applicant for a substituted Note shall furnish to the Company and to the Trustee such security, pre-funding and/or indemnity as may be required by them to save each of them harmless from any loss, liability, cost or expense caused by or connected with such substitution, and, in every case of destruction, loss or theft, the applicant shall also furnish to the Company

and to the Trustee evidence to their satisfaction of the destruction, loss or theft of such Note and of the ownership thereof.

The Trustee may authenticate any such substituted Note and deliver the same upon the receipt of a Company Order and of such security, pre-funding and/or indemnity as the Trustee and the Company may require. No service charge shall be imposed by the Company, the Transfer Agent, the ADS Depositary, the Note Registrar, any co-Note Registrar or the Paying Agent upon the issuance of any substitute Note, but the Company may require a Holder to pay a sum sufficient to cover any documentary, stamp, issue, transfer or similar tax required in connection therewith as a result of the name of the Holder of the new substitute Note being different from the name of the Holder of the old Note that became mutilated or was destroyed, lost or stolen. In case any Note that has matured or is about to mature or has been surrendered for repurchase (and not withdrawn) in accordance with Article 15 or has been selected for redemption in accordance with Article 16 or is about to be converted in accordance with Article 14 shall become mutilated or be destroyed, lost or stolen, the Company may, in its sole discretion, instead of issuing a substitute Note, pay or authorize the payment of or convert or authorize the conversion of the same (without surrender thereof except in the case of a mutilated Note), as the case may be, if the applicant for such payment or conversion shall furnish to the Company and to the Trustee such security and/or pre-funding and/or indemnity as may be required by them to save each of them harmless for any loss, liability, cost or expense caused by or connected with such substitution, and, in every case of destruction, loss or theft, evidence satisfactory to the Company, and the Trustee evidence of their satisfaction of the destruction, loss or theft of such Note and of the ownership thereof.

Every substitute Note issued pursuant to the provisions of this Section 2.06 by virtue of the fact that any Note is destroyed, lost or stolen shall constitute an additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Note shall be found at any time, and shall be entitled to all the benefits of (but shall be subject to all the limitations set forth in) this Indenture equally and proportionately with any and all other Notes duly issued hereunder. To the extent permitted by law, all Notes shall be held and owned upon the express condition that the foregoing provisions are exclusive with respect to the replacement, payment, redemption, conversion or repurchase of mutilated, destroyed, lost or stolen Notes and shall preclude any and all other rights or remedies notwithstanding any law or statute existing or hereafter enacted to the contrary with respect to the replacement, payment, redemption, conversion or repurchase of negotiable instruments or other securities without their surrender.

Section 2.07 *Temporary Notes.* Pending the preparation of Physical Notes, the Company may execute and the Trustee shall, upon written request of the Company, authenticate and deliver temporary Notes (printed or lithographed). Temporary Notes shall be issuable in any authorized denomination, and substantially in the form of the Physical Notes but with such omissions, insertions and variations as may be appropriate for temporary Notes, all as may be determined by the Company. Every such temporary Note shall be executed by the Company and authenticated by the Trustee upon the same conditions and in substantially the same manner, and with the same effect, as the Physical Notes. Without unreasonable delay, the Company shall execute and deliver to the Trustee Physical Notes (other than any Global Note) and thereupon any or all temporary Notes (other than any Global Note) may be surrendered in exchange therefor, at each office or agency maintained by the Company pursuant to Section 4.02 and the

Trustee shall upon receipt of a Company Order authenticate and deliver in exchange for such temporary Notes an equal aggregate principal amount of Physical Notes. Such exchange shall be made by the Company at its own expense and without any charge therefor. Until so exchanged, the temporary Notes shall in all respects be entitled to the same benefits and subject to the same limitations under this Indenture as Physical Notes authenticated and delivered hereunder.

Section 2.08 *Cancellation of Notes Paid, Converted, Etc.* The Company shall cause all Notes surrendered for the purpose of payment, repurchase, redemption, registration of transfer or exchange or conversion, if surrendered to the Company or any of the Company's agents, Subsidiaries, Consolidated Affiliated Entities or Affiliates, in each case that the Company controls, to be delivered and surrendered to the Paying Agent for cancellation. All Notes delivered to the Paying Agent shall be canceled promptly by it, and except for Notes surrendered for transfer or exchange, no Notes shall be authenticated in exchange thereof except as expressly permitted by any of the provisions of this Indenture. The Paying Agent shall dispose of canceled Notes in accordance with its customary procedures and, after such disposition, shall deliver a certificate of such cancellation and disposition to the Company, at the Company's prior written request in a Company Order.

Section 2.09 *CUSIP Numbers.* The Company in issuing the Notes may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee and the Agents shall use "CUSIP" numbers in all notices issued to Holders as a convenience to such Holders; *provided* that the Trustee and the Agents shall have no liability for any defect in the "CUSIP" numbers as they appear on any Note, notice or elsewhere, and *provided* further that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Notes or on such notice and that reliance may be placed only on the other identification numbers printed on the Notes. The Company shall promptly notify the Trustee and the Agents in writing of any change in the "CUSIP" or "ISIN" numbers, as applicable.

Section 2.10 *Additional Notes; Repurchases.* The Company may, without the consent of, or notice to, the Holders and notwithstanding Section 2.01, reopen this Indenture and issue additional Notes hereunder with the same terms as the Notes initially issued hereunder (except for any differences in the issue price, the issue date and Special Interest accrued, if any, and, if applicable, restrictions on transfer in respect of such additional Notes) in an unlimited aggregate principal amount; *provided* that if any such additional Notes are not fungible with the Notes initially issued hereunder for U.S. federal income tax or securities law purposes, such additional Notes shall have a separate CUSIP, ISIN or other identifying number from the Notes initially issued hereunder. Prior to the issuance of any such additional Notes, the Company shall deliver to the Trustee a Company Order, an Officer's Certificate and an Opinion of Counsel, such Officer's Certificate and Opinion of Counsel to cover such matters, in addition to those required by Section 17.06, as the Trustee shall reasonably request. In addition, the Company may, to the extent permitted by law, and, without the consent of the Holders, directly or indirectly (regardless of whether such Notes are surrendered to the Company), repurchase Notes in the open market or otherwise, whether by the Company or through its Subsidiaries, Consolidated Affiliated Entities or through a private or public tender or exchange offer or through counterparties to private agreements. The Company shall cause any Notes so repurchased to be surrendered to the Paying Agent for cancellation in accordance with Section 2.08 and upon receipt of a Company Order, the Paying Agent shall cancel all Notes so surrendered and such

Notes shall no longer be considered outstanding under this Indenture upon their repurchase. The Company may also enter into cash-settled swaps or other derivatives with respect to the Notes.

For the avoidance of doubt, any Notes underlying such cash-settled swaps or other derivatives shall not be required to be surrendered to the Note Registrar for cancellation in accordance with Section 2.08 and will continue to be considered outstanding for purposes of this Indenture, subject to the provisions of Section 8.04.

Section 2.11 *Appointment of Authenticating Agent.* As long as any Notes remain outstanding, the Company may, by an instrument in writing, appoint an authenticating agent (an “**Authenticating Agent**”), which shall be authorized to act on behalf of the Trustee to authenticate Notes pursuant to this Indenture. Notes authenticated by such Authenticating Agent shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee. Whenever reference is made in this Indenture to the authentication and delivery of Notes by the Trustee or to the Trustee’s certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Such Authenticating Agent shall at all times be a Person that is eligible pursuant to the Trust Indenture Act (as if the Trust Indenture Act were applicable hereto) to act as such and that has a combined capital and surplus of at least US\$50,000,000.

ARTICLE 3 SATISFACTION AND DISCHARGE

Section 3.01 *Satisfaction and Discharge.* This Indenture shall upon request of the Company be discharged and shall cease to be of further effect, and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when (a) (i) all Notes theretofore authenticated and delivered (other than (x) Notes which have been destroyed, lost or stolen and which have been replaced, paid or converted as provided in Section 2.06 and (y) Notes for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 4.04(d)) have been delivered to the Paying Agent for cancellation; or (ii) the Company has deposited with the Trustee (or solely in the case of conversion, deposited ADSs with the ADS Depositary) and/or delivered to Holders, as applicable, after the Notes have become due and payable, whether on the Maturity Date, any Tax Redemption Date, any Optional Redemption Date, the Repurchase Date, any Fundamental Change Repurchase Date, upon conversion or otherwise cash and/or (solely in the case of conversion, if applicable) ADSs, sufficient to pay all of (or satisfy such Conversion Obligation in respect of) the outstanding Notes and has paid all other sums payable by the Company under this Indenture; (b) if the Company has deposited cash with the Trustee (or its agents), the Trustee has received irrevocable instruction from the Company to make a payment on (or to satisfy such Conversion Obligation in respect of) the outstanding Notes, as the case may be, after the Notes have become due and payable, whether on the Maturity Date, any Tax Redemption Date, any Optional Redemption Date, the Repurchase Date, any Fundamental Change Repurchase Date, upon conversion or otherwise; and (c) the Company has delivered to the Trustee an Officer’s Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee and the Agents under Section 7.06 shall survive.

ARTICLE 4
PARTICULAR COVENANTS OF THE COMPANY

Section 4.01 *Payment of Principal and Special Interest.* The Company covenants and agrees that it will cause to be paid the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, each of the Notes at the places, at the respective times and in the manner provided herein and in the Notes.

Section 4.02 *Maintenance of Office or Agency.* The Company will maintain in the Borough of Manhattan, the City of New York, an office or agency (which initially will be the Paying Agent Office) where the Notes may be surrendered for registration of transfer or exchange or for presentation for payment or repurchase (“**Paying Agent**”) or for conversion (“**Conversion Agent**”) and where notices and demands to or upon the Company in respect of the Notes and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Paying Agent Office, *provided, however*, that the legal service of process against the Company shall in no circumstance be made at an office or agency of the Trustee.

The Company may also from time to time designate as co-Note Registrars one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided* that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in the Borough of Manhattan, the City of New York, for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency. The terms “**Paying Agent**” and “**Conversion Agent**” include any such additional or other offices or agencies, as applicable.

The Company hereby initially designates Citibank, N.A. as the Paying Agent, Note Registrar, Transfer Agent and Conversion Agent and the office or agency of Citibank, N.A., located at 14th Floor, 388 Greenwich Street, New York, New York 10013, United States of America, each shall be considered as one such office or agency of the Company for each of the aforesaid purposes.

In acting hereunder and in connection with the Notes, the Paying Agent, Transfer Agent, Conversion Agent, Custodian, and Note Registrar shall act solely as an agent of the Company and will not assume any fiduciary duty or relationship of agency or trust for or with any of the beneficial owners or Holder(s).

Section 4.03 *Appointments to Fill Vacancies in Trustee’s Office.* The Company, whenever necessary to avoid or fill a vacancy in the office of Trustee, will appoint, in the manner provided in Section 7.09, a trustee, so that there shall at all times be a trustee hereunder.

Section 4.04 *Provisions as to Paying Agent.* (a) If the Company shall appoint a Paying Agent other than the Trustee, the Company will cause such Paying Agent to execute and deliver to the Trustee an instrument in which such agent shall agree with the Trustee, subject to the provisions of this Section 4.04:

(i) that it will hold all sums held by it as such agent for the payment of the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, the Notes for the benefit of the Holders of the Notes;

(ii) that it will give the Trustee prompt written notice of any failure by the Company to make any payment of the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, the Notes when the same shall be due and payable; and

(iii) that at any time during the continuance of an Event of Default, upon request of the Trustee, it will forthwith pay to the Trustee all sums so held.

The Company shall by 11:00 a.m., New York City time one Business Day prior to each due date of the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, or accrued and unpaid Special Interest, if any, on, the Notes, deposit with the Paying Agent a sum in immediately available funds sufficient to pay such principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) or accrued and unpaid Special Interest, if any, and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee in writing of any failure to take such action; *provided* that if such deposit is made on the due date, such deposit must be received by the Paying Agent by 11:00 a.m., New York City time, on such date; *provided further*, that to the extent such deposit is received by Paying Agent after 11:00 a.m., New York City time, on any such due date, such deposit will be deemed deposited on the next Business Day. The Paying Agent shall not be bound to make any payment until it has received, in immediately available and cleared funds, an amount which shall be sufficient to pay, as applicable, the aggregate amount of principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, or accrued and unpaid Special Interest, if any, on, the Notes when such principal or Special Interest, if any, shall become due and payable. The Paying Agent shall not be responsible or liable for any delay in making the payment if it does not receive funds before 11:00 a.m. one Business Day prior to the payment date. The Company shall procure that, before 11:00 a.m., New York City time, on the second Business Day before each payment date, the bank effecting payment for it has confirmed by email, facsimile or authenticated SWIFT message to the Paying Agent the payment instructions relating to such payment.

(b) If the Company shall act as its own paying agent, it will, on or before each due date of the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, the Notes, set aside, segregate and hold in trust for the benefit of the Holders of the Notes a sum sufficient to pay such principal (including the Redemption Price, the Repurchase Price and the

Fundamental Change Repurchase Price, if applicable) and accrued and unpaid Special Interest, if any, so becoming due and will promptly notify the Trustee in writing of any failure to take such action and of any failure by the Company to make any payment of the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, or accrued and unpaid Special Interest, if any, on, the Notes when the same shall become due and payable. Upon an Event of Default under Section 6.01(i) or Section 6.01(j) hereof, the Trustee (or, if Citicorp International Limited is the Trustee, Citibank, N.A.) shall automatically become the Paying Agent.

(c) Anything in this Section 4.04 to the contrary notwithstanding, the Company may, at any time, for the purpose of obtaining a satisfaction and discharge of this Indenture, or for any other reason, pay, cause to be paid or deliver to the Trustee all sums or amounts held by the Company in trust or by any Paying Agent as required by this Section 4.04, such sums or amounts to be held by the Trustee upon the trusts herein contained and upon such payment or delivery by the Company or any Paying Agent to the Trustee, the Company or such Paying Agent shall be released from all further liability but only with respect to such sums or amounts.

(d) Subject to applicable escheatment laws, any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, and accrued and unpaid Special Interest, if any, on, or in satisfaction of its Conversion Obligation with respect to, any Note and remaining unclaimed for two years after such principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) or Special Interest, if any, has become due and payable or such Conversion Obligation has become due shall be paid or delivered, as the case may be, to the Company on request of the Company contained in an Officer's Certificate, or (if then held by the Company) shall be discharged from such trust; and the Holder of such Note shall thereafter, as an unsecured general creditor, look only to the Company for payment thereof, and all liability of the Trustee or such Paying Agent with respect to such money or property, and all liability of the Company as trustee thereof, shall thereupon cease; *provided, however*, that the Trustee or such Paying Agent, before being required to make any such repayment or delivery, may at the expense of the Company cause to be published once, in a newspaper published in the English language, customarily published on each Business Day and of general circulation in The Borough of Manhattan, the City of New York, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid or delivered to the Company.

Section 4.05 *Existence.* Subject to Article 11, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence. The Company shall promptly provide the Trustee with written notice of any change to its name, jurisdiction of incorporation or change to its corporate organization.

Section 4.06 *Rule 144A Information Requirement and Annual Reports.* (a) At any time the Company is not subject to Section 13 or 15(d) of the Exchange Act, the Company shall, so long as any of the Notes, any ADSs deliverable upon conversion thereof, if any, or any Ordinary Shares underlying ADSs deliverable upon conversion thereof shall, at such time, constitute

“restricted securities” within the meaning of Rule 144(a)(3) under the Securities Act, promptly provide to the Trustee and shall, upon written request, provide to any Holder, beneficial owner or prospective purchaser of such Notes or the ADSs deliverable upon conversion of such Notes, if any, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act to facilitate the resale of such Notes or ADSs pursuant to Rule 144A. The Company shall take such further action as any Holder or beneficial owner of such Notes or such ADSs may reasonably request to the extent from time to time required to enable such Holder or beneficial owner to sell such Notes or ADSs in accordance with Rule 144A, as such rule may be amended from time to time.

(b) The Company shall provide to the Trustee within 15 days after the same are required to be filed with the Commission, copies of any documents or reports that the Company is required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act (excluding any such information, documents or reports, or portions thereof, subject to confidential treatment and any correspondence with the Commission) (giving effect to any applicable grace period provided by Rule 12b-25 under the Exchange Act). Any such document or report that the Company files with the Commission via the Commission’s EDGAR system (or any successor thereto) shall be deemed to be provided to the Trustee for purposes of this Section 4.06(b) at the time such documents are filed via the EDGAR system (or any successor thereto), it being understood that the Trustee shall not be responsible for determining whether such filings have been made and when the Company’s statements, reports or documents are publically available and/or accessible electronically.

(c) Delivery of the reports and documents described in subsection (b) above to the Trustee is for informational purposes only, and the Trustee’s receipt of such shall not constitute actual or constructive notice or knowledge of any information contained therein or determinable from information contained therein, including the Company’s compliance with any of its covenants hereunder (as to which the Trustee is entitled to conclusively rely on an Officer’s Certificate).

(d) If, at any time during the six-month period beginning on, and including, the date that is six months after the Last Date of Original Issuance of the Notes, the Company fails to timely file any document or report that it is required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act, as applicable (after (i) giving effect to all applicable grace periods thereunder and (ii) other than reports on Form 6-K to the extent such reports are not required to satisfy the “current public information” requirement of Rule 144), or the Notes are not otherwise freely tradable pursuant to Rule 144 by Holders other than the Company’s Affiliates or Holders that were the Company’s Affiliates at any time during the three months immediately preceding (as a result of restrictions pursuant to U.S. securities laws or the terms of this Indenture or the Notes), the Company shall pay or cause the Paying Agent (on behalf of the Company and subject to receipt of funds from the Company pursuant to the last paragraph in Section 4.04(a)) to pay Special Interest on the Notes. Such Special Interest shall accrue on the Notes at the rate of 0.50% per annum of the principal amount of the Notes outstanding for each day during such period for which the Company’s failure to file has occurred and is continuing or the period during which the Notes are not freely tradable, as described in this Section 4.06(d), by Holders other than Affiliates of the Company (or Holders that were Affiliates of the Company at any time during the three months immediately preceding). As used in this Section 4.06(d),

documents or reports that the Company is required to “file” with the Commission pursuant to Section 13 or 15(d) of the Exchange Act does not include documents or reports that the Company furnishes to the Commission pursuant to Section 13 or 15(d) of the Exchange Act. Solely for purposes of this paragraph, the phrase “restrictions pursuant to U.S. securities laws or the terms of this Indenture or the Notes” shall not include, for the avoidance of doubt, the assignment of a restricted CUSIP number or the existence of a restrictive notes legend on Notes in compliance with this Indenture, in either case, during the six-month period described in Section 4.06(d).

(e) If, and for so long as, the restrictive legend on the Notes specified in Section 2.05(c) has not been removed, the Notes are assigned a restricted CUSIP number or the Notes are not otherwise freely tradable by Holders other than the Company’s Affiliates or Holders that were the Company’s Affiliates at any time during the three months immediately preceding (without restrictions pursuant to U.S. securities laws or the terms of this Indenture or the Notes) as of the 380th day after the Last Date of Original Issuance of the Notes, the Company shall pay or cause the Paying Agent to pay Special Interest on the Notes at a rate equal to 0.50% per annum of the principal amount of Notes outstanding until the restrictive legend on the Notes has been removed in accordance with Section 2.05(c), the Notes have been assigned an unrestricted CUSIP number and the Notes are freely tradable by Holders other than the Company’s Affiliates or Holders that were the Company’s Affiliates at any time during the three months immediately preceding (without restrictions pursuant to U.S. securities laws or the terms of this Indenture or the Notes).

(f) Special Interest will be payable in arrears on each Special Interest Payment Date as set forth in Section 2.03(b).

(g) Subject to the immediately preceding sentence, the Special Interest that is payable in accordance with Section 4.06(d) or Section 4.06(e) shall be in addition to, and not in lieu of, any Special Interest that may be payable as a result of the Company’s election pursuant to Section 6.03. Notwithstanding the foregoing, in no event shall any Special Interest that may accrue pursuant to Section 4.06(d) and Section 4.06(e) together with any Special Interest that may accrue in the event that the Company elects to pay Special Interest in respect of an Event of Default relating to its failure to comply with its obligations as set forth under Section 6.03, accrue at an aggregate rate in excess of 0.50% per annum, in each case, as a result of the Company’s failure to timely file any document or report that it is required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act, regardless of the number of such events or such circumstances giving rise to the requirement to pay such Special Interest. Such Special Interest will be the exclusive remedy available to Holders of the Notes for a failure of the Notes to become freely tradable pursuant to Rule 144 by Holders other than the Company’s Affiliates (or Holders that were the Company’s Affiliates at any time during the three months immediately preceding) as a result of restrictions pursuant to U.S. securities laws or the terms of this Indenture or the Notes.

(h) If Special Interest is payable by the Company pursuant to Section 4.06(d) or Section 4.06(e), the Company shall deliver to the Trustee and the Paying Agent an Officer’s Certificate to that effect stating (i) the amount of such Special Interest that is payable and (ii) the date on which such Special Interest is payable. Unless and until a Responsible Officer of the

Trustee receives at the Corporate Trust Office such a certificate, the Trustee and the Paying Agent may assume without inquiry that no such Special Interest is payable. If the Company has paid such Special Interest directly to the Persons entitled to it, the Company shall deliver to the Trustee an Officer's Certificate setting forth the particulars of such payment.

Section 4.07 *Additional Amounts.* (a) All payments and deliveries made by, or on behalf of, the Company or any successor to the Company under or with respect to this Indenture and the Notes, including, but not limited to, payments of principal (including, if applicable, the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price), premium, if any, payments of Special Interest, if any, and payments of cash and/or deliveries of ADSs or any other consideration due on conversion of a Note (together with payment of cash for any Fractional ADS or other consideration), shall be made without withholding, deduction or reduction for any other collection at source for, or on account of, any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied (including any penalties and interest related thereto) ("**applicable taxes**") unless such withholding, deduction or reduction is required by law or by regulation or governmental policy having the force of law. In the event that any such withholding, deduction or reduction is so required by or within the Cayman Islands or the People's Republic of China, or any jurisdiction in which the Company or any successor to the Company is, for tax purposes, incorporated, organized or resident or doing business (each, as applicable, a "**Relevant Taxing Jurisdiction**") or any jurisdiction from or through which payment or delivery is made or deemed made (together with each Relevant Taxing Jurisdiction, a "**Relevant Jurisdiction,**" including, in each case, any political subdivision or taxing authority thereof or therein), the Company shall pay or deliver to each Holder such additional amounts of cash, ADSs or other consideration, as applicable ("**Additional Amounts**") as may be necessary to ensure that the net amount received by the beneficial owner of the Notes after such withholding, deduction or reduction (and after deducting any taxes on the Additional Amounts) shall equal the amounts that would have been received by such beneficial owner had no such withholding, deduction or reduction been required; *provided* that no Additional Amounts shall be payable:

(i) for or on account of:

(A) any applicable taxes that would not have been imposed but for:

(1) the existence of any present or former connection between the relevant Holder or beneficial owner of such Note and the Relevant Jurisdiction, other than merely acquiring or holding such Note, receiving cash and/or ADSs (together with the payment of cash for any Fractional ADS) or other consideration upon conversion of such Note or the receipt of payments or the exercise or enforcement of rights thereunder, including, without limitation, such Holder or beneficial owner being or having been a national, domiciliary or resident of such Relevant Jurisdiction or treated as a resident thereof or being or having been physically present or engaged in a trade or business therein or having had a permanent establishment therein;

(2) the presentation of such Note (in cases in which presentation is required) more than 30 days after the later of the date on which the payment of the principal of (including the Redemption Price, the Repurchase Price and Fundamental Change Repurchase Price, if applicable) and Special Interest, if any, on, such Note or the payment of cash and/or the delivery of ADSs (together with payment of cash for any Fractional ADS) upon conversion of such Note became due and payable pursuant to the terms thereof or was made or duly provided for (except to the extent that the Holder or beneficial owner would have been entitled to Additional Amounts had the Note been presented on the last day of such 30 day period); or

(3) the failure of the Holder or beneficial owner to comply with a timely written request from the Company or any successor of the Company, addressed to the Holder, to the extent such Holder or beneficial owner is legally entitled, without material undue burden, to provide certification, information, documents or other evidence concerning such Holder's or beneficial owner's nationality, residence, identity or connection with the Relevant Jurisdiction, or to make any declaration or satisfy any other reporting requirement relating to such matters, if and to the extent that due and timely compliance with such request is required by statute, regulation or administrative practice of the Relevant Jurisdiction in order to reduce or eliminate any withholding or deduction as to which Additional Amounts would have otherwise been payable to such Holder or beneficial owner;

(B) any estate, inheritance, gift, sale, transfer, personal property or similar applicable tax or excise taxes imposed on a transfer of the Notes;

(C) any applicable tax that is payable otherwise than by withholding, deduction or any other collection at source from payments or deliveries under or with respect to the Notes;

(D) any applicable tax required to be withheld or deducted under Sections 1471 to 1474 of the Code (or any amended or successor versions of such Sections that is substantively comparable and not materially more onerous to comply with) ("FATCA"), any regulations or other official guidance thereunder, any intergovernmental agreement or agreement pursuant to Section 1471(b)(1) of the Code entered into in connection with FATCA, or any law, regulation or other official guidance enacted in any jurisdiction implementing FATCA or an intergovernmental agreement; or

(E) any combination of applicable taxes referred to in the preceding clauses (A), (B), (C) or (D); or

(ii) with respect to any payment of the principal of (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if

applicable), premium, if any, or any Special Interest, on, such Note or the payment of cash and/or delivery of ADSs (together with payment of cash for any Fractional ADS) upon conversion of such Note to a Holder, if the Holder is a fiduciary, partnership or person other than the sole beneficial owner of that payment or delivery to the extent that such payment or delivery would be required to be included in the income under the laws of the Relevant Jurisdiction, for tax purposes, of a beneficiary or settlor with respect to the fiduciary, a partner or member of that partnership or a beneficial owner who would not have been entitled to such Additional Amounts had that beneficiary, settlor, partner, member or beneficial owner been the Holder thereof.

(b) In addition to the foregoing, the Company or its successor shall also pay and indemnify each Holder and beneficial owner for any present or future stamp, issue, registration, value added, court or documentary taxes, or any other excise or property taxes, charges or similar levies or taxes (including penalties, interest and any other reasonable expenses related thereto) which are levied by any Relevant Jurisdiction (and in the case of enforcement, any jurisdiction) on or in connection with the execution, delivery, registration or enforcement of any of the Notes, this Indenture or any other document or instrument referred to herein or the receipt of payments with respect thereto (including the receipt of ADSs (together with payment of cash for any Fractional ADS) or other consideration due upon conversion).

(c) If the Company becomes obligated to pay Additional Amounts with respect to any payment or delivery under or with respect to the Notes, the Company shall deliver to the Trustee and the Paying Agent, if other than the Trustee, on a date that is at least 30 days prior to the date of that payment or delivery (unless the obligation to pay Additional Amounts arises after the 30th day prior to that payment or delivery date, in which case the Company shall notify the Trustee and the Paying Agent promptly thereafter) an Officer's Certificate stating the fact that Additional Amounts will be payable and the amount estimated to be so payable. The Officer's Certificate must also set forth any other information reasonably necessary to enable the Paying Agent or the Trustee (on behalf of the Company and subject to receipt of funds from the Company pursuant to the last paragraph in Section 4.04(a)), as the case may be, to pay Additional Amounts to Holders on the relevant payment or delivery date. The Trustee, the Paying Agent and the Conversion Agent shall be entitled to conclusively rely on and accept such Officer's Certificate as conclusive proof that such payments are necessary. The Company or its successor shall provide the Trustee, the Paying Agent and the Conversion Agent with documentation reasonably satisfactory to the Trustee, the Paying Agent and the Conversion Agent (as applicable) evidencing the payment of Additional Amounts.

(d) The Company shall make all withholdings and deductions required by law and shall remit the full amount deducted or withheld to the relevant tax authority in accordance with applicable law. Upon request, the Company shall provide to the Trustee a certified copy of an official receipt or, if official receipts are not obtainable, other documents reasonably satisfactory to the Trustee evidencing the payment of any applicable taxes so deducted or withheld. The Company will attach to each certified copy or other document a certificate stating the amount of such applicable taxes paid per US\$1,000 principal amount of the Notes then outstanding. Copies of those receipts or other documentation, as the case may be, shall be made available by the Paying Agent to the Holders of the Notes upon prior written request.

(e) Any reference in this Indenture or the Notes in any context to the payment of cash and/or the delivery of ADSs (together with payment of cash for any Fractional ADS) or other consideration upon conversion of any Note or the payment of principal of (including the Redemption Price, the Repurchase Price and Fundamental Change Repurchase Price, if applicable) and any premium or Special Interest, (including any Special Interest) on any Note or any other amount payable with respect to such Note, shall be deemed to include payment of Additional Amounts to the extent that, in such context, Additional Amounts are, were or would be payable with respect to that amount pursuant to this Section 4.07.

(f) The foregoing obligations shall survive termination, defeasance or discharge of this Indenture or any transfer by a Holder or beneficial owner of its Notes and will apply *mutatis mutandis* to any jurisdiction in which any successor to the Company is then, for tax purposes, incorporated, organized or resident or doing business (or any political subdivision or taxing authority thereof or therein) or any jurisdiction from or through which payment or delivery under or with respect to the Notes is made or deemed made by or on behalf of such successor (or any political subdivision or taxing authority thereof or therein).

Section 4.08 *Stay, Extension and Usury Laws.* The Company covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law or other law that would prohibit or forgive the Company from paying all or any portion of the principal of or Special Interest, if any, on the Notes as contemplated herein, wherever enacted, now or at any time hereafter in force, or that may affect the covenants or the performance of this Indenture; and the Company (to the extent it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

Section 4.09 *Compliance Certificate; Statements as to Defaults.* The Company shall deliver to the Trustee within 120 days after the end of each fiscal year of the Company (beginning with the fiscal year ending on December 31, 2021) an Officer's Certificate stating that a review has been conducted of the Company's activities under this Indenture and the Company has fulfilled its obligations hereunder, and whether the authorized Officers thereof have knowledge of any Event of Default or Default by the Company that occurred and is continuing and, if so, specifying each such Event of Default and the nature thereof. Delivery of such reports and documents to the Trustee is for informational purposes only, and the Trustee's receipt of such shall not constitute actual or constructive notice or knowledge of any information contained therein or determinable from information contained therein.

In addition, the Company shall deliver to the Trustee, as soon as possible, and in any event within 30 days after the occurrence of any Event of Default or Default if such Event of Default or Default is then continuing, a written notice setting forth the details of any events that would constitute an Event of Default or Default, their status and the action that the Company is taking or proposing to take in respect thereof; *provided* that the Company is not required to deliver such notice if such Event of Default or Default has been cured. The Trustee shall have no responsibility to take any steps to ascertain whether any Event of Default or Default has occurred, and until (i) a Responsible Officer of the Trustee has received a written notice

regarding such an occurrence, or (ii) the Trustee has received written notice at the Corporate Trust Office from the Holders of at least 25% in aggregate principal amount of the Notes then outstanding regarding such an occurrence, the Trustee is entitled to assume, without liability, that no Event of Default or Default has occurred.

Section 4.10 *Further Instruments and Acts.* Upon request of the Trustee, the Company will execute and deliver such further instruments and do such further acts as may be reasonably necessary or proper to carry out more effectively the purposes of this Indenture.

ARTICLE 5
LISTS OF HOLDERS AND REPORTS BY THE COMPANY

Section 5.01 *Lists of Holders.* The Company covenants and agrees that it will furnish or cause to be furnished to the Trustee, (i) if and at all such times when Special Interest is payable on the Notes pursuant to this Indenture, not more than 15 days after each January 15 and July 15 in each year (if Special Interest is then payable as set forth hereunder) beginning with July 15, 2021, and (ii) at such other times as the Trustee may request in writing, within 30 days after receipt by the Company of any such request (or such lesser time as the Trustee may reasonably request in order to enable it to timely provide any notice to be provided by it hereunder), a list in such form as the Trustee may reasonably require of the names and addresses of the Holders as of a date not more than 15 days (or such other date as the Trustee may reasonably request in order to so provide any such notices) prior to the time such information is furnished, except that no such list need be furnished so long as Citibank, N.A. is acting as Note Registrar.

Section 5.02 *Preservation and Disclosure of Lists.* The Trustee shall preserve, in as current a form as is reasonably practicable, all information as to the names and addresses of the Holders contained in the most recent list furnished to it as provided in Section 5.01 or maintained by the Trustee in its capacity as Note Registrar, if so acting. The Trustee may destroy any list furnished to it as provided in Section 5.01 upon receipt of a new list so furnished.

ARTICLE 6
DEFAULTS AND REMEDIES

Section 6.01 *Events of Default.* The following events shall be “**Events of Default**” with respect to the Notes:

(a) default in any payment of Special Interest or Additional Amounts, if any, on any Note when due and payable and the default continues for a period of 30 days;

(b) default in the payment of principal of any Note when due and payable on the Maturity Date, upon redemption in accordance with Section 16.01 or Section 16.02, upon any required repurchase, upon declaration of acceleration or otherwise;

(c) failure by the Company to comply with its obligations to convert the Notes in accordance with this Indenture upon exercise of a Holder’s conversion right and such failure continues for a period of five Business Days;

(d) failure by the Company to comply with notice obligations in accordance with Section 15.01(a), Section 15.02(c), Section 16.01, Section 14.03(a), Section 14.03(g), Section 14.01(b)(ii) or Section 14.01(b)(iii), in each case, when due and such failure continues for a period of five Business Days;

(e) failure by the Company to comply with its obligations under Article 11;

(f) failure by the Company for 60 days after written notice from the Trustee or by the Trustee at the request of the Holders of at least 25% in aggregate principal amount of the Notes then outstanding has been received by the Company to comply with any of its other agreements contained in the Notes or this Indenture;

(g) default by the Company or any Significant Subsidiary of the Company with respect to any mortgage, agreement or other instrument under which there may be outstanding, or by which there may be secured or evidenced, any indebtedness for money borrowed in excess of US\$25,000,000 (or the foreign currency equivalent thereof) in the aggregate of the Company and/or any such Significant Subsidiary, whether such indebtedness now exists or shall hereafter be created (i) resulting in such indebtedness becoming or being declared due and payable prior to its stated maturity or (ii) constituting a failure to pay the principal or interest, if any, of any such debt when due and payable at its stated maturity, upon required repurchase, upon declaration of acceleration or otherwise; and in the cases of clauses (i) and (ii), such acceleration shall not have been rescinded or annulled or such failure to pay or default shall not have been cured or waived, or such indebtedness is not paid or discharged, as the case may be, within 30 days after written notice to the Company by the Trustee or to the Company and the Trustee by Holders of at least 25% in aggregate principal amount of Notes then outstanding in accordance with this Indenture;

(h) a final judgment for the payment of US\$25,000,000 (or the foreign currency equivalent thereof) or more (excluding any amounts covered by insurance) rendered against the Company or any Significant Subsidiary of the Company, which judgment is not paid, bonded or otherwise discharged or stayed within 60 days after (i) the date on which the right to appeal thereof has expired if no such appeal has commenced, or (ii) the date on which all rights to appeal have been extinguished;

(i) the Company or any Significant Subsidiary shall commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to the Company or any such Significant Subsidiary or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver, liquidator, custodian or other similar official of the Company or any such Significant Subsidiary or any substantial part of its property, or shall consent to any such relief or to the appointment of or taking possession by any such official in an involuntary case or other proceeding commenced against it, or shall make a general assignment for the benefit of creditors, or shall fail generally to pay its debts as they become due; or

(j) an involuntary case or other proceeding shall be commenced against the Company or any Significant Subsidiary seeking liquidation, reorganization or other relief with respect to the Company or such Significant Subsidiary or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or seeking the appointment of a trustee, receiver,

liquidator, custodian or other similar official of the Company or such Significant Subsidiary or any substantial part of its property, and such involuntary case or other proceeding shall remain undismissed and unstayed for a period of 60 consecutive days.

Section 6.02 *Acceleration; Rescission and Annulment.* If one or more Events of Default shall have occurred and be continuing, then, and in each and every such case (other than an Event of Default specified in Section 6.01(i) or Section 6.01(j) with respect to the Company or any of its Significant Subsidiaries), unless the principal of all of the Notes shall have already become due and payable, the Trustee may by notice in writing to the Company, or the Holders of at least 25% in aggregate principal amount of the Notes then outstanding determined in accordance with Section 8.04, by notice in writing to the Company and to the Trustee may, and the Trustee at the request of such Holders shall (subject to being indemnified and/or secured and/or pre-funded to its satisfaction), declare 100% of the principal of, and accrued and unpaid Special Interest, if any on, all the Notes to be due and payable immediately, and upon any such declaration the same shall become and shall automatically be immediately due and payable, notwithstanding anything contained in this Indenture or in the Notes to the contrary. If an Event of Default specified in Section 6.01(i) or Section 6.01(j) with respect to the Company or any of its Significant Subsidiaries occurs and is continuing, 100% of the principal of, and accrued and unpaid Special Interest, if any, on, all Notes shall become and shall automatically be immediately due and payable without any action on the part of the Trustee and the Holders. If an Event of Default occurs and is continuing, all agents of the Company appointed under this Indenture (including the Agents) will be required to act on the direction of the Trustee.

The immediately preceding paragraph, however, is subject to the conditions that, at any time after the principal of the Notes shall have been so declared due and payable, and before any judgment or decree for the payment of the monies due shall have been obtained or entered as hereinafter provided, if (1) rescission would not conflict with any judgment or decree of a court of competent jurisdiction and (2) any and all existing Events of Default under this Indenture, other than the nonpayment of the principal of and accrued and unpaid Special Interest, if any, on Notes that shall have become due solely by such acceleration, shall have been cured or waived pursuant to Section 6.09, then and in every such case (except as provided in the immediately succeeding sentence) the Holders of a majority in aggregate principal amount of the Notes then outstanding, by written notice to the Company and to the Trustee, may waive all Defaults or Events of Default with respect to the Notes and rescind and annul such declaration and its consequences and such Default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured for every purpose of this Indenture; but no such waiver or rescission and annulment shall extend to or shall affect any subsequent Default or Event of Default, or shall impair any right consequent thereon. Notwithstanding anything to the contrary herein, no such waiver or rescission and annulment shall extend to or shall affect any Default or Event of Default resulting from (i) the nonpayment of the principal of, or accrued and unpaid Special Interest, if any, on any Notes, (ii) a failure to repurchase any Notes when required or (iii) a failure to pay or deliver, as the case may be, the consideration due upon conversion of the Notes.

Section 6.03 *Special Interest.* Notwithstanding anything in this Indenture or in the Notes to the contrary, to the extent the Company elects, the sole remedy for Event of Default relating to the Company's failure to comply with its obligations as set forth in Section 4.06(b)

shall after the occurrence of such an Event of Default consist exclusively of the right to receive Special Interest on the Notes at a rate equal to:

(a) 0.25% per annum of the principal amount of the Notes outstanding for each day during the period beginning on, and including, the date on which such an Event of Default first occurs and ending on the earlier of (i) the date on which such Event of Default is cured or validly waived and (ii) the 180th day immediately following, and including, the date on which such Event of Default first occurred; and

(b) if such Event of Default has not been cured or validly waived prior to the 181st day immediately following, and including, the date on which such Event of Default first occurred, 0.50% per annum of the principal amount of the Notes outstanding for each day during the period beginning on, and including, the 181st day immediately following, and including, the date on which such an Event of Default first occurred and ending on the earlier of (i) the date on which such Event of Default is cured or validly waived and (ii) the 360th day immediately following, and including, the date on which such Event of Default first occurred.

Special Interest payable pursuant to this Section 6.03 shall be in addition to, not in lieu of, any Special Interest payable pursuant to Section 4.06(d) or Section 4.06(e). In no event shall Special Interest accrue on the Notes on any day under this Indenture (taking any Special Interest payable pursuant to this Section 6.03 together with any Special Interest payable pursuant to Section 4.06(d) and Section 4.06(e)) at an annual rate accruing in excess of 0.50% per annum, in the aggregate, for any violation or Default caused by the Company's failure to be current in respect of its Exchange Act reporting obligations. If the Company so elects, such Special Interest shall be payable as set forth in Section 2.03(b). On the 361st day after such Event of Default (if the Event of Default with respect to the Company's obligations under Section 4.06(b) is not cured or waived prior to such 361st day), the Notes will be subject to acceleration as provided in Section 6.02. In the event the Company does not elect to pay Special Interest following an Event of Default in accordance with this Section 6.03 or the Company elected to make such payment but does not pay the Special Interest when due, the Notes shall be subject to acceleration as provided in Section 6.02.

In order to elect to pay Special Interest as the sole remedy during the first 360 days after the occurrence of any Event of Default described in the immediately preceding paragraph, the Company must notify in writing all Holders of the Notes, the Trustee and the Paying Agent of such election prior to the beginning of such 360-day period. Upon the failure to timely give such notice, the Notes shall be immediately subject to acceleration as provided in Section 6.02.

Section 6.04 *Payments of Notes on Default; Suit Therefor.* If an Event of Default described in clause (a) or (b) of Section 6.01 shall have occurred, the Company shall, upon demand of the Trustee acting in its own sole and absolute discretion or at the request of Holders of at least 25% in aggregate principal amount of the Notes then outstanding determined in accordance with Section 8.04 and subject to indemnity and/or security and/or pre-funding satisfactory to the Trustee, pay to the Trustee, for the benefit of the Holders of the Notes, (i) the whole amount then due and payable on the Notes for principal and Special Interest, if any, with no interest accruing on any overdue principal and Special Interest, if any, unless Special Interest is payable pursuant to this Indenture on the required payment date, in which case such amounts

will accrue interest per annum at the then-applicable rate of Special Interest *plus* one percent from the required payment date and to the extent that Special Interest remains payable pursuant to this Indenture, subject to the enforceability of such interest pursuant to applicable law, and (ii) in addition thereto, such further amount as shall be sufficient to cover any amounts due to the Trustee under Section 7.06. If the Company shall fail to pay such amounts forthwith upon such demand, the Trustee, in its own name or as trustee of an express trust, may institute a judicial proceeding (at law or in equity) for the collection of the sums so due and unpaid, may prosecute such proceeding to judgment or final decree and may enforce the same against the Company or any other obligor upon the Notes and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon the Notes, wherever situated.

In the event there shall be pending proceedings for the bankruptcy or for the reorganization of the Company or any other obligor on the Notes under Title 11 of the United States Code, or any other applicable law, or in case a receiver, assignee or trustee in bankruptcy or reorganization, liquidator, sequestrator or similar official shall have been appointed for or taken possession of the Company or such other obligor, the property of the Company or such other obligor, or in the event of any other judicial proceedings relative to the Company or such other obligor upon the Notes, or to the creditors or property of the Company or such other obligor, the Trustee, irrespective of whether the principal of the Notes shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand pursuant to the provisions of this Section 6.04, shall be entitled and empowered, by intervention in such proceedings or otherwise, to file and prove a claim or claims for the whole amount of principal and accrued and unpaid Special Interest, if any, in respect of the Notes, and, in case of any judicial proceedings, to file such proofs of claim and other papers or documents and to take such other actions as it may deem necessary or advisable in order to have the claims of the Trustee (including any claim for the compensation, properly incurred expenses, properly incurred disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceedings relative to the Company or any other obligor on the Notes, its or their creditors, or its or their property, and to collect and receive any monies or other property payable or deliverable on any such claims, and to distribute the same after the deduction of any amounts due to the Trustee under Section 7.06; and any receiver, assignee or trustee in bankruptcy or reorganization, liquidator, custodian or similar official is hereby authorized by each of the Holders to make such payments to the Trustee, as administrative expenses, and, in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for compensation, properly incurred expenses, advances and properly incurred disbursements, including agents and counsel fees and expenses, and including any other amounts due to the Trustee under Section 7.06, incurred by it up to the date of such distribution. To the extent that such payment of compensation, properly incurred expenses, advances and properly incurred disbursements out of the estate in any such proceedings shall be denied for any reason, payment of the same shall be secured by a lien on, and shall be paid out of, any and all distributions, dividends, monies, securities and other property that the Holders of the Notes may be entitled to receive in such proceedings, whether in liquidation or under any plan of reorganization or arrangement or otherwise.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting such Holder or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

All rights of action and of asserting claims under this Indenture, or under any of the Notes, may be enforced by the Trustee without the possession of any of the Notes, or the production thereof at any trial or other proceeding relative thereto, and any such suit or proceeding instituted by the Trustee shall be brought in its own name or as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the compensation, properly incurred expenses, properly incurred disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Notes.

In any proceedings brought by the Trustee (and in any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the Holders of the Notes, and it shall not be necessary to make any Holders of the Notes parties to any such proceedings.

In case the Trustee shall have proceeded to enforce any right under this Indenture and such proceedings shall have been discontinued or abandoned because of any waiver pursuant to Section 6.09 or any rescission and annulment pursuant to Section 6.02 or for any other reason or shall have been determined adversely to the Trustee, then and in every such case the Company, the Holders, and the Trustee shall, subject to any determination in such proceeding, be restored respectively to their several positions and rights hereunder, and all rights, remedies and powers of the Company, the Holders, and the Trustee shall continue as though no such proceeding had been instituted.

Section 6.05 *Application of Monies Collected by Trustee.* Any monies or property collected by the Trustee pursuant to this Article 6 with respect to the Notes shall be applied in the following order, at the date or dates fixed by the Trustee for the distribution of such monies, upon presentation of the several Notes, and stamping thereon the payment, if only partially paid, and upon surrender thereof, if fully paid:

First, to the payment of all amounts due to the Trustee and the Agents, including to their respective agents and counsel, under Section 7.06, including indemnity payments, and all fees, costs and expenses (including legal fees and expenses) due to the Trustee, the Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar hereunder;

Second, in case the principal of the outstanding Notes shall not have become due and be unpaid, to the payment of any Special Interest, if any, on, the Notes in default in the order of the date due of the payments of such Special Interest, with interest (to the extent that such interest is payable pursuant to this Indenture and has been collected by the Trustee) upon such overdue payments at the then applicable rate of Special Interest, if any, *plus* one percent, such payments to be made ratably to the Persons entitled thereto;

Third, in case the principal of the outstanding Notes shall have become due, by declaration or otherwise, and be unpaid to the payment of the whole amount (including, if

applicable, the payment of the Redemption Price, Repurchase Price or Fundamental Change Repurchase Price and any cash due upon conversion) then owing and unpaid upon the Notes for principal and Special Interest, if any, with interest (to the extent that any such interest is payable pursuant to this Indenture and has been collected by the Trustee) on the overdue principal and Special Interest, if any, at the then applicable rate of Special Interest, if any, *plus* one percent, and in case such monies shall be insufficient to pay in full the whole amounts so due and unpaid upon the Notes, then to the payment of such principal (including, if applicable, the Redemption Price, Repurchase Price or Fundamental Change Repurchase Price and the cash due upon conversion) and interest without preference or priority of principal over interest, if any, or of any interest over principal or of any installment of interest over any other installment of interest, or of any Note over any other Note, ratably to the aggregate of such principal (including, if applicable, the Redemption Price, Repurchase Price or Fundamental Change Repurchase Price) and any accrued and unpaid interest; and

Fourth, to the payment of the remainder, if any, to the Company.

Section 6.06 *Proceedings by Holders*. Except to enforce the right to receive payment of principal (including, if applicable, the Redemption Price, the Repurchase Price or Fundamental Change Repurchase Price) or Special Interest, if any, when due, or the right to receive payment or delivery of the consideration due upon conversion, no Holder of any Note shall have any right by virtue of or by availing of any provision of this Indenture to institute any suit, action or proceeding in equity or at law upon or under or with respect to this Indenture, or for the appointment of a receiver, trustee, liquidator, custodian or other similar official, or for any other remedy hereunder, unless:

(a) such Holder previously shall have given to the Trustee written notice of an Event of Default and of the continuance thereof, as herein provided;

(b) Holders of at least 25% in aggregate principal amount of the Notes then outstanding shall have made written request upon the Trustee to institute such action, suit or proceeding in its own name as Trustee hereunder;

(c) such Holders shall have offered to the Trustee such security and/or indemnity and/or pre-funding satisfactory to it against any loss, liability or expense to be incurred therein or thereby;

(d) the Trustee has not complied with such request for 60 days after its receipt of such written notice, request and offer of security and/or indemnity and/or pre-funding satisfactory to it (as set forth in clause (c) above); and

(e) no written direction that, in the opinion of the Trustee, is inconsistent with such written request shall have been given to the Trustee by the Holders of a majority of the aggregate principal amount of the Notes then outstanding within such 60-day period pursuant to Section 6.09,

it being understood and intended, and being expressly covenanted by the taker and Holder of every Note with every other taker and Holder and the Trustee that no one or more Holders shall have any right in any manner whatever by virtue of or by availing of any provision of this

Indenture to affect, disturb or prejudice the rights of any other Holder, or to obtain or seek to obtain priority over or preference to any other such Holder, or to enforce any right under this Indenture, except in the manner herein provided and for the equal, ratable and common benefit of all Holders (except as otherwise provided herein), it being understood that the Trustee does not have an affirmative duty to ascertain whether or not any actions or forbearances by a Holder are prejudicial to any other Holders. For the protection and enforcement of this Section 6.06, each and every Holder and the Trustee shall be entitled to such relief as can be given either at law or in equity.

Notwithstanding any other provision of this Indenture and any provision of any Note, the right of any Holder to receive payment or delivery, as the case may be, of (x) the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, (y) accrued and unpaid Special Interest, if any, on, and (z) the consideration due upon conversion of, such Note, on or after the respective due dates expressed or provided for in such Note or in this Indenture, or to institute suit for the enforcement of any such payment or delivery, as the case may be, on or after such respective dates against the Company shall not be impaired or affected without the consent of such Holder.

Section 6.07 *Proceedings by Trustee*. In case of an Event of Default, the Trustee may in its sole and absolute discretion proceed to protect and enforce the rights vested in it by this Indenture by such appropriate judicial proceedings as are necessary to protect and enforce any of such rights, either by suit in equity or by action at law or by proceeding in bankruptcy or otherwise, whether for the specific enforcement of any covenant or agreement contained in this Indenture or in aid of the exercise of any power granted in this Indenture, or to enforce any other legal or equitable right vested in the Trustee by this Indenture or by law.

Section 6.08 *Remedies Cumulative and Continuing*. Except as provided in the last paragraph of Section 2.06, all powers and remedies given by this Article 6 to the Trustee or to the Holders shall, to the extent permitted by law, be deemed cumulative and not exclusive of any thereof or of any other powers and remedies available to the Trustee or the Holders of the Notes, by judicial proceedings or otherwise, to enforce the performance or observance of the covenants and agreements contained in this Indenture, and no delay or omission of the Trustee or of any Holder of any of the Notes to exercise any right or power accruing upon any Default or Event of Default shall impair any such right or power, or shall be construed to be a waiver of any such Default or Event of Default or any acquiescence therein; and, subject to the provisions of Section 6.06, every power and remedy given by this Article 6 or by law to the Trustee or to the Holders may be exercised from time to time, and as often as shall be deemed expedient, by the Trustee or by the Holders.

Section 6.09 *Direction of Proceedings and Waiver of Defaults by Majority of Holders*. The Holders of a majority of the aggregate principal amount of the Notes at the time outstanding determined in accordance with Section 8.04 shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to Notes; *provided, however*, that (a) such direction shall not be in conflict with any rule of law or with this Indenture, (b) the Trustee may take any other action deemed proper by the Trustee that is not inconsistent with such direction, and (c) subject Article 7, the Trustee will be under no obligation to exercise any of the rights or

powers under this Indenture at the request or direction of any of the Holders unless the requisite number of Holders have offered to, and if requested, provided the Trustee indemnity and/or security and/or pre-funding satisfactory to the Trustee against any loss, liability or expense that might be incurred by it in compliance with such request or direction. The Trustee may refuse to follow any direction that conflicts with law or this Indenture, that may involve the Trustee in personal liability, or if it is not provided with security and/or indemnity and/or pre-funding to its satisfaction, or that the Trustee determines is unduly prejudicial to the rights of any other Holder (it being understood, subject to Article 7, that the Trustee does not have an affirmative duty to ascertain whether or not any such directions are unduly prejudicial to any other Holder). In addition, the Trustee will not be required to expend its own funds under any circumstances. The Holders of a majority in aggregate principal amount of the Notes at the time outstanding determined in accordance with Section 8.04 may on behalf of the Holders of all of the Notes (x) waive any past Default or Event of Default hereunder and its consequences except (i) a default in the payment of accrued and unpaid Special Interest, if any, on, or the principal (including, if applicable, the Redemption Price, Repurchase Price or Fundamental Change Repurchase Price) of, the Notes when due that has not been cured pursuant to the provisions of Section 6.02, (ii) a failure by the Company to pay or deliver, or cause to be delivered, as the case may be, the consideration due upon conversion of the Notes or (iii) a default in respect of a covenant or provision hereof which under Article 10 cannot be modified or amended without the consent of each Holder of an outstanding Note affected and (y) rescind any resulting acceleration of the Notes and its consequences if (i) the Trustee has been paid all amounts owing to the Trustee under Section 7.06 hereunder, (ii) such rescission would not conflict with any judgment or decree of a court of competent jurisdiction and (iii) all existing Events of Default (other than nonpayment of the principal of, and Special Interest, if any, on, the Notes that have become due solely by such acceleration) have been cured or waived. Upon any such waiver the Company, the Trustee and the Holders of the Notes shall be restored to their former positions and rights hereunder; but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any right consequent thereon. Whenever any Default or Event of Default hereunder shall have been waived as permitted by this Section 6.09, said Default or Event of Default shall for all purposes of the Notes and this Indenture be deemed to have been cured and to be not continuing; but no such waiver shall extend to any subsequent or other Default or Event of Default or impair any right consequent thereon.

Section 6.10 *Notice of Defaults and Events of Default.* If a Default or Event of Default occurs and is continuing and is notified in writing to the Trustee, the Trustee shall, within 90 days after the occurrence and continuance of such Default or Event of Default or, if later, within 15 days after written notice thereof is provided to the Trustee, mail to all Holders (at the Company's expense) as the names and addresses of such Holders appear upon the Note Register, notice of all Defaults so notified in writing; *provided* that the Trustee shall not be deemed to have knowledge of any occurrence of a Default or Event or Default unless it has received actual written notice thereof. Except in the case of a Default in the payment of the principal of (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable), or accrued and unpaid Special Interest, if any, on, any of the Notes or a Default in the payment or delivery of the consideration due upon conversion, the Trustee shall be protected in withholding such notice if and so long as the Trustee (in its sole discretion) in good faith determines that the withholding of such notice is in the interests of the Holders.

Section 6.11 *Undertaking to Pay Costs.* All parties to this Indenture agree, and each Holder of any Note by its acceptance thereof shall be deemed to have agreed, that any court may, in its discretion, require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit and that such court may in its discretion assess costs, including attorneys' fees and expenses, against any party litigant in such suit, having due regard to the merits and good faith of the claims or defenses made by such party litigant; *provided* that the provisions of this Section 6.11 (to the extent permitted by law) shall not apply to any suit instituted by or against the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the Notes at the time outstanding determined in accordance with Section 8.04, or to any suit instituted by any Holder for the enforcement of the payment of the principal of or accrued and unpaid Special Interest, if any, on any Note (including, but not limited to, the Redemption Price, the Repurchase Price and Fundamental Change Repurchase Price with respect to the Notes being repurchased as provided in this Indenture) on or after the due date expressed or provided for in such Note or to any suit for the enforcement of the right to convert any Note in accordance with the provisions of Article 14.

ARTICLE 7
CONCERNING THE TRUSTEE

Section 7.01 *Duties and Responsibilities of Trustee.* The Trustee, prior to the occurrence of an Event of Default and after the curing or waiver of all Events of Default that may have occurred, undertakes to perform such duties and only such duties as are specifically set forth in this Indenture and no implied covenants or obligations will be read into this Indenture against the Trustee. In case an Event of Default, of which the Trustee has actual written notice, has occurred that has not been cured or waived the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs; *provided* that if an Event of Default occurs and is continuing, the Trustee will be under no obligation to exercise any of the rights or powers under this Indenture at the request or direction of any of the Holders unless the requisite number of Holders have instructed the Trustee in writing and offered to the Trustee indemnity and/or security and/or pre-funding satisfactory to it against any loss, liability or expenses that might be incurred by it in compliance with such request or direction. The Trustee shall not be deemed to have knowledge of any Default or Event of Default unless it has received an actual written notice thereof.

No provision of this Indenture shall be construed to relieve the Trustee from liability for its own grossly negligent action, its own grossly negligent failure to act or its own willful misconduct, except that:

- (a) prior to the occurrence of an Event of Default and after the curing or waiving of all Events of Default that may have occurred:
 - (i) the duties and obligations of the Trustee shall be determined solely by the express provisions of this Indenture, and the Trustee shall not be liable except for the performance of such duties and obligations as are specifically set forth in this Indenture

and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(ii) in the absence of gross negligence and willful misconduct on the part of the Trustee, as proven in a non-appealable decision of a court of competent jurisdiction, the Trustee may conclusively and without liability rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but, in the case of any such certificates or opinions that by any provisions hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture (but need not confirm or investigate the accuracy of any mathematical calculations or other facts, statements, opinions or conclusions stated therein);

(b) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer or Responsible Officers of the Trustee, unless it shall be proved in a non-appealable decision in a court of competent jurisdiction that the Trustee was grossly negligent in ascertaining the pertinent facts;

(c) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of not less than a majority of the aggregate principal amount of the Notes at the time outstanding determined as provided in Section 8.04 relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture;

(d) whether or not therein provided, every provision of this Indenture relating to the conduct or affecting the liability of, or affording protection to, the Trustee shall be subject to the provisions of this Section;

(e) the Trustee shall not be liable in respect of any payment (as to the correctness of amount, entitlement to receive or any other matters relating to payment) or notice effected by the Company or any Paying Agent or any records maintained by any Note Registrar with respect to the Notes;

(f) if any party fails to deliver a notice relating to an event the fact of which, pursuant to this Indenture, requires notice to be sent to the Trustee, the Trustee may conclusively and without liability rely on its failure to receive such notice as reason to act as if no such event occurred;

(g) *[RESERVED]*;

(h) the rights immunities, privileges, disclaimers from liability and protections (including the right to compensation and indemnity and the rights to resign) afforded to the Trustee pursuant to this Article 7 shall also be afforded to the Agents and other Person employed to act hereunder;

(i) the Trustee shall have no duty to inquire, no duty to determine and no duty to monitor as to the performance of the Company's covenants in this Indenture or the financial performance of the Company; the Trustee shall be entitled to assume, until it has received written notice in accordance with this Indenture, that the Company is properly performing its duties hereunder;

(j) notwithstanding any other provision of this Indenture, the Trustee, the Conversion Agent and the Paying Agent shall be entitled to make a deduction or withholding from any payment which it makes under the Notes for or on account of any tax, if and only to the extent so required by Applicable Law (within the meaning of Section 7.02(n) below), in which event the Trustee, the Conversion Agent and the Paying Agent shall make such payment after such deduction or withholding has been made and shall timely remit such taxes to the relevant authority within the time allowed for the amount so deducted or withheld;

(k) the Trustee will be under no obligation to exercise any of its rights or powers under this Indenture at the request or direction of any of the Holders unless the requisite number of Holders have instructed the Trustee in writing and offered to the Trustee indemnity and/or security and/or pre-funding satisfactory to it against any loss, liability or expense that might be incurred by it in compliance with such requests or direction.

(l) before the Trustee or any Agent acts or refrains from acting, it may require an Officer's Certificate or an Opinion of Counsel prepared and delivered at the cost of the Company conforming to Section 17.06 and the Trustee and the Agents may rely conclusively on such certificate or opinion and will not be liable for any action it takes or omits to take in good faith in reliance on such Officer's Certificate or Opinion of Counsel;

(m) in connection with the exercise by it of its trusts, powers, authorities or discretions (including, without limitation, any modification, waiver, authorization or determination), the Trustee shall have regard to the general interests of the Holders as a class but shall not have regard to any interests arising from circumstances particular to individual Holders (whatever their number) and in particular, but without limitation, shall not have regard to the consequences of the exercise of its trusts, powers, authorities or discretions for individual Holders (whatever their number) resulting from their being for any purpose domiciled or resident in, or otherwise connected with, or subject to the jurisdiction of, any country, state or territory; and

(n) Notwithstanding anything else herein contained, the Trustee and any Agent may refrain without liability from doing anything that would, in its opinion acting reasonably be contrary to any law of any jurisdiction (including but not limited to Hong Kong, the United States of America or any jurisdiction forming a part of it, to the extent applicable) and may without liability to do anything which is, in its reasonable opinion, necessary to comply with any such law, directive or regulations.

(o) None of the provisions contained in this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur personal financial liability in the performance of any of its duties or in the exercise of any of its rights or powers.

Section 7.02 *Reliance on Documents, Opinions, Etc.* Except as otherwise provided in Section 7.01:

(a) the Trustee and the Agents may conclusively and without liability rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, consent, order, bond, Note, coupon or other paper or document (whether in its original or facsimile form) believed by it in good faith to be genuine and to have been signed or presented by the proper party or parties;

(b) any request, direction, order or demand of the Company mentioned herein shall be sufficiently evidenced by an Officer's Certificate (unless other evidence in respect thereof be herein specifically prescribed); and any Board Resolution may be evidenced to the Trustee by a copy thereof certified by the Secretary or an Assistant Secretary of the Company;

(c) the Trustee and the Agents may consult with counsel of their selection and require an Opinion of Counsel and any advice of such counsel or Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken or omitted by it hereunder in good faith and in accordance with such advice or Opinion of Counsel;

(d) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney at the expense of the Company and shall incur no liability of any kind by reason of such inquiry or investigation;

(e) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents, delegates, custodians, nominees or attorneys and the Trustee shall not be responsible for supervising or monitoring or for any misconduct or negligence on the part of any agent, delegate, representative, custodian, nominee or attorney appointed by it with due care hereunder;

(f) the permissive rights of the Trustee enumerated herein shall not be construed as duties;

(g) under no circumstances and notwithstanding any contrary provision included herein, neither the Trustee, the Paying Agent, the Conversion Agent, the Transfer Agent nor the Note Registrar shall be responsible or liable for special, indirect, punitive, or consequential damages or loss of any kind whatsoever (including, but not limited to, loss of profit) whether or not foreseeable and irrespective of whether any of them have been advised of the likelihood of such loss or damage and regardless of the form of action; this provision shall remain in full force and effect notwithstanding the discharge of the Notes, the termination of this Indenture or the resignation, replacement or removal of the Trustee, the Paying Agent, the Conversion Agent, the Transfer Agent and the Note Registrar;

(h) the Trustee, the Paying Agent, the Conversion Agent, the Transfer Agent and the Note Registrar may refrain from taking any action in any jurisdiction if the taking of such action in that jurisdiction would, in its opinion based upon legal advice in the relevant jurisdiction, be contrary to any law of that jurisdiction or, to the extent applicable, of Hong Kong or New York; furthermore, the Trustee may also refrain from taking such action if it would otherwise render it liable to any person in that jurisdiction, Hong Kong or New York or if, in its opinion based on such legal advice, it would not have the power to do the relevant thing in that jurisdiction by virtue of any applicable law in that jurisdiction or in New York or if it is determined by any court or other competent authority in that jurisdiction that it does not have such power;

(i) the Trustee shall not be required to give any bond or surety in respect of the execution of the trusts, and/or performance of its powers and duties hereunder;

(j) the Trustee and the Agents may request that the Company deliver Officer's Certificates setting forth the names of individuals and their titles and specimen signatures of officers authorized at such time to take specified actions pursuant to this Indenture, which Officer's Certificates may be signed by any Person authorized to sign an Officer's Certificate, as the case may be, including any Person specified as so authorized in any such certificate previously delivered and not superseded;

(k) the Trustee shall not be responsible or liable for any action it takes or omits to take in good faith which it reasonably believes to be authorized or within its rights or powers;

(l) neither the Trustee nor any of its delegates, directors, officers, employees, agents or affiliates shall be responsible for nor have any duty to monitor the performance or any action of the Company, or any of their respective delegates, directors, members, officers, agents, affiliates or employee, nor shall it have any liability in connection with the malfeasance or nonfeasance by such party. The Trustee and the Agents shall not be responsible for any inaccuracy in the information obtained from the Company or for any inaccuracy or omission in the records which may result from such information or any failure by the Trustee to perform its duties as set forth herein as a result of any inaccuracy or incompleteness of such information;

(m) neither the Trustee nor any Agent thereof shall have any responsibility or liability for any actions taken or not taken by the Depositary;

(n) the Company understands that Citigroup and its subsidiaries are a global financial organization that operates in and provides services and products to clients through affiliates and subsidiaries located in multiple jurisdictions (such global financial organization, the "**Citi Group**"). The Company also understands that the Citi Group may centralize in one or more affiliates, subsidiaries or unaffiliated service providers certain activities, including audit, accounting, administration, risk management, legal, compliance, sales, marketing, relationship management, and the storage, maintenance, aggregation, processing and analysis of information and data regarding the Company. Consequently, the Company hereby consents and authorizes the Trustee and the Agents to disclose to other members of the Citi Group (and their respective officers, directors and employees) agents and third parties selected by any of them, wherever situated, information and data regarding the Company, its employees and representatives, and any accounts established pursuant to this Indenture and the Notes in connection with the

foregoing activities. To the extent that information and data includes personal data encompassed by relevant data protection legislation applicable to the Company, the Company represents and warrants that it is authorized to provide the foregoing consents and authorizations and that the disclosure to the Trustee will comply with the relevant data protection legislation. The Company acknowledges and agrees that information concerning it may be disclosed to unaffiliated service providers who are required to maintain the confidentiality of such information, to governmental and regulatory authorities in jurisdictions where the Citi Group operates, and otherwise as required by law. For the purpose of Section 7.02(n),

“**Applicable Law**” means any law or regulation including, but not limited to: (i) any statute or regulation; (ii) any rule or practice of any Authority by which any party is bound or with which it is accustomed to comply; (iii) any agreement between any Authorities; and (iv) any customary agreement between any Authority and any party.

“**Authority**” means any competent regulatory, prosecuting, Tax or governmental authority in any jurisdiction.

“**Citi Organization**” means Citigroup, Inc., Citibank, N.A., Citibank Europe plc, their branches, subsidiaries and affiliates and anyone who succeeds them or to whom they assign their rights other than Citicorp International Limited.

(o) the Company hereby irrevocably waives, in favor of the Trustee and the Agents, any conflict of interest which may arise by virtue of the Trustee and the Agents acting in various capacities under this Indenture or for other customers of the Trustee and the Agents. The Company acknowledges that the Trustee and the Agents and their respective affiliates (together, the “**Trustee Parties**”) may have interests in, or may be providing or may in the future provide financial or other services to other parties with interests which the Company may regard as conflicting with its interests and may possess information (whether or not material to the Company) other than as a result of the Trustee acting as trustee or the Agents acting as agent hereunder, that the Trustee may not be entitled to share with the Company. The Trustee acting as trustee will not disclose confidential information obtained from the Company (without its consent) to any of the Trustee’s or the Agents’ other customers nor will it use on the Company’s behalf any confidential information obtained from any other customer. Without prejudice to the foregoing, the Company agrees that the Trustee Parties may deal (whether for its own or its customers’ account) in, or advise on, securities of any party and that such dealing or giving of advice, will not constitute a conflict of interest for the purposes of this Indenture;

(p) the statutory duty of care set out in Section 3A of the Trustee Ordinance (Cap. 29) of Hong Kong, as amended by the Trust Law (Amendment) Ordinance 2013, shall not apply to the duties of the Trustee in relation to this Indenture;

(q) each Agent shall be obligated to perform such duties and only such duties as are in this Indenture and no implied duties or obligation shall be read into the Indenture against any Agent;

(r) the Company and the Trustee (each, a “signatory” solely for the purposes of this Section 7.02(r)) shall, within 10 Business Days of a written request by the other signatory,

supply to that other signatory such forms, documentation and other information relating to it, its operations, or the Notes as that other signatory reasonably requests for the purposes of that other signatory's compliance with Applicable Law and shall notify the relevant other signatory reasonably promptly in the event that it becomes aware that any of the forms, documentation or other information provided by such signatory is (or becomes) inaccurate in any material respect; *provided, however*, that no signatory shall be required to provide any forms, documentation or other information pursuant to this Section 7.02(r) to the extent that: (i) any such form, documentation or other information (or the information required to be provided on such form or documentation) is not reasonably available to such signatory and cannot be obtained by such signatory using reasonable efforts; or (ii) doing so would or might in the reasonable opinion of such signatory constitute a breach of any: (a) Applicable Law; (b) fiduciary duty; or (c) duty of confidentiality;

(s) the Company shall notify the Trustee, the Paying Agent and the Conversion Agent in the event that it determines that any payment to be made by the Trustee, the Paying Agent and the Conversion Agent under the Notes is a payment which could be subject to FATCA Withholding if such payment were made to a recipient that is generally unable to receive payments free from FATCA Withholding, and the extent to which the relevant payment is so treated; *provided, however*, that the Company's obligation under this Section 7.02(s) shall apply only to the extent that such payments are so treated by virtue of characteristics of the Company, the Notes, or both; and

(t) notwithstanding any other provision of this Indenture, the Trustee, the Paying Agent and the Conversion Agent shall be entitled to make a deduction or withholding from any payment which it makes under the Notes for or on account of any Tax, if and only to the extent so required by Applicable Law, in which event the Trustee, the Paying Agent or the Conversion Agent (as the case may be) shall make such payment after such deduction or withholding has been made and shall account to the relevant Authority within the time allowed for the amount so deducted or withheld or, at its option, shall reasonably promptly after making such payment return to the Company the amount so deducted or withheld, in which case, the Company shall so account to the relevant Authority for such amount.

For the purpose of Sections 7.02(r) to 7.02(t),

“**Applicable Law**” means any law or regulation including, but not limited to: (i) any statute or regulation; (ii) any rule or practice of any Authority by which any party is bound or with which it is accustomed to comply; (iii) any agreement between any Authorities; and (iv) any customary agreement between any Authority and any party.

“**Authority**” means any competent regulatory, prosecuting, Tax or governmental authority in any jurisdiction.

“**Code**” means the U.S. Internal Revenue Code of 1986, as amended.

“**FATCA Withholding**” means any withholding or deduction required pursuant to an agreement described in section 1471(b) of the Code, or otherwise imposed pursuant to sections

1471 through 1474 of the Code, any regulations or agreements thereunder, any official interpretations thereof, or any law implementing an intergovernmental approach thereto.

“**Tax**” means any present or future taxes, duties, assessments or governmental charges of whatever nature imposed, levied, collected, withheld or assessed by or on behalf of any Authority having power to tax.

Section 7.03 *No Responsibility for Recitals, Etc.* The recitals, statements, warranties and representations contained herein and in the Notes (except in the Trustee’s certificate of authentication) shall be taken as the statements of the Company, and the Trustee and the Agents assume no responsibility for the correctness of the same. The Trustee makes no representations as to the accuracy or correctness of the same or for any failure by the Company or any other party to disclose events that may have occurred and may affect the significance or accuracy of such information, or the execution, legality, effectiveness, adequacy, genuineness, validity, enforceability or admissibility in evidence of this Indenture or of the Notes. The Trustee shall not be accountable for the use or application by the Company of any Notes or the proceeds of any Notes authenticated and delivered by the Trustee in conformity with the provisions of this Indenture. Notwithstanding the generality of the foregoing, each Holder shall be solely responsible for making its own independent appraisal of, and investigation into, the financial condition, creditworthiness, condition, affairs, status and nature of the Company, and the Trustee shall not at any time have any responsibility for the same and each Holder shall not rely on the Trustee in respect thereof.

Section 7.04 *Trustee, Paying Agent, Transfer Agent, Conversion Agent, Bid Solicitation Agent or Note Registrar May Own Notes.* The Trustee, any Paying Agent, any Transfer Agent, any Conversion Agent, Bid Solicitation Agent (if other than the Company or any Affiliate thereof) or Note Registrar, in its individual or any other capacity, may engage in business and contractual relationships with the Company or its Affiliates and may become the owner or pledgee of Notes with the same rights it would have if it were not the Trustee, Paying Agent, Transfer Agent, Conversion Agent, Bid Solicitation Agent or Note Registrar, and nothing herein shall obligate any of them to account for any profits earned from any business or transactional relationship.

Section 7.05 *Monies to Be Held in Trust.* All monies received by the Trustee shall, until used or applied as herein provided, be held in trust for the purposes for which they were received. Money held by the Trustee in trust or by the Paying Agent or the Conversion Agent hereunder need not be segregated from other funds or property except to the extent required by law. Neither the Trustee nor the Paying Agent nor the Conversion Agent shall be under any liability for interest on any money received by it hereunder. Any funds held by the Paying Agent or the Conversion Agent are held as a banker and shall not be subject to the applicable client money rules.

Section 7.06 *Compensation and Expenses of Trustee.* (a) The Company covenants and agrees to pay to the Trustee from time to time, and the Trustee shall be entitled to, compensation for all services rendered by it hereunder in any capacity as mutually agreed to in writing between the Trustee and the Company (which sum shall be paid free and clear of deduction and withholding on account of taxation, set-off and counterclaim), and the Company will pay or

reimburse the Trustee upon its request for all expenses, disbursements and advances properly incurred or made by the Trustee in accordance with any of the provisions of this Indenture in any capacity thereunder (including the compensation and the properly incurred expenses and disbursements of its agents and counsel and of all Persons not regularly in its employ) except any such expense, disbursement or advance as shall have been caused by its gross negligence or willful misconduct as proven in a non-appealable decision in a court of competent jurisdiction. The Company also covenants to indemnify the Note Registrar, Transfer Agent, Conversion Agent, Paying Agent and Trustee (which for the purposes of this Section 7.06 shall be deemed to include its delegates, officers, directors, agents, counsel, employees, successors and assigns) in any capacity under this Indenture, and any other document or transaction entered into in connection herewith, and to hold it harmless against, any loss, claim, damage, liability or expense (including, reasonable legal fees and expenses) (whether arising from third party claims or claims by or against the Company) incurred without gross negligence or willful misconduct on the part of the Trustee, its delegates, officers, directors, agents, counsels, employees, successors or assigns, as the case may be, as proven in a non-appealable decision of a court of competent jurisdiction, and arising out of or in connection with the acceptance or administration of this Indenture or in any other capacity hereunder, including the costs and expenses of defending themselves against any claim of liability (including, without limitation, any and all attorney's fees and properly incurred expenses) in the process of enforcing this indemnity. The obligations of the Company under this Section 7.06 to compensate or indemnify the Trustee and to pay or reimburse the Trustee for expenses, disbursements and advances shall be secured by a senior claim to which the Notes are hereby made subordinate on all money or property held or collected by the Trustee, except, subject to the effect of Section 6.05, funds held in trust herewith for the benefit of the Holders of particular Notes. The Trustee's right to receive payment of any amounts due under this Section 7.06 shall not be subordinate to any other liability or indebtedness of the Company. The indemnity under this Section 7.06(a) is payable upon demand by the Trustee. The obligation of the Company under this Section 7.06(a) shall survive the satisfaction and discharge of the Notes, the termination or discharge of this Indenture and the resignation, replacement or removal of the Trustee. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld. The indemnification provided in this Section 7.06(a) shall extend to the delegates, officers, directors, agents, counsels and employees of the Trustee and any successor Trustee hereunder. Subject to Section 7.02(e), any gross negligence or willful misconduct of any agent, delegate, attorney or representative, in each case, of the Trustee, shall not affect indemnification of the Trustee.

Without prejudice to any other rights available to the Trustee under applicable law, when the Trustee and its agents incur expenses or render services after an Event of Default specified in Section 6.01(i) or Section 6.01(j) occurs, the expenses and the compensation for the services are intended to constitute expenses of administration under any bankruptcy, insolvency or similar laws. If a Default or Event of Default shall have occurred or if the Trustee finds it expedient or necessary or is requested by the Company and/or the Holders to undertake duties which are of an exceptional nature or otherwise outside the scope of the Trustee's normal duties under this Indenture, the Company will pay such additional remuneration as the Company and the Trustee may separately agree in writing.

The obligations of the Company under this paragraph (a) shall survive the payment of the Notes, the termination or discharge of this Indenture and the resignation, replacement or removal of the Trustee, the Paying Agent, the Conversion Agent and the Note Registrar.

(b) The Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar shall be entitled to the compensation to be agreed upon in writing with the Company for all services rendered by it under this Indenture, and the Company agrees promptly to pay such compensation and to reimburse the Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar for its out-of-pocket expenses (including fees and properly incurred expenses of counsel) by it in connection with the services rendered by it under this Indenture. The Company hereby agrees to indemnify the Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar and their respective delegates, officers, directors, agents and employees and any successors thereto for, and to hold it harmless against, any loss, liability or expense (including fees and properly incurred expenses of counsel) without gross negligence or willful misconduct on its part arising out of or in connection with its acting as the Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar hereunder. The obligations of the Company under this paragraph (b) shall survive the payment of the Notes, the termination or discharge of this Indenture and the resignation, replacement or removal of the Paying Agent, the Transfer Agent, the Conversion Agent and the Note Registrar. For the avoidance of doubt, in the event of any repurchase, the Company shall pay the Paying Agent additional compensation (to be agreed between the Company and the Paying Agent) for performing duties in respect of any repurchase where it is acting in a capacity similar to a tender agent.

Section 7.07 *Officer's Certificate as Evidence.* Except as otherwise provided in Section 7.01, whenever in the administration of the provisions of this Indenture the Trustee shall deem it necessary or desirable that a matter be proved or established prior to taking or omitting any action hereunder, such matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by an Officer's Certificate delivered to the Trustee, and such Officer's Certificate shall be full warrant to the Trustee for any action taken or omitted by it under the provisions of this Indenture upon the faith thereof.

Section 7.08 *Eligibility of Trustee.* There shall at all times be a Trustee hereunder that is a corporation organized and doing business under the laws of the United States of America and any state thereof or Hong Kong that is authorized under such laws to exercise corporate trust power, that is subject to supervision or examination by federal or state authorities and that shall have a combined capital and surplus of at least US\$50,000,000. If such corporation publishes reports of condition at least annually, pursuant to law or to the requirements of national, state or local supervising or examining authority, then, for the purposes of this Section, the combined capital and surplus of such corporation shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article.

Section 7.09 *Resignation or Removal of Trustee.* (a) The Trustee may at any time resign by giving 30 days written notice of such resignation to the Company and by mailing notice thereof to the Holders at their addresses as they shall appear on the Note Register. Upon

receiving such notice of resignation, the Company shall promptly appoint a successor trustee by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the resigning Trustee and one copy to the successor trustee. If no successor trustee shall have been so appointed and have accepted appointment within 30 days after the mailing of such notice of resignation to the Holders or following the removal of the Trustee in accordance with this Section 7.09, the resigning Trustee, (i) at the expense of the Company, may appoint its own successor trustee and/or (ii) at the expense of the Company, upon ten Business Days' notice to the Company and the Holders, petition any court of competent jurisdiction for the appointment of a successor trustee, or any Holder who has been a bona fide holder of a Note or Notes for at least six months (or since the date of this Indenture) may, subject to the provisions of Section 6.11, on behalf of himself or herself and all others similarly situated, petition any such court for the appointment of a successor trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, appoint a successor trustee.

(b) In case at any time any of the following shall occur:

(i) the Trustee shall cease to be eligible in accordance with the provisions of Section 7.08 and shall fail to resign after written request therefor by the Company or by any such Holder, or

(ii) the Trustee shall become incapable of acting, or shall be adjudged a bankrupt or insolvent, or a receiver of the Trustee or of its property shall be appointed, or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in either case, the Company may by a Board Resolution remove the Trustee and appoint a successor trustee by written instrument, in duplicate, executed by order of the Board of Directors, one copy of which instrument shall be delivered to the Trustee so removed and one copy to the successor trustee, or, subject to the provisions of Section 6.11, any Holder who has been a bona fide holder of a Note or Notes for at least six months (or since the date of this Indenture) may, on behalf of himself or herself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor trustee. Such court may thereupon, after such notice, if any, as it may deem proper and prescribe, remove the Trustee and appoint a successor trustee.

(c) The Holders of a majority in aggregate principal amount of the Notes at the time outstanding, as determined in accordance with Section 8.04, may at any time remove the Trustee and nominate a successor trustee that shall be deemed appointed as successor trustee unless within ten days after notice to the Company of such nomination the Company objects thereto, in which case the Trustee so removed (at the expense of the Company) or any Holder, upon the terms and conditions and otherwise as in Section 7.09(a) provided, may petition any court of competent jurisdiction for an appointment of a successor trustee.

(d) Any resignation or removal of the Trustee and appointment of a successor trustee pursuant to any of the provisions of this Section 7.09 shall become effective upon acceptance of appointment by the successor trustee as provided in Section 7.10.

Section 7.10 *Acceptance by Successor Trustee.* Any successor trustee appointed as provided in Section 7.09 shall execute, acknowledge and deliver to the Company and to its predecessor trustee an instrument accepting such appointment hereunder, and thereupon the resignation or removal of the predecessor trustee shall become effective and such successor trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, duties and obligations of its predecessor hereunder, with like effect as if originally named as Trustee herein; but, nevertheless, on the written request of the Company or of the successor trustee, the trustee ceasing to act shall, upon payment of any amounts then due to it pursuant to the provisions of Section 7.06, execute and deliver an instrument transferring to such successor trustee all the rights and powers of the trustee so ceasing to act. Upon request of any such successor trustee, the Company shall execute any and all instruments in writing for more fully and certainly vesting in and confirming to such successor trustee all such rights and powers. Any trustee ceasing to act shall, nevertheless, retain a senior claim to which the Notes are hereby made subordinate on all money or property held or collected by such trustee as such, except for funds held in trust for the benefit of Holders of particular Notes, to secure any amounts then due to it pursuant to the provisions of Section 7.06.

No successor trustee shall accept appointment as provided in this Section 7.10 unless at the time of such acceptance such successor trustee shall be eligible under the provisions of Section 7.08.

Upon acceptance of appointment by a successor trustee as provided in this Section 7.10, each of the Company and the successor trustee, at the written direction and at the expense of the Company shall deliver or cause to be delivered notice of the succession of such trustee hereunder to the Holders at their addresses as they shall appear on the Note Register. If the Company fails to deliver such notice within ten days after acceptance of appointment by the successor trustee, the successor trustee shall cause such notice to be delivered at the expense of the Company.

Section 7.11 *Succession by Merger, Etc.* Any corporation or other entity into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation or other entity resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation or other entity succeeding to all or substantially all of the corporate trust business of the Trustee (including the administration of this Indenture), shall be the successor to the Trustee hereunder without the execution or filing of any paper or any further act on the part of any of the parties hereto; *provided* that in the case of any corporation or other entity succeeding to all or substantially all of the corporate trust business of the Trustee such corporation or other entity shall be eligible under the provisions of Section 7.08.

In case at the time such successor to the Trustee shall succeed to the trusts created by this Indenture, any of the Notes shall have been authenticated but not delivered, any such successor to the Trustee may adopt the certificate of authentication of any predecessor trustee, and deliver such Notes so authenticated; and in case at that time any of the Notes shall not have been authenticated, any successor to the Trustee may authenticate such Notes either in the name of any predecessor trustee hereunder or in the name of the successor trustee; and in all such cases such certificates shall have the full force which it is anywhere in the Notes or in this Indenture provided that the certificate of the Trustee shall have; *provided, however*, that the right to adopt the certificate of authentication of any predecessor trustee or to authenticate Notes in the name of

any predecessor trustee shall apply only to its successor or successors by merger, conversion or consolidation.

Section 7.12 *Trustee's Application for Instructions from the Company.* Any application by the Trustee for written instructions from the Company (other than with regard to any action proposed to be taken or omitted to be taken by the Trustee that affects the rights of the Holders of the Notes under this Indenture) may, at the option of the Trustee, set forth in writing any action proposed to be taken or omitted by the Trustee under this Indenture and the date on and/or after which such action shall be taken or such omission shall be effective. The Trustee shall not be liable for any action taken by, or omission of, the Trustee in accordance with a proposal included in such application on or after the date specified in such application (which date shall not be less than three Business Days after the date of such application provided in accordance with Section 17.03 hereof), unless, prior to taking any such action (or the effective date in the case of any omission), the Trustee shall have received written instructions in accordance with this Indenture in response to such application specifying the action to be taken or omitted.

ARTICLE 8 CONCERNING THE HOLDERS

Section 8.01 *Action by Holders.* Whenever in this Indenture it is provided that the Holders of a specified percentage of the aggregate principal amount of the Notes may take any action (including the making of any demand or request, the giving of any notice, consent or waiver or the taking of any other action), the fact that at the time of taking any such action, the Holders of such specified percentage have joined therein may be evidenced (a) by any instrument or any number of instruments of similar tenor executed by Holders in person or by agent or proxy appointed in writing, or (b) by the record of the Holders voting in favor thereof at any meeting of Holders duly called and held in accordance with the provisions of Article 9, or (c) by a combination of such instrument or instruments and any such record of such a meeting of Holders. Whenever the Company or the Trustee solicits the taking of any action by the Holders of the Notes, the Company or the Trustee may fix, but shall not be required to, in advance of such solicitation, a date as the record date for determining Holders entitled to take such action. The record date if one is selected shall be not more than fifteen days prior to the date of commencement of solicitation of such action.

Section 8.02 *Proof of Execution by Holders.* Subject to the provisions of Section 7.01, Section 7.02 and Section 9.05, proof of the execution of any instrument by a Holder or its agent or proxy shall be sufficient if made in accordance with such reasonable rules and regulations as may be prescribed by the Trustee or in such manner as shall be satisfactory to the Trustee. The holding of Notes shall be proved by the Note Register or by a certificate of the Note Registrar. The record of any Holders' meeting shall be proved in the manner provided in Section 9.06.

Section 8.03 *Who Are Deemed Absolute Owners.* The Company, the Trustee, any Paying Agent, any Transfer Agent, any Conversion Agent and any Note Registrar may deem the Person in whose name a Note shall be registered upon the Note Register to be, and may treat it as, the absolute owner of such Note (whether or not such Note shall be overdue and notwithstanding any notation of ownership or other writing thereon made by any Person other than the Company or any Note Registrar) for the purpose of receiving payment of or on account

of the principal of and (subject to Section 2.03) accrued and unpaid Special Interest, if any, on such Note, for the purpose of conversion of such Note and for all other purposes; and neither the Company nor the Trustee nor any Paying Agent nor any Transfer Agent nor any Conversion Agent nor any Note Registrar shall be affected by any notice to the contrary. The sole registered holder of a Global Note shall be the Depositary or its nominee. All such payments or deliveries so made to any Holder for the time being, or upon its order, shall be valid, and, to the extent of the sums or ADSs so paid or delivered, effectual to satisfy and discharge the liability for monies payable or ADSs deliverable upon any such Note. Notwithstanding anything to the contrary in this Indenture or the Notes following an Event of Default, any owner of a beneficial interest in a Global Note may directly enforce against the Company, without the consent, solicitation, proxy, authorization or any other action of the Depositary or any other Person, such owner's right to exchange such beneficial interest for a Note in certificated form in accordance with the provisions of this Indenture.

Section 8.04 *Company-Owned Notes Disregarded.* In determining whether the Holders of the requisite aggregate principal amount of Notes have concurred in any direction, consent, waiver or other action under this Indenture, Notes that are owned by the Company, by any consolidated Subsidiary or Consolidated Affiliated Entity thereof or by any Affiliate of the Company or any consolidated Subsidiary or Consolidated Affiliated Entity thereof shall be disregarded and deemed not to be outstanding for the purpose of any such determination; *provided* that for the purposes of determining whether the Trustee shall be protected in relying on any such direction, consent, waiver or other action only Notes in respect of which a Responsible Officer is notified in writing shall be so disregarded. Notes so owned that have been pledged in good faith may be regarded as outstanding for the purposes of this Section 8.04 if the pledgee shall establish its right to so act with respect to such Notes and that the pledgee is not the Company, a consolidated Subsidiary or Consolidated Affiliated Entity thereof or an Affiliate of the Company or a consolidated Subsidiary or Consolidated Affiliated Entity thereof. Upon the request of the Trustee, the Company shall furnish to the Trustee promptly an Officer's Certificate listing and identifying all Notes, if any, known by the Company to be owned or held by or for the account of any of the above described Persons; and, subject to Section 7.01, the Trustee shall be entitled, without liability, to accept such Officer's Certificate as conclusive evidence of the facts therein set forth and of the fact that all Notes not listed therein are outstanding for the purpose of any such determination.

Section 8.05 *Revocation of Consents; Future Holders Bound.* At any time prior to (but not after) the evidencing to the Trustee, as provided in Section 8.01, of the taking of any action by the Holders of the percentage of the aggregate principal amount of the Notes specified in this Indenture in connection with such action, any Holder of a Note that is shown by the evidence to be included in the Notes the Holders of which have consented to such action may, by filing written notice with the Trustee at its Corporate Trust Office and upon proof of holding as provided in Section 8.02, revoke such action so far as concerns such Note. Except as aforesaid, any such action taken by the Holder of any Note shall be conclusive and binding upon such Holder and upon all future Holders and owners of such Note and of any Notes issued in exchange or substitution therefor or upon registration of transfer thereof, irrespective of whether any notation in regard thereto is made upon such Note or any Note issued in exchange or substitution therefor or upon registration of transfer thereof.

ARTICLE 9
HOLDERS' MEETINGS

Section 9.01 *Purpose of Meetings.* A meeting of Holders may be called at any time and from time to time pursuant to the provisions of this Article 9 for any of the following purposes:

(a) to give any notice to the Company or to the Trustee or to give any directions to the Trustee permitted under this Indenture, or to consent to the waiving of any Default or Event of Default hereunder and its consequences, or to take any other action authorized to be taken by Holders pursuant to any of the provisions of Article 6;

(b) to remove the Trustee and nominate a successor trustee pursuant to the provisions of Article 7;

(c) to consent to the execution of an indenture or indentures supplemental hereto pursuant to the provisions of Section 10.02;
or

(d) to take any other action authorized to be taken by or on behalf of the Holders of any specified aggregate principal amount of the Notes under any other provision of this Indenture or under applicable law.

Section 9.02 *Call of Meetings by Trustee.* The Trustee may (in its sole and absolute discretion and without obligation) at any time call a meeting of Holders to take any action specified in Section 9.01, to be held at such time and at such place as the Trustee shall determine. Notice of every meeting of the Holders, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting and the establishment of any record date pursuant to Section 8.01, shall be mailed to Holders of such Notes at their addresses as they shall appear on the Note Register. Such notice shall also be mailed to the Company. Such notices shall be mailed not less than 20 nor more than 90 days prior to the date fixed for the meeting.

Any meeting of Holders shall be valid without notice if the Holders of all Notes then outstanding are present in person or by proxy or if notice is waived before or after the meeting by the Holders of all Notes then outstanding, and if the Company and the Trustee are either present by duly authorized representatives or have, before or after the meeting, waived notice.

Section 9.03 *Call of Meetings by Company or Holders.* In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 10% of the aggregate principal amount of the Notes then outstanding, shall have requested the Company to call a meeting of Holders, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Company shall not have delivered the notice of such meeting within 20 days after receipt of such request, then the Trustee or such Holders may determine the time and the place for such meeting and may call such meeting to take any action authorized in Section 9.01, by mailing notice thereof as provided in Section 9.02.

Section 9.04 *Qualifications for Voting.* To be entitled to vote at any meeting of Holders a Person shall (a) be a Holder of one or more Notes on the record date pertaining to such meeting or (b) be a Person appointed by an instrument in writing as proxy by a Holder of one or more

Notes on the record date pertaining to such meeting. The only Persons who shall be entitled to be present or to speak at any meeting of Holders shall be the Persons entitled to vote at such meeting and their counsel and any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

Section 9.05 *Regulations.* Notwithstanding any other provisions of this Indenture, the Trustee or the Note Registrar may make such reasonable regulations as it may deem advisable for any meeting of Holders, in regard to proof of the holding of Notes and of the appointment of proxies, and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall think fit.

The Trustee shall, by an instrument in writing, appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders as provided in Section 9.03, in which case the Company or the Holders calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Holders of a majority in aggregate principal amount of the Notes represented at the meeting and entitled to vote at the meeting.

Subject to the provisions of Section 8.04, at any meeting of Holders each Holder or proxyholder shall be entitled to one vote for each US\$1,000 principal amount of Notes held or represented by him or her; *provided, however*, that no vote shall be cast or counted at any meeting in respect of any Note challenged as not outstanding and ruled by the chairman of the meeting to be not outstanding. The chairman of the meeting shall have no right to vote other than by virtue of Notes held by it or instruments in writing as aforesaid duly designating it as the proxy to vote on behalf of other Holders. Any meeting of Holders duly called pursuant to the provisions of Section 9.02 or Section 9.03 may be adjourned from time to time by the Holders of a majority of the aggregate principal amount of Notes represented at the meeting, whether or not constituting a quorum, and the meeting may be held as so adjourned without further notice.

Minutes shall be made of all resolutions and proceedings at every meeting and, if purporting to be signed by the chairman of that meeting or of the next succeeding meeting of Holders of the Notes, shall be conclusive evidence of the matters in them. Until the contrary is proved every meeting for which minutes have been so made and signed shall be deemed to have been duly convened and held and all resolutions passed or proceedings transacted at it to have been duly passed and transacted.

Section 9.06 *Voting.* The vote upon any resolution submitted to any meeting of Holders shall be by written ballot on which shall be subscribed the signatures of the Holders or of their representatives by proxy and the outstanding aggregate principal amount of the Notes held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record in duplicate of the proceedings of each meeting of Holders shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more Persons having knowledge of the facts setting forth a copy of the

notice of the meeting and showing that said notice was mailed as provided in Section 9.02. The record shall show the aggregate principal amount of the Notes voting in favor of or against any resolution. The record shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one of the duplicates shall be delivered to the Company and the other to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting.

Any record so signed and verified shall be conclusive evidence of the matters therein stated.

Section 9.07 *No Delay of Rights by Meeting.* Nothing contained in this Article 9 shall be deemed or construed to authorize or permit, by reason of any call of a meeting of Holders or any rights expressly or impliedly conferred hereunder to make such call, any hindrance or delay in the exercise of any right or rights conferred upon or reserved to the Trustee or to the Holders under any of the provisions of this Indenture or of the Notes.

ARTICLE 10 SUPPLEMENTAL INDENTURES

Section 10.01 *Supplemental Indentures Without Consent of Holders.* The Company, when authorized by the resolutions of the Board of Directors, and the Trustee, at the Company's expense and direction, may from time to time and at any time amend or supplement this Indenture or the Notes for one or more of the following purposes:

- (a) to cure any ambiguity, omission, defect or inconsistency;
- (b) to provide for the assumption by a Successor Company of the obligations of the Company under this Indenture and the Notes pursuant to Article 11;
- (c) to add guarantees or any credit enhancements of similar nature with respect to the Notes;
- (d) to secure the Notes;
- (e) to add to the covenants or Events of Defaults of the Company for the benefit of the Holders or surrender any right or power conferred upon the Company;
- (f) upon the occurrence of any transaction or event described in Section 14.07(a), to (i) provide that the Notes are convertible into Reference Property, subject to Section 14.02, and (ii) effect the related changes to the terms of the Notes described under Section 14.07(a), in each case, in accordance with Section 14.07;
- (g) to make any change that does not adversely affect the rights of any Holder in any material respect;
- (h) to make changes in connection with an acceptance for listing on a Permitted Exchange as contemplated in Section 10.03;

- (i) to comply with the rules of the Depositary;
- (j) to evidence and provide for the acceptance of the appointment of a successor trustee in accordance with this Indenture;
- (k) to irrevocably elect a Settlement Method or a Specified Dollar Amount, or eliminate the Company's right to elect a Settlement Method; *provided, however*, that no such election or elimination shall affect any Settlement Method theretofore elected (or deemed to be elected) with respect to any Note pursuant to the provisions of Article 14; or
- (l) to conform the provisions of this Indenture or the Notes to the "Description of the Notes" section of the Offering Memorandum.

Upon the written request of the Company, the Trustee is hereby authorized to join with the Company in the execution of any such amendment or supplement to this Indenture or the Notes, to make any further appropriate agreements and stipulations that may be therein contained, unless such supplemental indenture that affects the Trustee's and/or any Agent's (as the case may be) own rights, duties, privileges, liabilities or immunities under this Indenture or otherwise, in which case the Trustee may in its sole and absolute discretion, but shall not be obligated to, enter into such supplemental indenture.

Any amendment or supplement to this Indenture or the Notes authorized by the provisions of this Section 10.01 may be executed by the Company and the Trustee without the consent of the Holders of any of the Notes at the time outstanding, notwithstanding any of the provisions of Section 10.02.

Section 10.02 *Supplemental Indentures with Consent of Holders*. With the consent (evidenced as provided in Article 8) of the Holders of at least a majority of the aggregate principal amount of the Notes then outstanding (determined in accordance with Article 8 and including, without limitation, consents obtained in connection with a repurchase of, or tender or exchange offer for, Notes), the Company, when authorized by the resolutions of the Board of Directors, and the Trustee, at the Company's expense, may from time to time and at any time enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or any supplemental indenture or the Notes or modifying in any manner the rights of the Holders; *provided, however*, that, without the consent of each Holder of an outstanding Note affected, no such supplemental indenture shall:

- (a) reduce the amount of Notes whose Holders must consent to an amendment or waiver;
- (b) reduce the rate of or change the stated time for payment of Special Interest, if any, on any Note;
- (c) reduce the principal of or change the Maturity Date of any Note;
- (d) make any change that adversely affects the conversion rights of any Notes;

- (e) reduce the Repurchase Price payable on the Repurchase Date, the Fundamental Change Repurchase Price or the Redemption Price of any Note or amend or modify in any manner adverse to the Holders the Company's obligation to make such payments, whether through an amendment or waiver of provisions in the covenants, definitions or otherwise;
- (f) make any Note payable in a currency other than U.S. dollars;
- (g) change the ranking of the Notes;
- (h) impair the right of any Holder to receive payment of principal and any Special Interest on such Holder's Notes on or after the due dates therefor or to institute suit for the enforcement of any payment on or with respect to such Holder's Note;
- (i) change the Company's obligation to pay Additional Amounts on any Note; or
- (j) make any change in this Article 10 that requires each Holder's consent or in the waiver provisions in Section 6.02 or Section 6.09.

Upon the written request of the Company, and upon the filing with the Trustee of evidence of the consent of Holders as aforesaid and subject to Section 10.05, the Trustee shall join with the Company in the execution of such supplemental indenture unless (i) the Trustee has not received an Officer's Certificate and an Opinion of Counsel that such supplemental indenture is authorized and permitted by the terms of this Indenture and not contrary to law or (ii) such supplemental indenture affects the Trustee's and/or Agent's (as the case may be) own rights, duties, privileges, liabilities or immunities under this Indenture or otherwise, in which case the Trustee may in its sole and absolute discretion, but shall not be obligated to, enter into such supplemental indenture.

Holdings do not need under this Section 10.02 to approve the particular form of any proposed supplemental indenture. It shall be sufficient if such Holders approve the substance thereof. After any supplemental indenture becomes effective under Section 10.01 or Section 10.02, the Company shall send to the Holders (with a copy to the Trustee) a notice briefly describing such supplemental indenture. However, the failure to give such notice to all the Holders, or any defect in the notice, will not impair or affect the validity of the supplemental indenture.

Section 10.03 *Supplemental Indenture in respect of Fundamental Change*. If a Fundamental Change described in clause (d) of the definition thereof has occurred and the Newly Listed Equity has been accepted for listing on a Permitted Exchange, then, from and after the later to occur of (x) the date of such acceptance for listing on a Permitted Exchange and (y) the Effective Date of such Fundamental Change (the "**New Listing Reference Date**"), Section 14.07 of this Indenture will be deemed to apply *mutatis mutandis* as if the Reference Property for the Notes were the Newly Listed Equity. No later than five Business Days after the New Listing Reference Date, the Company shall execute with the Trustee a supplemental indenture containing such provisions that the Board of Directors determines in good faith are appropriate to preserve the economic interests of the Holders and are necessary to reflect the replacement of the ADSs (or Ordinary Shares or other Common Equity or Reference Property then underlying the Notes) with the Newly Listed Equity. The Company shall notify the Holders, the Trustee, the Conversion

Agent (if other than the Trustee) or any other agent appointed for such purpose in writing as promptly as reasonably practicable following the date the Company and the Trustee execute such supplemental indenture, and the Company shall substantially concurrently with such notice post such supplemental indenture on the Company's website and disclose the same in a current report on Form 6-K (or any successor form) that is filed with the Commission.

Section 10.04 *Effect of Supplemental Indentures*. Upon the execution of any supplemental indenture pursuant to the provisions of this Article 10, this Indenture shall be and be deemed to be modified and amended in accordance therewith and the respective rights, limitation of rights, obligations, duties, privileges, liabilities and immunities under this Indenture of the Trustee, the Company and the Holders shall thereafter be determined, exercised and enforced hereunder subject in all respects to such modifications and amendments and all the terms and conditions of any such supplemental indenture shall be and be deemed to be part of the terms and conditions of this Indenture for any and all purposes.

Section 10.05 *Notation on Notes*. Notes authenticated and delivered after the execution of any supplemental indenture pursuant to the provisions of this Article 10 may, at the Company's expense, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company or the Trustee shall so determine, new Notes so modified as to conform, in the opinion of the Trustee and the Company, to any modification of this Indenture contained in any such supplemental indenture may, at the Company's expense, be prepared and executed by the Company, authenticated by the Trustee upon receipt of a Company Order by the Trustee and delivered in exchange for the Notes then outstanding, upon surrender of such Notes then outstanding.

Section 10.06 *Evidence of Compliance of Supplemental Indenture to Be Furnished Trustee*. In addition to the documents required by Section 17.06, the Trustee shall receive an Officer's Certificate and an Opinion of Counsel as conclusive evidence that any supplemental indenture executed pursuant hereto complies with the requirements of this Article 10 and is permitted or authorized by this Indenture, is the valid and binding obligation of the Company enforceable in accordance with its terms, subject to customary assumptions, qualifications and exceptions.

ARTICLE 11 CONSOLIDATION, MERGER, SALE, CONVEYANCE AND LEASE

Section 11.01 *Company May Consolidate, Etc. on Certain Terms*. Subject to the provisions of Section 11.02, the Company shall not consolidate with, merge with or into, or sell, convey, transfer or lease all or substantially all of the consolidated assets of the Company, its Subsidiaries and its Consolidated Affiliated Entities, taken as a whole, to another Person, unless:

(a) the resulting, surviving or transferee Person (the "**Successor Company**"), if not the Company, shall be a corporation organized and existing under the laws of the United States, any State thereof, the district of Columbia, the Cayman Islands, the British Virgin Islands, Bermuda or Hong Kong and the Successor Company (if not the Company) shall expressly assume, by supplemental indenture all of the obligations of the Company under the Notes and

this Indenture (including, for the avoidance of doubt, the obligation to pay Additional Amounts pursuant to Section 4.07); and

(b) immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing under this Indenture.

For purposes of this Section 11.01, the sale, conveyance, transfer or lease of all or substantially all of the assets of one or more Subsidiaries or Consolidated Affiliated Entities of the Company to another Person (other than a Subsidiary or a Consolidated Affiliated Entity of the Company), which properties and assets, if held by the Company instead of such Subsidiaries or Consolidated Affiliated Entities, would constitute all or substantially all of the assets of the Company on a consolidated basis, shall be deemed to be the sale, conveyance, transfer or lease of all or substantially all of the consolidated assets of the Company to another Person.

Section 11.02 *Successor Corporation to Be Substituted*. In case of any such consolidation, merger, sale, conveyance, transfer or lease and upon the assumption by the Successor Company (if not the Company), by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the due and punctual payment of the principal of and accrued and unpaid Special Interest, if any, on all of the Notes (including, for the avoidance of doubt, any Additional Amounts), the due and punctual delivery or payment, as the case may be, of any consideration due upon conversion of the Notes (including, for the avoidance of doubt, any Additional Amounts) and the due and punctual performance of all of the covenants and conditions of this Indenture to be performed by the Company, such Successor Company (if not the Company) shall succeed to and, except in the case of a lease of all or substantially all of the Company's consolidated properties and assets, shall be substituted for the Company, with the same effect as if it had been named herein as the party of the first part. Such Successor Company thereupon may cause to be signed, and may issue either in its own name or in the name of the Company any or all of the Notes issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the order of such Successor Company instead of the Company and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver, or cause to be authenticated and delivered, any Notes that previously shall have been signed and delivered by the Officers of the Company to the Trustee for authentication, and any Notes that such Successor Company thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Notes so issued shall in all respects have the same legal rank and benefit under this Indenture as the Notes theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Notes had been issued at the date of the execution hereof. In the event of any such consolidation, merger, sale, conveyance or transfer (but not in the case of a lease), upon compliance with this Article 11 the Person named as the "Company" in the first paragraph of this Indenture (or any successor that shall thereafter have become such in the manner prescribed in this Article 11) may be dissolved, wound up and liquidated at any time thereafter and, except in the case of a lease, such Person shall be released from its liabilities as obligor and maker of the Notes and from its obligations under this Indenture and the Notes.

In case of any such consolidation, merger, sale, conveyance, transfer or lease, such changes in phraseology and form (but not in substance) may be made in the Notes thereafter to be issued as may be appropriate.

Section 11.03 *Opinion of Counsel to Be Given to Trustee*. Except where the Company is the Surviving Person, no consolidation, merger, sale, conveyance, transfer or lease shall be effective unless the Trustee shall be entitled to receive and conclusively rely on an Officer's Certificate and an Opinion of Counsel as conclusive evidence that any such consolidation, merger, sale, conveyance, transfer or lease and any such assumption and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture, complies with the provisions of this Article 11, that all conditions precedent thereto have been satisfied and that the Notes and such supplemental indenture are the legal, valid and binding obligations of the Successor Company, enforceable against it in accordance with its terms, subject to customary assumptions, qualifications, and exceptions.

ARTICLE 12
IMMUNITY OF INCORPORATORS, STOCKHOLDERS, OFFICERS AND DIRECTORS

Section 12.01 *Indenture and Notes Solely Corporate Obligations*. No recourse for the payment of the principal of or accrued and unpaid Special Interest, if any, on any Note, nor for any claim based thereon or otherwise in respect thereof, and no recourse under or upon any obligation, covenant or agreement of the Company in this Indenture or in any supplemental indenture or in any Note, nor because of the creation of any indebtedness represented thereby, shall be had against any incorporator, stockholder, employee, agent, Officer or director or Subsidiary, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that all such liability is hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issue of the Notes.

ARTICLE 13
INTENTIONALLY OMITTED

ARTICLE 14
CONVERSION OF NOTES

Section 14.01 *Conversion Privilege*. (a) Subject to and upon compliance with the provisions of this Article 14, each Holder of a Note shall have the right, at such Holder's option, to convert all or any portion (if the portion to be converted is US\$1,000 principal amount or an integral multiple thereof) of such Note (i) subject to satisfaction of the conditions described in Section 14.01(b), at any time prior to the close of business on the Business Day immediately preceding August 1, 2025 under the circumstances and during the periods set forth in Section 14.01(b), and (ii) regardless of the conditions described in Section 14.01(b), on or after August 1, 2025 and prior to the close of business on the second Scheduled Trading Day immediately preceding the Maturity Date, in each case, at an initial conversion rate of 18.3574 ADSs (subject to adjustment as provided in this Article 14, the "**Conversion Rate**") per US\$1,000 principal amount of Notes (subject to, and in accordance with, the settlement provisions of Section 14.02, the "**Conversion Obligation**"). For the avoidance of doubt, "Conversion Rate" as of a particular date without setting forth a particular time on such date shall mean the Conversion Rate immediately after the close of business on such date.

(b) (i) Prior to the close of business on the Business Day immediately preceding August 1, 2025, a Holder may surrender all or any portion of its Notes for conversion at any time during the five Business Day period immediately after any ten consecutive Trading Day period (the “**Measurement Period**”) in which the Trading Price per US\$1,000 principal amount of Notes, as determined following a request by a Holder of Notes in accordance with this subsection (b)(i), for each Trading Day of the Measurement Period was less than 98% of the product of the Last Reported Sale Price of the ADSs on each such Trading Day and the Conversion Rate on each such Trading Day. The Trading Prices shall be determined by the Bid Solicitation Agent pursuant to this subsection (b)(i) and the definition of Trading Price set forth in this Indenture. The Bid Solicitation Agent (if other than the Company) shall have no obligation to determine the Trading Price per US\$1,000 principal amount of Notes unless the Company has requested such determination in writing, and the Company shall have no obligation to make such request (or, if the Company is acting as Bid Solicitation Agent, the Company shall have no obligation to determine the Trading Price per US\$1,000 principal amount of Notes) unless a Holder of at least US\$2,000,000 principal amount of Notes provides the Company with reasonable evidence that the Trading Price per US\$1,000 principal amount of Notes on any Trading Day would be less than 98% of the product of the Last Reported Sale Price of the ADSs on such Trading Day and the Conversion Rate on such Trading Day, at which time the Company shall instruct the Bid Solicitation Agent (if other than the Company) in writing to determine, or if the Company is acting as Bid Solicitation Agent, the Company shall determine, the Trading Price per US\$1,000 principal amount of Notes beginning on the next Trading Day and on each successive Trading Day until the Trading Price per US\$1,000 principal amount of Notes is greater than or equal to 98% of the product of the Last Reported Sale Price of the ADSs and the Conversion Rate. At such time as the Company directs the Bid Solicitation Agent in writing to solicit bid quotations, the Company will provide the Bid Solicitation Agent with the names and contact details of the three independent nationally recognized securities dealers the Company selects, and the Company will direct those securities dealers to provide bids to the Bid Solicitation Agent. If (x) the Company is not acting as Bid Solicitation Agent, and the Company does not, when the Company is required to, instruct the Bid Solicitation Agent to determine the Trading Price per US\$1,000 principal amount of Notes when obligated as provided in the preceding sentence, or if the Company instructs the Bid Solicitation Agent in writing to obtain bids and the Bid Solicitation Agent fails to make such determination, or (y) the Company is acting as Bid Solicitation Agent and the Company fails to make such determination when obligated as provided in the preceding sentence, then, in either case, the Trading Price per US\$1,000 principal amount of Notes shall be deemed to be less than 98% of the product of the Last Reported Sale Price of the ADSs and the Conversion Rate on each Trading Day of such failure. If the Trading Price condition set forth above has been met, the Company shall so notify the Holders, the Trustee and the Conversion Agent (if other than the Trustee) in writing. If, at any time after the Trading Price condition set forth above has been met, the Trading Price per US\$1,000 principal amount of Notes is greater than or equal to 98% of the product of the Last Reported Sale Price of the ADSs and the Conversion Rate for such date, the Company shall so notify in writing the Holders, the Trustee and the Conversion Agent (if other than the Trustee).

(ii) If, prior to the close of business on the Business Day immediately preceding August 1, 2025, the Company elects to:

(A) issue to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs) any rights, options or warrants (other than in connection with a stockholder rights plan so long as such rights have not separated from the Ordinary Shares (directly or in the form of ADSs) and are not exercisable until the occurrence of a triggering event, except that such rights will be deemed to be distributed under this Section 14.01(b)(ii)(A) upon their separation from the Ordinary Shares (directly or in the form of ADSs) or upon the occurrence of such triggering event) entitling them, for a period of not more than 60 calendar days after the announcement date of such issuance, to subscribe for or purchase Ordinary Shares (directly or in the form of ADSs) at a price per share that is less than the average of the Last Reported Sale Prices of the ADSs, *divided by* the number of Ordinary Shares then represented by one ADS, for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of such issuance; or

(B) distribute to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs) the Company's assets, securities or rights to purchase securities of the Company, which distribution has a per share value, as determined by the Board of Directors, exceeding 10% of (i) the Last Reported Sale Price of the ADSs on the Trading Day preceding the date of announcement for such distribution, *divided by* (ii) the number of Ordinary Shares then represented by one ADS,

then, in either case, the Company shall notify all Holders of the Notes, the Trustee and the Conversion Agent (if other than the Trustee) in writing at least 50 Scheduled Trading Days prior to the Ex-Dividend Date for such issuance or distribution (or if later in case of any separation of rights issued pursuant to a stockholder rights plan, as soon as practicable after the Company becomes aware that such separation has occurred). Once the Company has given such notice, a Holder may surrender all or any portion of its Notes for conversion at any time until the earlier of (1) the close of business on the Business Day immediately preceding the Ex-Dividend Date for such issuance or distribution and (2) the Company's announcement that such issuance or distribution will not take place, in each case, even if the Notes are not otherwise convertible at such time.

The Notes will not become convertible on account of such distribution if each Holder participates, at the same time and upon the same terms as Holders of the Company's ADSs and solely as a result of holding the Notes, in any of such distribution without having to convert its Notes as if such Holder held a number of ADSs equal to the Conversion Rate in effect on the Record Date for the ADS for such distribution *multiplied by* the principal amount (expressed in thousands) of Notes held by such Holder on such Record Date (for the avoidance of doubt, the Company shall still be required to send a notice of such distribution as described above).

(iii) If, prior to the close of business on the Business Day immediately preceding August 1, 2025, (1) a transaction or event that constitutes a Fundamental

Change or a Make-Whole Fundamental Change occurs, regardless of whether a Holder has the right to require the Company to repurchase the Notes pursuant to Section 15.02, or (2) if the Company is a party to a consolidation, merger, binding share exchange, or transfer or lease of all or substantially all of its assets, in each case, pursuant to which the ADSs would be converted into cash, securities or other assets, all or any portion of a Holder's Notes may be surrendered for conversion at any time from or after the actual effective date of such transaction until 35 Trading Days after the actual effective date of such transaction or, if such transaction also constitutes a Fundamental Change, until the related Fundamental Change Repurchase Date. The Company shall notify Holders, the Trustee and the Conversion Agent (if other than the Trustee) in writing as promptly as practicable following the date the Company publicly announces such transaction. If the Company does not provide such notice by the effective date of such transaction, then the last day on which the Notes are convertible shall be extended by the number of Business Days from, and including, the effective date thereof to, but not including, the date the Company provides the notice.

(iv) Prior to the close of business on the Business Day immediately preceding August 1, 2025, a Holder may surrender all or any portion of its Notes for conversion at any time during any calendar quarter commencing after the calendar quarter ending on June 30, 2021 (and only during such calendar quarter), if the Last Reported Sale Price of the ADSs for at least 20 Trading Days (whether or not consecutive) during the period of 30 consecutive Trading Days ending on, and including, the last Trading Day of the immediately preceding calendar quarter is greater than or equal to 130% of the Conversion Price on each applicable Trading Day. The Company shall determine at the beginning of each calendar quarter commencing after June 30, 2021 whether the Notes may be surrendered for conversion in accordance with this clause (iv) and shall notify the Holders, the Trustee and the Conversion Agent (if other than the Trustee) in writing if the Notes become convertible in accordance with this clause (iv).

(v) If the Company calls any or all of the Notes for redemption pursuant to Article 16, then a Holder may surrender any or all of its Notes for conversion at any time prior to the close of business on the second Business Day prior to the Tax Redemption Date or Optional Redemption Date, as the case may be, even if the Notes are not otherwise convertible at such time. After that time, the right to convert such Notes on account of the Company's delivery of the notice of redemption shall expire, unless the Company defaults in the payment of the Redemption Price on the Tax Redemption Date or the Optional Redemption Date, as the case may be, in which case a Holder may convert any or all of its Notes until the Redemption Price has been paid or duly provided for.

Section 14.02 *Conversion Procedure; Settlement Upon Conversion.*

(a) Subject to this Section 14.02, Section 14.03(b) and Section 14.07(a), upon conversion of any Note, the Company shall pay or deliver, as the case may be, to the converting Holder, in respect of each US\$1,000 principal amount of Notes being converted, cash ("**Cash Settlement**"), ADSs together with cash, if applicable, in lieu of delivering any fractional ADSs ("**Fractional ADSs**") (in accordance with subsection (j) of this Section 14.02 ("**Physical Settlement**")) or a combination of cash and ADSs, together with cash, if applicable, in lieu of

delivering any Fractional ADS in accordance with subsection (j) of this Section 14.02 (“**Combination Settlement**”), at its election, as set forth in this Section 14.02.

(i) All conversions for which the relevant Conversion Date occurs after the Company’s issuance of a Redemption Notice with respect to the Notes and prior to the close of business on the second Business Day prior to the related Tax Redemption Date or Optional Redemption Date, as applicable, and all conversions for which the relevant Conversion Date occurs on or after August 1, 2025 shall be settled using the same Settlement Method.

(ii) Except for any conversions for which the relevant Conversion Date occurs after the Company’s issuance of a Redemption Notice with respect to the Notes but prior to the close of business on the second Business Day prior to the related Tax Redemption Date or Optional Redemption Date, as applicable, and any conversions for which the relevant Conversion Date occurs on or after August 1, 2025, the Company shall use the same Settlement Method for all conversions with the same Conversion Date, but the Company shall not have any obligation to use the same Settlement Method with respect to conversions with different Conversion Dates.

(iii) If, in respect of any Conversion Date (or, in the case of any conversions for which the relevant Conversion Date occurs after the date of issuance of a Redemption Notice with respect to the Notes and prior to the close of business on the second Business Day prior to the related Tax Redemption Date or Optional Redemption Date, as applicable, in such Redemption Notice or on or after August 1, 2025, no later than August 1, 2025, as the case may be), the Company elects a Settlement Method, the Company shall deliver a written notice (the “**Settlement Notice**”) of the relevant Settlement Method in respect of such Conversion Date (or such period, as the case may be) to converting Holders, the Trustee and the Conversion Agent (if other than the Trustee) no later than the close of business on the second Trading Day immediately following the relevant Conversion Date (or, in the case of any conversions for which the relevant Conversion Date occurs after the date of issuance of a Redemption Notice with respect to the Notes and prior to the close of business on the second Business Day prior to the related Tax Redemption Date or Optional Redemption Date, as applicable, in such Redemption Notice or on or after August 1, 2025, no later than August 1, 2025) (in each case, the “**Settlement Method Election Deadline**”). If the Company does not elect a Settlement Method prior to the deadline set forth in the immediately preceding sentence, the Company shall no longer have the right to elect its choice of Settlement Method and the Company shall be deemed to have elected the Default Settlement Method. If the Company delivers a Settlement Notice electing Combination Settlement (or is deemed to have elected Combination Settlement) in respect of its Conversion Obligation, but does not indicate a Specified Dollar Amount per US\$1,000 principal amount of Notes to be converted in such Settlement Notice, the Specified Dollar Amount per US\$1,000 principal amount of Notes to be converted shall be deemed to be US\$1,000. For the avoidance of doubt, the Company’s failure to timely elect a Settlement Method or specify as applicable a Specified Dollar Amount shall not constitute a Default under this Indenture.

(iv) The Company may, by written notice to Holders, the Trustee and the Conversion Agent (if other than the Trustee), on or before August 1, 2025, change the Default Settlement Method or elect to irrevocably fix the Settlement Method to any Settlement Method that the Company is then permitted to elect (including Combination Settlement with a Specified Dollar Amount per US\$1,000 principal amount of Notes of US\$1,000 or with an ability to continue to set the Specified Dollar Amount per US\$1,000 principal amount of Notes at or above any specific amount set forth in such election notice), in each case, that will apply to all Note conversions with a Conversion Date that is on or after the date the Company sends such notice. If the Company changes the Default Settlement Method or elects to irrevocably fix the Settlement Method, in either case, to Combination Settlement with an ability to continue to set the Specified Dollar Amount per US\$1,000 principal amount of Notes at or above a specified amount, the Company shall, after the date of such change or election, as the case may be, inform Holders converting their Notes, the Trustee and the Conversion Agent (if other than the Trustee) in writing of such Specified Dollar Amount in respect of the relevant conversion or conversions no later than the relevant Settlement Method Election Deadline for such conversion or conversions, or, if the Company does not timely inform the Holders, the Trustee and the Conversion Agent of the Specified Dollar Amount, such Specified Dollar Amount shall be the specific amount set forth in the change or election notice or, if no specific amount was set forth in the change or election notice, such Specified Dollar Amount shall be deemed to be US\$1,000 per US\$1,000 principal amount of Notes. If the Company changes the Default Settlement Method or irrevocably fixes the Settlement Method, then the Company shall concurrently either post the Default Settlement Method or fixed Settlement Method, as applicable, on the Company's website or disclose the same in a current report on Form 6-K (or any successor form) that is filed with the Commission. Notwithstanding the foregoing, no such change in the Default Settlement Method or irrevocable election will affect any Settlement Method theretofore elected (or deemed to be elected) with respect to any Conversion Date pursuant to this Section 14.02. For the avoidance of doubt, such change or election (as the case may be), if made, will be effective without the need to amend this Indenture or the Notes, including pursuant to Section 10.02(a). However, the Company may nonetheless choose to execute such an amendment at the Company's option.

(v) Subject to Section 14.03 and Section 14.04, the cash, ADSs or a combination of cash and ADSs, as applicable, in respect of any conversion of Notes (the "**Settlement Amount**") shall be computed as follows:

(A) if the Company elects (or is deemed to have elected) to satisfy its Conversion Obligation in respect of such conversion by Physical Settlement, the Company shall deliver to the converting Holder in respect of each US\$1,000 principal amount of Notes being converted a number of ADSs equal to the Conversion Rate in effect on the Conversion Date for such conversion;

(B) if the Company elects (or is deemed to have elected) to satisfy its Conversion Obligation in respect of such conversion by Cash Settlement, the Company shall pay to the converting Holder in respect of each US\$1,000 principal amount of Notes being converted cash in an amount equal to the sum of the Daily

Conversion Values for each of the 40 consecutive Trading Days during the related Observation Period; and

(C) if the Company elects (or is deemed to have elected) to satisfy its Conversion Obligation in respect of such conversion by Combination Settlement, the Company shall pay or deliver, as the case may be, in respect of each US\$1,000 principal amount of Notes being converted, a Settlement Amount equal to the sum of the Daily Settlement Amounts for each of the 40 consecutive Trading Days during the related Observation Period.

(vi) The Daily Settlement Amounts (if applicable) and the Daily Conversion Values (if applicable) shall be determined by the Company promptly following the last day of the Observation Period. Promptly after such determination of the Daily Settlement Amounts or the Daily Conversion Values, as the case may be, and the amount of cash payable in lieu of delivering any Fractional ADS, the Company shall notify the Trustee and the Conversion Agent (if other than the Trustee) in writing of the Daily Settlement Amounts or the Daily Conversion Values, as the case may be, and the amount of cash payable in lieu of delivering Fractional ADSs. The Trustee and the Conversion Agent (if other than the Trustee) shall have no responsibility for any such determination.

(b) Subject to Section 14.02(e), before any Holder of a Note shall be entitled to convert a Note as set forth above, such Holder shall (i) in the case of a Global Note, (1) comply with the procedures of the Depository in effect at that time for converting a beneficial interest in a Global Note, and the procedures agreed between the Company and the ADS Depository with respect to any ADSs issued upon conversion of the Notes prior to the Resale Restriction Termination Date, (2) and, if required, pay funds equal to Special Interest, if any, payable on the next Special Interest Payment Date to which such Holder is not entitled as set forth in Section 14.02(h), and (3) prior to the Resale Restriction Termination Date, complete, sign and deliver a duly completed irrevocable notice to the Conversion Agent, the Company and the ADS Depository as set forth in the Form of Notice of Conversion (or a facsimile thereof) (a “**Notice of Conversion**”) and (ii) in the case of a Physical Note (1) complete, manually sign and deliver a duly completed irrevocable Notice of Conversion to the Conversion Agent at the specified office of the Conversion Agent, the Company and the ADS Depository, and state in writing therein the principal amount of Notes to be converted and the name or names (with addresses) in which such Holder wishes the certificate or certificates for any ADSs to be delivered upon settlement of the Conversion Obligation to be registered, (2) surrender such Notes, duly endorsed to the Company or in blank (and accompanied by appropriate endorsement and transfer documents), at the specified office of the Conversion Agent, (3) if required, furnish appropriate endorsements and transfer documents and (4) if required, pay funds equal to Special Interest, if any, payable on the next Special Interest Payment Date to which such Holder is not entitled as set forth in Section 14.02(h). The Trustee (and if different, the Conversion Agent) shall notify the Company of any conversion pursuant to this Article 14 on the Conversion Date, or promptly following instructions for such conversion. No Notice of Conversion with respect to any Notes may be delivered and no Notes may be surrendered by a Holder for conversion thereof if such Holder has also delivered a Repurchase Notice or Fundamental Change Repurchase Notice to the Company in respect of such Notes and has not validly withdrawn such Repurchase Notice or Fundamental Change Repurchase Notice, as the case may be, in accordance with Section 15.03.

The delivery of the ADSs by the ADS Depository to Holders upon conversion of their Notes or their designated transferees will be governed by the terms of the Deposit Agreement and, on or prior to the Resale Restriction Termination Date, by the terms of the Restricted Issuance Agreement and the procedures agreed between the Company and the ADS Depository with respect to any restricted ADSs issued upon conversion of the Notes.

By converting a beneficial interest in a Global Note into ADSs, the Holder is deemed to represent to the Company and the ADS Depository that such Holder is not an “affiliate” (as defined in Rule 144) of the Company and has not been an “affiliate” of the Company during the three months immediately preceding the Conversion Date.

If more than one Note shall be surrendered for conversion at one time by the same Holder, the Conversion Obligation with respect to such Notes shall be computed on the basis of the aggregate principal amount of the Notes (or specified portions thereof to the extent permitted thereby) so surrendered. None of the Trustee or any Agent shall have any responsibility whatsoever with respect to the issuance and delivery of the ADSs to Holders who elect to convert their Notes.

(c) A Note shall be deemed to have been converted immediately prior to the close of business on the date (the “**Conversion Date**”) that the Holder has complied with the requirements set forth in subsection (b) above. Except as set forth in Section 14.03(b) and Section 14.07(a), the Company shall pay and/or deliver, as the case may be, the consideration due in respect of the Conversion Obligation (x) on the third Business Day immediately following the relevant Conversion Date, if the Company elects Physical Settlement (provided that, with respect to any Conversion Date following the Special Interest Record Date immediately preceding the Maturity Date where Physical Settlement applies to the related conversion, the Company shall settle any such conversion on the Maturity Date), or (y) on the second Business Day immediately following the last Trading Day of the relevant Observation Period, in the case of any other Settlement Method. If any ADSs are due to a converting Holder, the Company shall issue or cause to be issued, and deliver (if applicable) to such Holder, or such Holder’s nominee or nominees, the full number of ADSs to which such Holder shall be entitled, in book-entry format through the Depository, in satisfaction of the Company’s Conversion Obligation.

(d) In case any Note shall be surrendered for partial conversion, the Company shall execute and, upon receipt of a Company Order, instruct the Trustee who shall authenticate and deliver to or upon the written order of the Holder of the Note so surrendered a new Note or Notes in authorized denominations in an aggregate principal amount equal to the unconverted portion of the surrendered Note, without payment of any service charge by the converting Holder but, if required by the Company, with payment of a sum sufficient to cover any documentary, stamp, issue, transfer tax or similar governmental charge required by law or that may be imposed in connection therewith as a result of the name of the Holder of the new Notes issued upon such conversion being different from the name of the Holder of the old Notes surrendered for such conversion.

(e) If a Holder submits a Note for conversion, the Company shall pay any documentary, stamp, issue, transfer or similar tax due on the delivery of any ADSs upon conversion of the Notes (or the issuance of the underlying Ordinary Shares), unless the tax is due

because the Holder requests such ADSs (or such Ordinary Shares) to be issued in a name other than the Holder's name, in which case the Holder shall pay that tax. The Company may refuse to deliver the certificates representing the ADSs (or the Ordinary Shares) being issued in a name other than the Holder's name until the Company or the ADS Depository, as applicable, receives a sum sufficient to pay any tax that is due by such Holder in accordance with the immediately preceding sentence. The Company shall also pay and/or indemnify each Holder and beneficial owners of Notes and/or ADSs issuable upon conversion of the Notes for applicable fees (including, without limitation ADS depository fees for the issuance and delivery of ADSs) and expenses payable to, or withheld by, the Depository of the ADSs (including, for the avoidance of doubt, by means of a reduction in any amounts or property payable or deliverable in respect of any ADSs or in the value of deposited amounts or property represented by any ADSs) for the issuance of all ADSs deliverable upon conversion.

(f) Except as provided in Section 14.04, no adjustment shall be made for dividends on any ADSs delivered upon the conversion of any Note as provided in this Article 14.

(g) Upon the conversion of an interest in a Global Note, the Paying Agent shall make a notation on such Global Note as to the reduction in the principal amount represented thereby.

(h) Upon conversion, a Holder shall not receive any separate cash payment for accrued and unpaid Special Interest, if any, except as set forth below and the Company will not adjust the Conversion Rate for any accrued and unpaid Special Interest on the Notes. The Company's settlement of the Conversion Obligation shall be deemed to satisfy in full its obligation to pay the principal amount of the Note and accrued and unpaid Special Interest, if any, to, but not including, the relevant Conversion Date. As a result, accrued and unpaid Special Interest, if any, to, but not including, the relevant Conversion Date shall be deemed to be paid in full rather than cancelled, extinguished or forfeited. Upon a conversion of Notes into a combination of cash and ADSs, accrued and unpaid Special Interest, if any, will be deemed to be paid first out of the cash paid upon such conversion. Notwithstanding the foregoing, if Notes are converted after the close of business on a Special Interest Record Date and prior to the open of business on the immediately following Special Interest Payment Date, Holders of such Notes as of the close of business on such Special Interest Record Date will receive the full amount of Special Interest, if any, payable on such Notes on the corresponding Special Interest Payment Date notwithstanding the conversion. Notes surrendered for conversion during the period from the close of business on any Special Interest Record Date to the open of business on the immediately following Special Interest Payment Date must be accompanied by funds equal to the amount of Special Interest, if any, payable on the Notes so converted (regardless of whether the converting Holder was the holder of record on the corresponding Special Interest Record Date); *provided* that no such payment shall be required (1) for conversions following the Special Interest Record Date immediately preceding the Maturity Date; (2) if the Company has specified a Tax Redemption Date or an Optional Redemption Date that is after a Special Interest Record Date and on or prior to the second Business Day immediately succeeding the corresponding Special Interest Payment Date; (3) if the Company has specified a Fundamental Change Repurchase Date that is after a Special Interest Record Date and on or prior to the second Business Day immediately succeeding the corresponding Special Interest Payment Date; or (4) to the extent of any Defaulted Amounts, if any Defaulted Amounts exists at the time of conversion with respect to such Note.

(i) The Person in whose name the certificate for any ADSs shall be delivered upon conversion is registered shall be treated as a holder of record of such ADSs as of the close of business on the relevant Conversion Date (if the Company elects to satisfy the related Conversion Obligation by Physical Settlement) or the last Trading Day of the relevant Observation Period (if the Company elects to satisfy the related Conversion Obligation by Combination Settlement), as the case may be. Upon a conversion of Notes, such Person shall no longer be a Holder of such Notes surrendered for conversion.

(j) The Company shall not issue any Fractional ADS upon conversion of the Notes and shall instead pay cash in lieu of delivering any Fractional ADS deliverable upon conversion based on the Daily VWAP for the relevant Conversion Date (in the case of Physical Settlement) or based on the Daily VWAP for the last Trading Day of the relevant Observation Period (in the case of Combination Settlement). For each Note surrendered for conversion, if the Company has elected (or is deemed to have elected) Combination Settlement, the full number of ADSs that shall be issued upon conversion thereof shall be computed on the basis of the aggregate Daily Settlement Amounts for the relevant Observation Period and any Fractional ADSs remaining after such computation shall be paid in cash.

(k) In accordance with the Deposit Agreement or the Restricted Issuance Agreement, as applicable, the Company shall issue to the ADS Custodian such Ordinary Shares as may be required for the issuance of the ADSs upon conversion of the Notes, *plus* written delivery instructions for such ADSs, and any other information or documentation, shall pay the applicable ADS depository fees (including, without limitation ADS depository fees for the issuance and delivery of ADSs) and shall comply with the Deposit Agreement or the Restricted Issuance Agreement (as the case may be), in each case, as required by the ADS Depository or the ADS Custodian in connection with each issue and deposit of Ordinary Shares and issuance and delivery of the corresponding ADSs.

Section 14.03 Increased Conversion Rate Applicable to Certain Notes Surrendered in Connection with Make-Whole Fundamental Changes. (a) If a Make-Whole Fundamental Change occurs prior to the Maturity Date and a Holder elects to convert its Notes in connection with such Make-Whole Fundamental Change, the Company shall, under the circumstances described below, increase the Conversion Rate for the Notes so surrendered for conversion by a number of additional ADSs (the “**Additional ADSs**”), as described below. A conversion of Notes shall be deemed for these purposes to be “in connection with” such Make-Whole Fundamental Change if the relevant Notice of Conversion is received by the Conversion Agent from, and including, the Effective Date of the Make-Whole Fundamental Change up to, and including, the second Business Day immediately prior to the related Fundamental Change Repurchase Date (or, in the case of a Make-Whole Fundamental Change that would have been a Fundamental Change but for the *proviso* in clause (b) of the definition thereof, the 35th Trading Day immediately following the Effective Date of such Make-Whole Fundamental Change). The Company shall provide written notification to Holders and the Trustee (and the Conversion Agent, if other than the Trustee) of the Effective Date of any Make-Whole Fundamental Change and issue a press release announcing such Effective Date no later than five Business Days after such Effective Date. Neither the Trustee nor the Paying Agent nor the Conversion Agent shall be required to take any steps to ascertain whether a Make-Whole Fundamental Change or any event

which could lead to the occurrence of a Make-Whole Fundamental Change has occurred and shall not be liable to any person for any failure to do so.

(b) Upon surrender of Notes for conversion in connection with a Make-Whole Fundamental Change, the Company shall, at its option, satisfy the related Conversion Obligation by Physical Settlement, Cash Settlement or Combination Settlement in accordance with Section 14.02; *provided, however*, that if, at the effective time of a Make-Whole Fundamental Change described in clause (b) of the definition of Fundamental Change, the Reference Property following such Make-Whole Fundamental Change is composed entirely of cash, for any conversion of Notes with a Conversion Date on or after the Effective Date of such Make-Whole Fundamental Change, the Conversion Obligation shall be calculated based solely on the ADS Price for the transaction and shall be deemed to be an amount of cash per US\$1,000 principal amount of converted Notes equal to the Conversion Rate (including any adjustment for Additional ADSs), *multiplied by* such ADS Price. In such event, the Conversion Obligation will be determined and paid to Holders in cash on the fifth Business Day following the Conversion Date.

(c) The number of Additional ADSs, if any, by which the Conversion Rate shall be increased shall be determined by reference to the table below, based on the date on which the Make-Whole Fundamental Change occurs or becomes effective (the “**Effective Date**”) and the price (the “**ADS Price**”) paid (or deemed to be paid) per ADS in the Make-Whole Fundamental Change. If the holders of the ADSs receive in exchange for their ADSs only cash in a Make-Whole Fundamental Change described in clause (b) of the definition of Fundamental Change, the ADS Price shall be the cash amount paid per ADS. Otherwise, the ADS Price shall be the average of the Last Reported Sale Prices of the ADSs over the five consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Effective Date of the Make-Whole Fundamental Change.

(d) The ADS Prices set forth in the column headings of the table below shall be adjusted as of any date on which the Conversion Rate of the Notes is otherwise adjusted. The adjusted ADS Prices shall equal the ADS Prices applicable immediately prior to such adjustment, *multiplied by* a fraction, the numerator of which is the Conversion Rate immediately prior to such adjustment giving rise to the ADS Price adjustment and the denominator of which is the Conversion Rate as so adjusted. The number of Additional ADSs set forth in the table below shall be adjusted in the same manner and at the same time as the Conversion Rate as set forth in Section 14.04.

(e) The following table sets forth the number of Additional ADSs to be received per US\$1,000 principal amount of Notes pursuant to this Section 14.03 for each ADS Price and Effective Date set forth below:

Effective Date	ADS Price												
	\$38.91	\$45.00	\$50.00	\$54.47	\$60.00	\$65.00	\$70.00	\$80.00	\$90.00	\$100.00	\$125.00	\$150.00	\$200.00
January 26, 2021	7.3429	5.5902	4.4120	3.6040	2.8342	2.2982	1.8743	1.2621	0.8580	0.5844	0.2142	0.0640	0.0000
February 1, 2022	7.3429	5.5902	4.3642	3.5131	2.7128	2.1638	1.7360	1.1308	0.7424	0.4871	0.1580	0.0369	0.0000
February 1, 2023	7.3429	5.4740	4.1370	3.2526	2.4418	1.9000	1.4877	0.9230	0.5757	0.3565	0.0934	0.0123	0.0000
February 1, 2024	7.3429	4.7527	3.5390	2.7358	2.0023	1.5166	1.1520	0.6658	0.3810	0.2121	0.0343	0.0000	0.0000
February 1, 2025	7.3429	4.4509	3.0858	2.2205	1.4758	1.0185	0.7014	0.3275	0.1453	0.0575	0.0001	0.0000	0.0000
February 1, 2026	7.3429	3.8648	1.6426	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

The exact ADS Prices and Effective Dates may not be set forth in the table above, in which case:

(i) if the ADS Price is between two ADS Prices in the table above or the Effective Date is between two Effective Dates in the table, the number of Additional ADSs shall be determined by a straight-line interpolation between the number of Additional ADSs set forth for the higher and lower ADS Prices and the earlier and later Effective Dates, as applicable, based on a 365-day year;

(ii) if the ADS Price is greater than US\$200.00 per ADS (subject to adjustment in the same manner as the ADS Prices set forth in the column headings of the table above pursuant to subsection (d) above), no Additional ADSs shall be added to the Conversion Rate; and

(iii) if the ADS Price is less than US\$38.91 per ADS (subject to adjustment in the same manner as the ADS Prices set forth in the column headings of the table above pursuant to subsection (d) above), no Additional ADSs shall be added to the Conversion Rate.

Notwithstanding the foregoing, in no event shall the Conversion Rate per US\$1,000 principal amount of Notes exceed 25.7003 ADSs, subject to adjustment in the same manner as the Conversion Rate pursuant to Section 14.04.

(f) Nothing in this Section 14.03 shall prevent an adjustment to the Conversion Rate pursuant to Section 14.04.

(g) If the Holder elects to convert its Notes in connection with the Company's election to (i) redeem the Notes in respect of a Change in Tax Law pursuant to Section 16.01 or (ii) redeem the Notes at the Company's option pursuant to Section 16.02, in each case, the Conversion Rate shall be increased by a number of Additional ADSs determined pursuant to this Section 14.03(g). The Company shall settle conversions of such Notes as described in Section 14.02 and, for the avoidance of doubt, pay Additional Amounts, if any, with respect to any such conversion.

A conversion shall be deemed to be "in connection with" the Company's election to redeem the Notes in respect of a Change in Tax Law or redeem the Notes at the Company's option if the relevant Notice of Conversion is received by the Conversion Agent during the period from, and including, the date the Company provides the related notice of redemption to Holders until the close of business on the second Business Day immediately preceding the Tax Redemption Date or the Optional Redemption Date, as the case may be (or, if the Company fails to pay the Redemption Price, such later date on which the Company pays the Redemption Price).

The number of Additional ADSs by which the Conversion Rate will be increased in the event the Company elects to redeem the Notes pursuant to Article 16 hereof will be determined by reference to the table in clause (e) above based on the Redemption Reference Date and the Redemption Reference Price (each as defined below), but determined for purposes of this

Section 14.03(g) as if (x) the Holder had elected to convert its Notes in connection with a Make- Whole Fundamental Change, (y) the applicable “Redemption Reference Date” were the “Effective Date” as specified in clause (c) above and (z) the applicable “Redemption Reference Price” were the “ADS Price” as specified in clause (c) above. “**Redemption Reference Date**” means the date the Company delivers the relevant Redemption Notice. “**Redemption Reference Price**” means, for any conversion in connection with the Company’s election to redeem the Notes in respect of a Change in Tax Law pursuant to Section 16.01 or redeem the Notes at the Company’s option pursuant to Section 16.02, as the case may be, the average of the Last Reported Sale Prices of the ADSs over the five consecutive Trading Day period ending on, and including the Trading Day immediately preceding, the date the Company delivers the relevant Redemption Notice.

If a conversion in connection with a notice of redemption would also be deemed to be in connection with a Make-Whole Fundamental Change, then, solely for purposes of that conversion, a Holder of the Notes to be converted will be entitled to a single increase to the Conversion Rate with respect to the first to occur of the Effective Date of the Redemption Notice or the Make- Whole Fundamental Change, as applicable, and the later event shall be deemed not to have occurred for purposes of such conversion for purposes of Section 14.02 and Section 14.03.

Section 14.04 *Adjustment of Conversion Rate*. If the number of Ordinary Shares represented by the ADSs is changed, after the date of this Indenture, for any reason other than one or more of the events described in this Section 14.04, the Company shall make an appropriate adjustment to the Conversion Rate such that the number of Ordinary Shares represented by the ADSs upon which conversion of the Notes is based remains the same.

Notwithstanding the adjustment provisions described in this Section 14.04, if the Company distributes to holders of the Ordinary Shares any cash, rights, options, warrants, shares of Capital Stock or similar equity interest, evidences of indebtedness or other assets or property of the Company (but excluding Expiring Rights) and a corresponding distribution is not made to holders of the ADSs, but, instead, the ADSs shall represent, in addition to Ordinary Shares, such cash, rights, options, warrants, shares of Capital Stock or similar equity interest, evidences of indebtedness or other assets or property of the Company, then an adjustment to the Conversion Rate described in this Section 14.04 shall not be made until and unless a corresponding distribution (if any) is made to holders of the ADSs, and such adjustment to the Conversion Rate shall be based on the distribution made to the holders of the ADSs and not on the distribution made to the holders of the Ordinary Shares. However, in the event that the Company issues or distributes to all holders of the Ordinary Shares any Expiring Rights, notwithstanding the immediately preceding sentence, the Company shall adjust the Conversion Rate pursuant to Section 14.04(b) (in the case of Expiring Rights described in clause (b) below entitling holders of the Ordinary Shares for a period of not more than 60 calendar days after the announcement date of such issuance to subscribe for or purchase Ordinary Shares or ADSs) or Section 14.04(c) (in the case of all other Expiring Rights).

For the avoidance of doubt, if any event described in this Section 14.04 results in a change to the number of Ordinary Shares represented by the ADSs, then such a change shall be deemed to satisfy the Company’s obligation to effect the relevant adjustment to the Conversion

Rate on account of such an event to the extent such change reflects what a corresponding change to the Conversion Rate would have been on account of such event.

The Conversion Rate shall be adjusted from time to time by the Company if any of the following events occurs, except that the Company shall not make any adjustments to the Conversion Rate if Holders of the Notes participate (other than in the case of (x) a share split or share combination or (y) a tender or exchange offer), at the same time and upon the same terms as holders of the ADSs and solely as a result of holding the Notes, in any of the transactions described in this Section 14.04, without having to convert their Notes, as if they held a number of ADSs equal to the Conversion Rate, *multiplied by* the principal amount (expressed in thousands) of Notes held by such Holder. Neither the Trustee nor the Conversion Agent shall have any responsibility to monitor or verify the accuracy of any calculation of any adjustment to the Conversion Rate and the same shall be conclusive and binding on the Holders, absent manifest error. Notice of such adjustment to the Conversion Rate shall be given by the Company promptly in writing to the Holders, the Trustee, the Paying Agent and the Conversion Agent and shall be conclusive and binding on the Holders, absent manifest error.

(a) If the Company exclusively issues Ordinary Shares as a dividend or distribution on the Ordinary Shares, or if the Company effects a share split or share combination, the Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_1}{OS_0}$$

where,

- CR₀ = the Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for the ADSs of such dividend or distribution, or immediately prior to the open of business on the Effective Date of such share split or share combination, as applicable;
- CR₁ = the Conversion Rate in effect immediately after the open of business on such Ex-Dividend Date or Effective Date, as applicable;
- OS₀ = the number of Ordinary Shares outstanding immediately prior to the open of business on such Ex-Dividend Date or Effective Date, as applicable (before giving effect to any such dividend, distribution, split or combination); and
- OS₁ = the number of Ordinary Shares outstanding immediately after giving effect to such dividend, distribution, share split or share combination.

Any adjustment made under this Section 14.04(a) shall become effective immediately after the open of business on the Ex-Dividend Date for the ADSs for such dividend or distribution, or immediately after the open of business on the Effective Date for such share split or share combination, as applicable. If any dividend or distribution of the type described in this Section 14.04(a) is declared but not so paid or made, the Conversion Rate shall be immediately readjusted, effective as of the date the Board of Directors determines not to pay such dividend or

distribution, to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(b) If the Company issues to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs) (other than in connection with a stockholder rights plan) any rights, options or warrants entitling them, for a period of not more than 60 calendar days after the announcement date of such issuance, to subscribe for or purchase Ordinary Shares (directly or in the form of ADSs) at a price per Ordinary Share that is less than the average of the Last Reported Sale Prices of the Ordinary Shares or the ADSs, as the case may be (*divided by*, in the case of the ADSs, the number of Ordinary Shares then represented by one ADS), for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of such issuance, the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \left(\frac{OS_0 + X}{OS_0 + Y} \right)$$

where,

- CR_0 = the Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for the ADSs for such issuance;
- CR_1 = the Conversion Rate in effect immediately after the open of business on such Ex-Dividend Date;
- OS_0 = the number of Ordinary Shares outstanding immediately prior to the open of business on such Ex-Dividend Date;
- X = the total number of Ordinary Shares (directly or in the form of ADSs) deliverable pursuant to such rights, options or warrants; and
- Y = the number of Ordinary Shares equal to (i) the aggregate price payable to exercise such rights, options or warrants, *divided by* (ii) the quotient of (a) the average of the Last Reported Sale Prices of the ADSs over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of the issuance of such rights, options or warrants *divided by* (b) the number of Ordinary Shares then represented by one ADS.

Any increase made under this Section 14.04(b) shall be made successively whenever any such rights, options or warrants are distributed and shall become effective immediately after the open of business on the Ex-Dividend Date for the ADSs for such issuance. To the extent that Ordinary Shares or ADSs are not delivered after the expiration of such rights, options or warrants, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect had the increase with respect to the issuance of such rights, options or warrants been made on the basis of delivery of only the number of Ordinary Shares actually delivered (directly or in the form of ADSs). To the extent such rights, options or warrants are not so issued, the

Conversion Rate shall be decreased to the Conversion Rate that would then be in effect had the increase to the Conversion Rate for such issuance been made on the basis of only the rights, options or warrants, if any, actually issued.

For purposes of this Section 14.04(b) and Section 14.01(b)(ii)(A), in determining whether any rights, options or warrants entitle the holders to subscribe for or purchase Ordinary Shares (directly or in the form of ADSs) at a price per Ordinary Share that is less than such average of the Last Reported Sale Prices of the Ordinary Shares or the ADSs, as the case may be (*divided by*, in the case of the ADSs, the number of Ordinary Shares then represented by one ADS), for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement for such issuance, and in determining the aggregate offering price of such Ordinary Shares or ADSs, there shall be taken into account any consideration received by the Company for such rights, options or warrants and any amount payable on exercise or conversion thereof, the value of such consideration, if other than cash, to be determined by the Board of Directors.

(c) If the Company distributes shares of its Capital Stock, evidences of its indebtedness, other assets or property of the Company or rights, options or warrants to acquire its Capital Stock or other securities, to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs), excluding (i) dividends, distributions or issuances as to which an adjustment was effected pursuant to Section 14.04(a) or Section 14.04(b), (ii) dividends or distributions paid exclusively in cash as to which an adjustment was effected pursuant to Section 14.04(d), (iii) except as otherwise described below in this Indenture, rights issued pursuant to any stockholder rights plan of the Company then in effect, (iv) distributions of Reference Property issued in exchange for, or upon conversion of, the ADSs or the Ordinary Shares as described under Section 14.07 and (v) Spin-Offs as to which the provisions set forth below in this Section 14.04(c) shall apply (any of such shares of Capital Stock, evidences of indebtedness, other assets or property or rights, options or warrants to acquire Capital Stock or other securities of the Company, the “**Distributed Property**”), then the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \left(\frac{SP_0}{SP_0 - FMV} \right)$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for the ADSs for such distribution;

CR_1 = the Conversion Rate in effect immediately after the open of business on such Ex-Dividend Date;

SP_0 = the average of the Last Reported Sale Prices of the ADSs (*divided by* the number of Ordinary Shares then represented by one ADS) over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution; and

FMV = the fair market value (as determined by the Board of Directors) of the Distributed Property with respect to each outstanding Ordinary Share (directly or in the form of ADSs) on the Ex-Dividend Date for the ADSs for such distribution.

Any increase made under the foregoing portion of this Section 14.04(c) above shall become effective immediately after the open of business on the Ex-Dividend Date for the ADSs for such distribution. If such distribution is not so paid or made in full, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect had the adjustment been made on the basis of only the distribution, if any, actually paid or made. Notwithstanding the foregoing, if “FMV” (as defined above) is equal to or greater than “SP₀” (as defined above), in lieu of the foregoing increase, each Holder of a Note shall receive, in respect of each US\$1,000 principal amount thereof, at the same time and upon the same terms as holders of the ADSs receive the Distributed Property, the amount and kind of Distributed Property such Holder would have received if such Holder owned a number of ADSs equal to the Conversion Rate in effect on the Record Date for the ADSs for the distribution.

With respect to an adjustment pursuant to this Section 14.04(c) where there has been a payment of a dividend or other distribution on the Ordinary Shares (directly or in the form of ADSs) of shares of Capital Stock of any class or series, or similar equity interest, of or relating to a Subsidiary or other business unit of the Company, that are, or, when issued, will be, listed or admitted for trading on a U.S. national securities exchange (a “**Spin-Off**”), the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \left(\frac{FMV_0 + MP_0}{MP_0} \right)$$

where,

CR₀ = the Conversion Rate in effect immediately prior to the end of the Valuation Period;

CR₁ = the Conversion Rate in effect immediately after the end of the Valuation Period;

FMV₀ = the average of the Last Reported Sale Prices of the Capital Stock or similar equity interest distributed to holders of the Ordinary Shares (directly or in the form of ADSs) applicable to one Ordinary Share (determined by reference to the definition of Last Reported Sale Price as set forth in Section 1.01 as if references therein to the ADSs were to such Capital Stock or similar equity interest) over the first 10 consecutive Trading Day period after, and including, the Ex-Dividend Date of the Spin-Off (the “**Valuation Period**”); and

MP₀ = the average of the Last Reported Sale Prices of the ADSs (*divided by* the number of Ordinary Shares then represented by one ADS) over the Valuation Period.

The adjustment to the Conversion Rate under the preceding paragraph shall occur immediately after the close of business on the last Trading Day of the Valuation Period; *provided* that (x) in respect of any conversion of Notes for which Physical Settlement is applicable, if the relevant Conversion Date occurs during the Valuation Period, references in the portion of this Section 14.04(c) with respect to 10 Trading Days shall be deemed to be replaced with such lesser number of Trading Days as have elapsed from, and including, the Ex-Dividend Date of such Spin-Off to, and including, such Conversion Date in determining the Conversion Rate and (y) in respect of any conversion of Notes for which Cash Settlement or Combination Settlement is applicable, for any Trading Day that falls within the relevant Observation Period for such conversion and within the Valuation Period, the reference to “10” in the preceding paragraph shall be deemed replaced with such lesser number of Trading Days as have elapsed between (and including, in each case) the Ex-Dividend Date for such Spin-Off and such Trading Day in determining the Conversion Rate as of such Trading Day.

For purposes of this Section 14.04(c) (and subject in all respect to Section 14.11), rights, options or warrants distributed by the Company to all holders of the Ordinary Shares (directly or in the form of ADSs) entitling them to subscribe for or purchase shares of the Company’s Capital Stock, including Ordinary Shares (either initially or under certain circumstances), which rights, options or warrants, until the occurrence of a specified event or events (“**Trigger Event**”): (i) are deemed to be transferred with such Ordinary Shares (directly or in the form of ADSs); (ii) are not exercisable; and (iii) are also issued in respect of future issuances of the Ordinary Shares (directly or in the form of ADSs), shall be deemed not to have been distributed for purposes of this Section 14.04(c) (and no adjustment to the Conversion Rate under this Section 14.04(c) will be required) until the occurrence of the earliest Trigger Event, whereupon such rights, options or warrants shall be deemed to have been distributed and an appropriate adjustment (if any is required) to the Conversion Rate shall be made under this Section 14.04(c). If any such right, option or warrant, including any such existing rights, options or warrants distributed prior to the date of this Indenture, are subject to events, upon the occurrence of which such rights, options or warrants become exercisable to purchase different securities, evidences of indebtedness or other assets, then the date of the occurrence of any and each such event shall be deemed to be the date of distribution and Ex-Dividend Date with respect to new rights, options or warrants with such rights (in which case the existing rights, options or warrants shall be deemed to terminate and expire on such date without exercise by any of the holders thereof). In addition, in the event of any distribution (or deemed distribution) of rights, options or warrants, or any Trigger Event or other event (of the type described in the immediately preceding sentence) with respect thereto that was counted for purposes of calculating a distribution amount for which an adjustment to the Conversion Rate under this Section 14.04(c) was made, (1) in the case of any such rights, options or warrants that shall all have been redeemed or purchased without exercise by any holders thereof, upon such final redemption or purchase (x) the Conversion Rate shall be readjusted as if such rights, options or warrants had not been issued and (y) the Conversion Rate shall then again be readjusted to give effect to such distribution, deemed distribution or Trigger Event, as the case may be, as though it were a cash distribution, equal to the per Ordinary Share redemption or purchase price received by a holder or holders of Ordinary Shares (directly or in the form of ADSs) with respect to such rights, options or warrants (assuming such holder had retained such rights, options or warrants), made to all holders of Ordinary Shares (directly or in the form of ADSs) as of the date of such redemption or purchase, and (2) in the case of such rights, options or warrants that shall have expired or been terminated without exercise by any holders thereof,

the Conversion Rate shall be readjusted as if such rights, options and warrants had not been issued.

For purposes of Section 14.04(a), Section 14.04(b) and this Section 14.04(c), if any dividend or distribution to which this Section 14.04(c) is applicable also includes one or both of:

(A) a dividend or distribution of Ordinary Shares (directly or in the form of ADSs) to which Section 14.04(a) is applicable (the “**Clause A Distribution**”); or

(B) a dividend or distribution of rights, options or warrants to which Section 14.04(b) is applicable (the “**Clause B Distribution**”),

then (1) such dividend or distribution, other than the Clause A Distribution and the Clause B Distribution, shall be deemed to be a dividend or distribution to which this Section 14.04(c) is applicable (the “**Clause C Distribution**”) and any Conversion Rate adjustment required by this Section 14.04(c) with respect to such Clause C Distribution shall then be made, and (2) the Clause A Distribution and Clause B Distribution shall be deemed to immediately follow the Clause C Distribution and any Conversion Rate adjustment required by Section 14.04(a) and Section 14.04(b) with respect thereto shall then be made, except that, if determined by the Company (I) the “Ex-Dividend Date” of the Clause A Distribution and the Clause B Distribution shall be deemed to be the Ex-Dividend Date of the Clause C Distribution and (II) any Ordinary Shares (directly or in the form of ADSs) included in the Clause A Distribution or Clause B Distribution shall be deemed not to be “outstanding immediately prior to the open of business on such Ex-Dividend Date or Effective Date” within the meaning of Section 14.04(a) or “outstanding immediately prior to the open of business on such Ex-Dividend Date” within the meaning of Section 14.04(b).

(d) If any cash dividend or distribution is made to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs), the Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \left(\frac{SP_0}{SP_0 - C} \right)$$

where,

CR_0 = the Conversion Rate in effect immediately prior to the open of business on the Ex-Dividend Date for the ADSs for such dividend or distribution;

CR_1 = the Conversion Rate in effect immediately after the open of business on the Ex-Dividend Date for such dividend or distribution;

SP_0 = the Last Reported Sale Price of the ADSs (*divided by* the number of Ordinary Shares then represented by one ADS) on the Trading Day immediately preceding the Ex-Dividend Date for such dividend or distribution; and

C = the amount in cash per Ordinary Share the Company distributes to all or substantially all holders of the Ordinary Shares (directly or in the form of ADSs) (for the avoidance of doubt, without giving effect to any applicable fees and expenses payable to, or withheld by, the ADS Depository with respect to such distribution).

Any increase pursuant to this Section 14.04(d) shall become effective immediately after the open of business on the Ex-Dividend Date for the ADSs for such dividend or distribution. If such dividend or distribution is not so paid, the Conversion Rate shall be decreased, effective as of the date the Board of Directors determines not to make or pay such dividend or distribution, to be the Conversion Rate that would then be in effect if such dividend or distribution had not been declared. Notwithstanding the foregoing, if “C” (as defined above) is equal to or greater than “SP₀” (as defined above), in lieu of the foregoing increase, each Holder of a Note shall receive, for each US\$1,000 principal amount of Notes, at the same time and upon the same terms as holders of the ADSs, the amount of cash that such Holder would have received if such Holder owned a number of ADSs equal to the Conversion Rate on the Record Date for the ADSs for such cash dividend or distribution.

(e) If the Company or any of its Subsidiaries or its Consolidated Affiliated Entities makes a payment in respect of a tender or exchange offer for the Ordinary Shares (directly or in the form of ADSs), to the extent that the Tender/Exchange Offer Consideration (as defined below) included in the payment per Ordinary Share exceeds the average of the Last Reported Sale Prices of the ADSs (*divided by* the number of Ordinary Shares then represented by one ADS) over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the date such tender or exchange offer expires, the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \left(\frac{AC + (SP_1 \times OS_1)}{OS_0 \times SP_1} \right)$$

where,

CR₀ = the Conversion Rate in effect immediately prior to the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires;

CR₁ = the Conversion Rate in effect immediately after the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires;

AC = the aggregate value of all cash and any other consideration (as determined by the Board of Directors as of the time such tender or exchange offer expires (the “**Tender/Exchange Offer Consideration**”)) paid or payable for Ordinary Shares or ADSs, as the case may be, purchased in such tender or exchange offer;

OS ₀	=	the number of Ordinary Shares outstanding immediately prior to the date such tender or exchange offer expires (prior to giving effect to the purchase of all Ordinary Shares or ADSs, as the case may be, accepted for purchase or exchange in such tender or exchange offer);
OS ₁	=	the number of Ordinary Shares outstanding immediately after the date such tender or exchange offer expires (after giving effect to the purchase of all Ordinary Shares or ADSs, as the case may be, accepted for purchase or exchange in such tender or exchange offer); and
SP ₁	=	the average of the Last Reported Sale Prices of the ADSs (<i>divided by</i> the number of Ordinary Shares then represented by one ADS) over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the date such tender or exchange offer expires.

The adjustment to the Conversion Rate under this Section 14.04(e) shall occur at the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the date such tender or exchange offer expires; *provided* that (x) in respect of any conversion of Notes for which Physical Settlement is applicable, if the relevant Conversion Date occurs during the 10 Trading Days immediately following, and including, the Trading Day next succeeding the expiration date of any tender or exchange offer, references in this Section 14.04(e) with respect to “10” or “10th” in the preceding paragraph shall be deemed replaced with such lesser number of Trading Days as have elapsed from, and including, the expiration date of such tender or exchange offer to, and including such Conversion Date in determining the Conversion Rate and (y) in respect of any conversion of Notes for which Cash Settlement or Combination Settlement is applicable, for any Trading Day that falls within the relevant Observation Period for such conversion and within the 10 Trading Days immediately following, and including the Trading Day next succeeding the expiration date of such tender or exchange offer, references with respect to 10 Trading Days shall be deemed replaced with such lesser number of Trading Days as have elapsed from, and including, the expiration date of such tender or exchange offer to, and including, such Trading Day in determining the Conversion Rate as of such Trading Day. For the avoidance of doubt, no adjustment under this Section 14.04(e) will be made if such adjustment would result in a decrease in the Conversion Rate (other than, for the avoidance of doubt, any readjustment described in the immediately succeeding paragraph).

(f) Notwithstanding this Section 14.04 or any other provision of this Indenture or the Notes, if a Conversion Rate adjustment becomes effective on any Ex-Dividend Date, and (x) in the case of Physical Settlement, a Holder that has converted its Notes on or after such Ex-Dividend Date and on or prior to the related Record Date would be treated as the record holder of the ADSs as of the related Conversion Date as described under Section 14.02(i) or (y) in the case of Combination Settlement, any Trading Day in the Observation period for such conversion occurs on or after such Ex-Dividend Date and on or prior to the related Record Date, and the consideration due with respect to such Trading Day includes any whole ADSs, in each case (x) and (y), based on an adjusted Conversion Rate for such Ex-Dividend Date and such ADSs due upon conversion would be entitled to participate in the related dividend, distribution or other event giving rise to the adjustment, then, notwithstanding the Conversion Rate adjustment

provisions in this Section 14.04, (A) in the case of Physical Settlement, the Conversion Rate adjustment relating to such Ex-Dividend Date shall not be made for such converting Holder, and instead, such Holder shall be treated as if such Holder were the record owner of the ADSs on an unadjusted basis and participate in the related dividend, distribution or other event giving rise to such adjustment and (B) in the case of Combination Settlement, the Conversion Rate adjustment related to such Ex-Dividend Date will be made for such conversion in respect of such Trading Day, but the ADSs issuable with respect to such Trading Day based on such adjusted Conversion Rate will not be entitled to participate in the related dividend, distribution or other event giving rise to such adjustment.

(g) Except as stated herein, the Company shall not adjust the Conversion Rate for the issuance of Ordinary Shares or ADSs or any securities convertible into or exchangeable for Ordinary Shares or ADSs or the right to purchase Ordinary Shares or ADSs or such convertible or exchangeable securities.

(h) In addition to those adjustments required by clauses (a), (b), (c), (d) and (e) of this Section 14.04, and to the extent permitted by applicable law and subject to the applicable rules of The Nasdaq Global Select Market and any other securities exchange on which any of the Company's securities are then listed, the Company from time to time may increase the Conversion Rate by any amount for a period of at least 20 Business Days if the Board of Directors determines that such increase would be in the Company's best interest, and the Company may (but is not required to) increase the Conversion Rate to avoid or diminish any income tax to holders of the Ordinary Shares or the ADSs or rights to purchase Ordinary Shares or ADSs in connection with a dividend or distribution of Ordinary Shares or ADSs (or rights to acquire Ordinary Shares or ADSs) or similar event.

(i) Notwithstanding anything to the contrary in this Article 14, the Conversion Rate shall not be adjusted:

(i) upon the issuance of any Ordinary Shares or ADSs pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on the Company's securities and the investment of additional optional amounts in Ordinary Shares or ADSs under any plan;

(ii) upon the issuance of any Ordinary Shares or ADSs or options or rights to purchase those Ordinary Shares or ADSs pursuant to any present or future employee, director or consultant benefit plan or program of or assumed by the Company or any of the Company's consolidated Subsidiaries or its Consolidated Affiliated Entities;

(iii) upon the repurchase of any Ordinary Shares pursuant to an open-market share repurchase program or other buyback transaction that is not a tender offer or exchange offer of the nature described in clause (e) of this Section 14.04 above;

(iv) upon the issuance of any Ordinary Shares or ADSs pursuant to any option, warrant, right or exercisable, exchangeable or convertible security not described in clause (ii) of this subsection and outstanding as of the date the Notes were first issued;

(v) solely for a change in the par value of the Ordinary Shares; or

(vi) for accrued and unpaid Special Interest, if any.

(j) All calculations and other determinations under this Article 14 shall be made by the Company and shall be made to the nearest one-ten thousandth (1/10,000) of an ADS.

(k) Whenever the Conversion Rate is adjusted as herein provided, the Company shall promptly deliver to the Trustee (and the Conversion Agent if not the Trustee) an Officer's Certificate setting forth (i) the adjusted Conversion Rate, (ii) the subsection of this Section 14.04 pursuant to which after such adjustment has been made, showing in reasonable detail the facts upon which such adjustment is based, and (iii) the date as of which such adjustment is effective, and such Officer's Certificate shall be conclusive evidence of the accuracy of such adjustment absent manifest error. Unless and until the Conversion Agent and a Responsible Officer of the Trustee shall have received such Officer's Certificate, the Conversion Agent and the Trustee shall not be deemed to have knowledge of any adjustment of the Conversion Rate and may assume without inquiry that the last Conversion Rate of which it has knowledge is still in effect. Promptly after delivery of such certificate, the Company shall prepare a notice of such adjustment of the Conversion Rate setting forth the adjusted Conversion Rate and the date on which each adjustment becomes effective and shall deliver such notice of such adjustment of the Conversion Rate to each Holder at its last address appearing on the Note Register of this Indenture. Failure to deliver such notice shall not affect the legality or validity of any such adjustment. Neither the Trustee nor any Conversion Agent shall be under any duty or responsibility with respect to any such certificate or the information and calculations contained therein.

(l) For purposes of this Section 14.04, the number of Ordinary Shares at any time outstanding shall not include Ordinary Shares held in the treasury of the Company (directly or in the form of ADSs) so long as the Company does not pay any dividend or make any distribution on Ordinary Shares held in the treasury of the Company (directly or in the form of ADSs), but shall include Ordinary Shares issuable in respect of scrip certificates issued in lieu of fractions of Ordinary Shares.

Section 14.05 *Adjustments of Prices*. Whenever any provision of this Indenture requires the Company to calculate the Last Reported Sale Prices, the Daily VWAPs, the Daily Conversion Values, the Daily Settlement Amounts, the ADS Price for purposes of a Make- Whole Fundamental Change or the Redemption Reference Price for purposes of the Company's election to redeem the Notes over a span of multiple days, the Board of Directors shall, in good faith, make appropriate adjustments (without duplication in respect of any adjustment made pursuant to the provisions described under Section 14.04 above) to each to account for any adjustment to the Conversion Rate that becomes effective pursuant to Section 14.04, or any event requiring an adjustment to the Conversion Rate pursuant to Section 14.04 where the Ex-Dividend Date, Effective Date or expiration date, as the case may be, of the event occurs, at any time during the period when such Last Reported Sale Prices, ADS Prices, the Daily VWAPs, the Daily Conversion Values or the Daily Settlement Amounts are to be calculated.

Section 14.06 *Ordinary Shares to Be Fully Paid*. The Company shall provide, free from preemptive rights, out of its authorized but unissued Ordinary Shares or Ordinary Shares held in treasury, a sufficient number of Ordinary Shares that corresponds to the number of ADSs due upon conversion of the Notes from time to time as such Notes are presented for conversion

(assuming that at the time of computation of such number of Ordinary Shares, all such Notes would be converted by a single Holder and that Physical Settlement were applicable).

Section 14.07 *Effect of Recapitalizations, Reclassifications and Changes of the Ordinary Shares.*

(a) In the case of:

(i) any recapitalization, reclassification or change of the ADSs or Ordinary Shares (other than changes resulting from a subdivision or combination and changes in par value or from par value to no par value (or vice versa)),

(ii) any consolidation, merger, combination or similar transaction involving the Company,

(iii) any sale, lease or other transfer to a third party of the consolidated assets of the Company and the Company's Subsidiaries and its Consolidated Affiliated Entities substantially as an entirety or

(iv) any statutory share exchange,

in each case, as a result of which the ADSs or the Ordinary Shares would be converted into, or exchanged for, stock, other securities, other property or assets (including cash or any combination thereof) (any such event, a "**Merger Event**"), then, the Company or the successor or purchasing Person, as the case may be, shall execute with the Trustee a supplemental indenture permitted under Section 10.01(f) providing that, at and after the effective time of such Merger Event, the right to convert each US\$1,000 principal amount of Notes shall be changed into a right to convert such principal amount of Notes into the kind and amount of shares of stock, other securities or other property or assets (including cash or any combination thereof) that a holder of a number of ADSs equal to the Conversion Rate immediately prior to such Merger Event would have owned or been entitled to receive (the "**Reference Property**," with each "**unit of Reference Property**" meaning the kind and amount of Reference Property that a holder of one ADS is entitled to receive) upon such Merger Event; *provided, however*, that at and after the effective time of such Merger Event (A) the Company shall continue to have the right to determine the form of consideration to be paid or delivered, as the case may be, upon conversion of Notes in accordance with Section 14.02 and (B) (I) any amount payable in cash upon conversion of the Notes in accordance with Section 14.02 shall continue to be payable in cash,

(II) any ADSs that the Company would have been required to deliver upon conversion of the Notes in accordance with Section 14.02 shall instead be deliverable in the amount and type of Reference Property that a holder of that number of ADSs would have been entitled to receive in such Merger Event and (III) the Daily VWAP shall be calculated based on the value of a unit of Reference Property that a holder of one ADS would have received in such transaction. If the Reference Property consists of only cash in such Merger Event, then for all conversions that occur on or after the effective date of such Merger Event (i) the Company shall be deemed to elect Physical Settlement, (ii) the consideration due upon conversion of each \$1,000 principal amount of Notes shall be solely cash in an amount equal to the Conversion Rate in effect on the Conversion Date (as may be increased as described under Section 14.03), *multiplied by* the price

paid per ADSs in such Merger Event and (iii) the Company shall satisfy its Conversion Obligation by paying cash to converting Holders on the fifth Business Day immediately following the Conversion Date.

If the Merger Event causes the ADSs or Ordinary Shares to be converted into, or exchanged for, the right to receive more than a single type of consideration (determined based in part upon any form of holder election), then (i) the Reference Property into which the Notes will be convertible shall be deemed to be the weighted average of the types and amounts of consideration actually received by the holders of the ADSs and (ii) the unit of Reference Property for purposes of the immediately preceding paragraph shall refer to the consideration referred to in clause (i) attributable to one ADS. The Company shall provide written notice to Holders, the Trustee and the Conversion Agent (if other than the Trustee) of such weighted average as soon as practicable after such determination is made.

Such supplemental indenture described in the second immediately preceding paragraph shall (i) provide for anti-dilution and other adjustments that shall be as nearly equivalent as is practicable to the adjustments provided for in this Article 14 (it being understood that no such adjustments shall be required with respect to any portion of the Reference Property that does not consist of shares of Common Equity (however evidenced) or depositary receipts in respect thereof) and (ii) contain such other provisions that the Board of Directors determines in good faith are appropriate to preserve the economic interests of the Holders and to give effect to the provisions described in this Section 14.07. If, in the case of any Merger Event, the Reference Property includes shares of stock, securities or other property or assets (other than cash) of a Person other than the Company or the successor or purchasing Person, as the case may be, in such Merger Event, then such other Person shall also execute such supplemental indenture, and such supplemental indenture shall contain such additional provisions to protect the interests of the Holders of the Notes, including the right of Holders to require the Company to repurchase their Notes upon a Fundamental Change pursuant to Section 15.02 and the right of Holders to require the Company to repurchase their Notes on the Repurchase Date pursuant to Section 15.01, as the Board of Directors shall reasonably consider necessary by reason of the foregoing. The Company shall, as soon as reasonably practicable after the Effective Date of such transaction, post such supplemental indenture on the Company's website and disclose the same in a current report on Form 6-K (or any successor form) that is filed with the Commission.

(b) [RESERVED]

(c) The Company shall not become a party to any Merger Event unless its terms are consistent with this Section 14.07. None of the foregoing provisions shall affect the right of a holder of Notes to convert its Notes into cash, ADSs or a combination of cash and ADSs, as applicable, as set forth in Section 14.01 and Section 14.02 prior to the effective date of such Merger Event.

(d) The above provisions of this Section shall similarly apply to successive Merger Events.

Section 14.08 *Certain Covenants*. (a) The Company covenants that all ADSs delivered upon conversion of Notes, and all Ordinary Shares represented by such ADSs, will be fully paid

and non-assessable by the Company and free from all taxes, liens and charges with respect to the issue thereof.

(b) The Company covenants that, if any ADSs to be provided for the purpose of conversion of Notes hereunder, or any Ordinary Shares represented by such ADSs, require registration with or approval of any governmental authority under any federal or state law before such ADSs may be validly issued upon conversion, the Company will, to the extent then permitted by the rules and interpretations of the Commission, secure such registration or approval, as the case may be.

(c) The Company further covenants that if at any time the ADSs shall be listed on any national securities exchange or automated quotation system the Company will list and keep listed, so long as the ADSs shall be so listed on such exchange or automated quotation system, any ADSs deliverable upon conversion of the Notes.

(d) The Company further covenants to take all actions and obtain all approvals and registrations required with respect to the conversion of the Notes into ADSs and the issuance, and deposit into the ADS facility, of the Ordinary Shares represented by such ADSs. The Company also undertakes to maintain, as long as any Notes are outstanding, the effectiveness of a registration statement on Form F-6 relating to the ADSs and an adequate number of ADSs available for issuance thereunder such that ADSs can be delivered upon conversion of the Notes, if any, in accordance with the terms of this Indenture, the Notes and the Deposit Agreement or the Restricted Issuance Agreement, as applicable, upon conversion of the Notes.

Section 14.09 *Responsibility of Trustee and the Agents*. The Trustee, the Paying Agent and any other the Conversion Agent shall not at any time be under any duty or responsibility to any Holder to determine the Conversion Rate (or any adjustment thereto) or whether any facts exist that may require any adjustment (including any increase) of the Conversion Rate, or with respect to the nature or extent or calculation of any such adjustment when made, or with respect to the method employed, or in this Indenture or in any supplemental indenture provided to be employed, in making the same. The Trustee, the Paying Agent and the Conversion Agent shall not be accountable with respect to the validity or value (or the kind or amount) of any shares of the ADSs, or of any securities, property or cash that may at any time be issued or delivered upon the conversion of any Note; and the Trustee, the Paying Agent and the Conversion Agent make no representations with respect thereto. Neither the Trustee, the Transfer Agent nor any Conversion Agent shall be responsible for any failure of the Company to issue, transfer or deliver any ADSs or stock certificates or other securities or property or cash upon the surrender of any Note for the purpose of conversion, the accuracy or inaccuracy of any mathematical calculation or formulae under this Indenture, whether by the Company or any Person so authorized by the Company for such purpose under this Indenture or the failure by the Company to comply with any of the duties, responsibilities or covenants of the Company in this Article 14. Without limiting the generality of the foregoing, neither the Trustee, the Paying Agent nor any Conversion Agent shall be under any responsibility to determine the correctness of any provisions contained in any supplemental indenture entered into pursuant to Section 14.07 relating either to the kind or amount of ADSs or securities or property (including cash) receivable by Holders upon the conversion of their Notes after any event referred to in such Section 14.07 or to any adjustment to be made with respect thereto, but, subject to the provisions

of Section 7.01, may accept (without any independent investigation) as conclusive evidence of the correctness of any such provisions, and shall be protected in relying upon, the Officer's Certificate (which the Company shall be obligated to file with the Trustee prior to the execution of any such supplemental indenture) with respect thereto. The parties agree that all notices to the Trustee, the Paying Agent or the Conversion Agent under this Article 14 shall be in writing.

Neither the Trustee nor any Agent shall be responsible for determining whether any event contemplated by Section 14.01(b) has occurred that makes the Notes eligible for conversion or no longer eligible therefor unless the Company has delivered to the Trustee, the Paying Agent and the Conversion Agent, the notices referred to in Section 14.01(b) with respect to the commencement or termination of such conversion rights. The Trustee, the Paying Agent and the Conversion Agent may conclusively rely on such notices, and the Company agrees to deliver such written notices to the Trustee, the Paying Agent and the Conversion Agent promptly after the occurrence of any such event or at such other times as shall be provided for in Section 14.01(b).

Section 14.10 *Notice to Holders Prior to Certain Actions*. In case of any:

(a) action by the Company or one of its Subsidiaries that would require an adjustment in the Conversion Rate pursuant to Section 14.04 or Section 14.11;

(b) Merger Event; or

(c) voluntary or involuntary dissolution, liquidation or winding-up of the Company; then, in each case (unless notice of such event is otherwise required pursuant to another provision of this Indenture), the Company shall cause to be filed with the Trustee and the Conversion Agent (if other than the Trustee) and to be mailed to each Holder at its address appearing on the Note Register, as promptly as possible but in any event at least 20 days prior to the applicable date hereinafter specified, a notice stating (i) the date on which a record is to be taken for the purpose of such action by the Company or one of its Subsidiaries or, if a record is not to be taken, the date as of which the holders of Ordinary Shares or ADSs, as the case may be, of record are to be determined for the purposes of such action by the Company or one of its Subsidiaries, or (ii) the date on which such Merger Event, dissolution, liquidation or winding-up is expected to become effective or occur, and the date as of which it is expected that holders of Ordinary Shares or ADSs, as the case may be, of record shall be entitled to exchange their Ordinary Shares or ADSs, as the case may be, for securities or other property deliverable upon such Merger Event, dissolution, liquidation or winding-up. Failure to give such notice, or any defect therein, shall not affect the legality or validity of such action by the Company or one of its Subsidiaries, Merger Event, dissolution, liquidation or winding-up.

Section 14.11 *Stockholder Rights Plans*. To the extent that the Company has a rights plan in effect upon conversion of the Notes, each ADS delivered upon such conversion, if any, shall be entitled to receive (either directly or in respect of the Ordinary Shares underlying such ADSs) the appropriate number of rights, if any, and the certificates representing the ADSs delivered upon such conversion shall bear such legends, if any, in each case as may be provided by the terms of any such stockholder rights plan, as the same may be amended from time to time.

However, if, prior to any conversion, the rights have separated from the Ordinary Shares underlying the ADSs in accordance with the provisions of the applicable stockholder rights plan, the Conversion Rate shall be adjusted at the time of separation as if the Company distributed to all or substantially all holders of the Ordinary Shares Distributed Property as provided in Section 14.04(c), subject to readjustment in the event of the expiration, termination or redemption of such rights.

Section 14.12 *Termination of Depositary Receipt Program*. Except as provided in Section 10.03, if the Ordinary Shares cease to be represented by ADSs issued under the Deposit Agreement, all references in this Indenture to the ADSs shall be deemed to have been replaced by a reference to the number of Ordinary Shares (and other property, if any) represented by the ADSs on the last day on which the ADSs represented the Ordinary Shares and as if the Ordinary Shares and the other property had been distributed to holders of the ADSs on that day. In addition, all references to the Last Reported Sale Price of the ADSs will be deemed to refer to the Last Reported Sale Price of the Ordinary Shares, and other appropriate adjustments, including adjustments to the Conversion Rate, will be made to reflect such change. In making such adjustments, where currency translations between U.S. dollars and any other currency are required, the exchange rate in effect on the date of determination will apply.

ARTICLE 15 REPURCHASE OF NOTES AT OPTION OF HOLDERS

Section 15.01 *Repurchase at Option of Holders*.

(a) Each Holder shall have the right, at such Holder's option, to require the Company to repurchase for cash on February 1, 2025 (the "**Repurchase Date**"), all of such Holder's Notes, or any portion thereof that is an integral multiple of US\$1,000 principal amount, at a repurchase price (the "**Repurchase Price**") that is equal to 100% of the principal amount of the Notes to be repurchased, plus accrued and unpaid Special Interest, if any, to, but not including, the Repurchase Date (unless the Repurchase Date falls after a Special Interest Record Date but on or prior to the Special Interest Payment Date to which such Special Interest Record Date relates, in which case the Company shall instead pay on or, at its election, before the Special Interest Payment Date the full amount of accrued and unpaid Special Interest, if any, to the Holder of record as of the close of business on such Special Interest Record Date, and the Repurchase Price will be equal to 100% of the principal amount of the Notes to be repurchased).

Notwithstanding the foregoing, the Company shall not be required to repurchase, or to make an offer to repurchase, the Notes on February 1, 2024 if (i) (x) a third party makes such an offer in the same manner, at the same time and otherwise in compliance with the requirements for an offer made by the Company as set forth above and such third party purchases all Notes properly surrendered and not validly withdrawn under its offer in the same manner, at the same time and otherwise in compliance with the requirements for an offer made by the Company as set forth above and (y) an owner of a beneficial interest in any Note repurchased by such third party will not receive a lesser amount (as a result of taxes, additional expenses or for any other reason) than such owner would have received had the Company repurchased such Note as set forth above, or (ii) the Company has called the Notes for redemption as described under Section 16.01 with a Redemption Date on February 1, 2024.

Not later than 20 Business Days prior to the Repurchase Date, the Company shall provide written notice (the “**Company Notice**”) to the Trustee or other agent appointed for such purpose, to the Paying Agent, the Conversion Agent if other than the Trustee and to each Holder at its address shown in the Note Register of the Note Registrar (and to beneficial owners as required by applicable law and to the Conversion Agent if other than the Trustee). The Company Notice shall include a Form of Repurchase Notice to be completed by a holder and shall state:

- (i) the last date on which a Holder may exercise its repurchase right pursuant to this Section 15.01 (the “**Repurchase Expiration Time**”);
- (ii) the Repurchase Price;
- (iii) the Repurchase Date;
- (iv) the name and address of the Conversion Agent, Paying Agent or other agent appointed for such purpose;
- (v) that the Notes with respect to which a Repurchase Notice has been delivered by a Holder may be converted only if the Holder withdraws the Repurchase Notice in accordance with the terms of this Indenture;
- (vi) that the Holder shall have the right to withdraw any Notes surrendered prior to the Repurchase Expiration Time; and
- (vii) the procedures a Holder must follow to exercise its repurchase rights under this Section 15.01 and a brief description of those rights.

At the Company’s request, the Paying Agent shall give such notice in the Company’s name and at the Company’s expense; *provided, however*, that, in all cases, a final copy of the notice to be delivered by the Paying Agent shall be provided by the Company to the Paying Agent.

Concurrently with providing the Company Notice, the Company shall publish a notice containing the information included in the Company Notice in a newspaper of general circulation in the City of New York or publish such information on the Company’s website or through such other public medium as the Company may use at that time.

No failure of the Company to give the foregoing notices and no defect therein shall limit the Holders’ repurchase rights or affect the validity of the proceedings for the repurchase of the Notes pursuant to this Section 15.01.

Repurchases of Notes under this Section 15.01 shall be made, at the option of the Holder thereof, upon:

- (A) delivery to the Paying Agent or any other agent appointed for such purpose by the Holder of a duly completed notice (the “**Repurchase Notice**”) in the form set forth in Attachment 3 to the Form of Note attached hereto as Exhibit A, if the Notes are Physical Notes, or in compliance with the Depositary’s

procedures for surrendering interests in global notes, if the Notes are Global Notes, in each case during the period beginning at any time from the open of business on the date that is 20 Business Days prior to the Repurchase Date until the close of business on the second Business Day immediately preceding the Repurchase Date; and

(B) delivery of the Notes, if the Notes are Physical Notes, to the Note Registrar at any time after delivery of the Repurchase Notice (together with all necessary endorsements) at the Paying Agent Office or specified office of another agent appointed for such purpose, or book-entry transfer of the Notes, if the Notes are Global Notes, in compliance with the procedures of the Depository, in each case such delivery being a condition to receipt by the Holder of the Repurchase Price therefor.

Each Repurchase Notice shall state:

- (A) in the case of Physical Notes, the certificate numbers of the Notes to be delivered for repurchase;
- (B) the portion of the principal amount of the Notes to be repurchased, which must be US\$1,000 or an integral multiple thereof; and
- (C) that the Notes are to be repurchased by the Company pursuant to the applicable provisions of the Notes and this Indenture;

provided, however, that if the Notes are Global Notes, the Repurchase Notice must comply with appropriate Depository procedures. If the Notes are not in certificated form, to exercise the repurchase right, Holders must surrender their Notes in accordance with applicable DTC procedures.

Notwithstanding anything herein to the contrary, any Holder delivering to the Paying Agent or other agent appointed for such purpose the Repurchase Notice contemplated by this Section 15.01 shall have the right to withdraw, in whole or in part, such Repurchase Notice prior to the close of business on the second Business Day immediately preceding the Repurchase Date by delivery of a duly completed written notice of withdrawal to the Paying Agent or other agent appointed for such purpose in accordance with Section 15.03.

The Paying Agent or other agent appointed for such purpose shall as soon as practicable notify the Company of the receipt by it of any Repurchase Notice or written notice of withdrawal thereof.

No Repurchase Notice with respect to any Notes may be delivered and no Note may be surrendered for repurchase pursuant to this Section 15.01 by a Holder thereof to the extent such Holder has also delivered a Fundamental Change Repurchase Notice with respect to such Note in accordance with Section 15.02 and not validly withdrawn such Fundamental Change Repurchase Notice in accordance with Section 15.03.

(b) Notwithstanding the foregoing, no Notes may be repurchased by the Company at the option of the Holders on the Repurchase Date if the principal amount of the Notes has been accelerated, and such acceleration has not been rescinded, on or prior to such Repurchase Date (except in the case of an acceleration resulting from a default by the Company in the payment of the Repurchase Price with respect to such Notes). The Trustee will promptly return to the respective Holders thereof any Physical Notes held by it during the acceleration of the Notes (except in the case of an acceleration resulting from a default by the Company in the payment of the Repurchase Price with respect to such Notes), or any instructions for book-entry transfer of the Notes in compliance with the procedures of the Depository shall be deemed to have been cancelled, and, upon such return or cancellation, as the case may be, the Repurchase Notice with respect thereto shall be deemed to have been withdrawn.

Section 15.02 *Repurchase at Option of Holders Upon a Fundamental Change*. (a) If a Fundamental Change occurs at any time, each Holder shall have the right, at such Holder's option, to require the Company to repurchase for cash all of such Holder's Notes, or any portion thereof that is equal to US\$1,000 or an integral multiple of US\$1,000, on the Business Day (the "**Fundamental Change Repurchase Date**") notified in writing by the Company to the Holders, the Trustee, the Paying Agent or other agent appointed for such purpose as set forth in Section 15.02(c) that is not less than 20 Business Days or more than 35 Business Days following the date of the Fundamental Change Company Notice at a Repurchase Price equal to 100% of the principal amount thereof, *plus* any accrued and unpaid Special Interest thereon to, but not including, the Fundamental Change Repurchase Date (the "**Fundamental Change Repurchase Price**"), unless the Fundamental Change Repurchase Date falls after a Special Interest Record Date but on or prior to the Special Interest Payment Date to which such Special Interest Record Date relates, in which case the Company shall instead pay on, or at its election, before the Special Interest Payment Date the full amount of accrued and unpaid Special Interest, if any, to Holders of record as of the close of business on such Special Interest Record Date, and the Fundamental Change Repurchase Price shall be equal to 100% of the principal amount of Notes to be repurchased pursuant to this Article 15. The Trustee, the Conversion Agent, Paying Agent or any other agent appointed for such purpose shall have no responsibility to determine, calculate or verify the Fundamental Change Repurchase Price. The Trustee, the Conversion Agent, the Paying Agent or any other agent appointed for such purpose shall not be required to take any steps to ascertain whether a Fundamental Change or any event which could lead to the occurrence of a Fundamental Change has occurred and shall not be liable to any person for any failure to do so.

Notwithstanding the foregoing, the Company shall not be required to repurchase, or to make an offer to repurchase, the Notes upon a Fundamental Change if (i) a third party makes such an offer in the same manner, at the same time and otherwise in compliance with the requirements for an offer made by the Company as set forth above and such third party purchases all Notes properly surrendered and not validly withdrawn under its offer in the same manner, at the same time and otherwise in compliance with the requirements for an offer made by the Company as set forth above and (ii) an owner of a beneficial interest in any Note repurchased by such third party will not receive a lesser amount (as a result of taxes, additional expenses or for any other reason) than such owner would have received had the Company repurchased such Note as set forth above.

(b) Repurchases of Notes under this Section 15.02 shall be made, at the option of the Holder thereof, upon:

(i) delivery to the Paying Agent (or other agent appointed for this purpose) by a Holder of a duly completed notice (the “**Fundamental Change Repurchase Notice**”) in the form set forth in Attachment 2 to the Form of Note attached hereto as Exhibit A, if the Notes are Physical Notes, or in compliance with the Depository’s procedures for surrendering interests in global notes, if the Notes are Global Notes, in each case on or before the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date; and

(ii) delivery of the Notes, if the Notes are Physical Notes, to the Paying Agent or other agent appointed for such purpose at any time after delivery of the Fundamental Change Repurchase Notice (together with all necessary endorsements for transfer) at the specified office as set forth in the Fundamental Change Repurchase Notice, or book-entry transfer of the Notes, if the Notes are Global Notes, in compliance with the procedures of the Depository, in each case such delivery being a condition to receipt by the Holder of the Fundamental Change Repurchase Price therefor.

The Fundamental Change Repurchase Notice in respect of any Notes to be repurchased shall state:

(i) in the case of Physical Notes, the certificate numbers of the Notes to be delivered for repurchase;

(ii) the portion of the principal amount of Notes to be repurchased, which must be US\$1,000 or an integral multiple thereof; and

(iii) that the Notes are to be repurchased by the Company pursuant to the applicable provisions of the Notes and this Indenture;

provided, however, that if the Notes are Global Notes, the Fundamental Change Repurchase Notice must comply with appropriate Depository procedures. If the Notes are not in certificated form, to exercise the repurchase right, Holders must surrender their Notes in accordance with applicable DTC procedures.

Notwithstanding anything herein to the contrary, any Holder delivering to the Paying Agent the Fundamental Change Repurchase Notice contemplated by this Section 15.02 shall have the right to withdraw, in whole or in part, such Fundamental Change Repurchase Notice prior to the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date by delivery of a duly completed written notice of withdrawal to the Paying Agent in accordance with Section 15.03.

The Paying Agent or other agent appointed for such purpose shall promptly notify the Company and the Trustee of the receipt by it of any Fundamental Change Repurchase Notice or written notice of withdrawal thereof.

No Fundamental Change Repurchase Notice with respect to any Notes may be delivered and no Note may be surrendered by a Holder for repurchase thereof to the extent such Holder has also surrendered a Repurchase Notice with respect to such Note in accordance with Section 15.01 and not validly withdrawn such Repurchase Notice in accordance with Section 15.03.

(c) On or before the 20th calendar day after the occurrence of the effective date of a Fundamental Change, the Company shall provide to all Holders, the Trustee (and the Conversion Agent, Paying Agent and any other agent appointed for this purpose, in each case, if other than the Trustee) a written notice (the "**Fundamental Change Company Notice**") of the occurrence of the effective date of the Fundamental Change and of the repurchase right at the option of the Holders arising as a result thereof. In the case of Physical Notes, such notice shall be by first class mail or, in the case of Global Notes, such notice shall be delivered in accordance with the applicable procedures of the Depositary. Concurrently with providing such notice, the Company shall publish a notice containing the information set forth in the Fundamental Change Company Notice in a newspaper of general circulation in the City of New York or publish such information on the Company's website or through such other public medium as the Company may use at that time. Each Fundamental Change Company Notice shall specify:

- (i) the events causing the Fundamental Change and whether such events also constitute a Make-Whole Fundamental Change;
- (ii) the effective date of the Fundamental Change;
- (iii) the last date on which a Holder may exercise the repurchase right pursuant to this Article 15;
- (iv) the Fundamental Change Repurchase Price;
- (v) the Fundamental Change Repurchase Date;
- (vi) the name and address of the Trustee, the Paying Agent, the Conversion Agent or any other agent appointed for repurchase, if applicable;
- (vii) if applicable, the Conversion Rate and any adjustments to the Conversion Rate as a result of such Fundamental Change if it is a Make-Whole Fundamental Change;
- (viii) if applicable, that the Notes with respect to which a Fundamental Change Repurchase Notice has been delivered by a Holder may be converted only if the Holder withdraws the Fundamental Change Repurchase Notice in accordance with the terms of this Indenture; and
- (ix) the procedures that Holders must follow to require the Company to repurchase their Notes.

At the Company's request, the Trustee shall give such notice in the Company's name and at the Company's expense; *provided*, however, that, in all cases, the text of such Company Notice shall be prepared by the Company.

No failure of the Company to give the foregoing notices and no defect therein shall limit the Holders' repurchase rights or affect the validity of the proceedings for the repurchase of the Notes pursuant to this Section 15.02.

(d) Notwithstanding the foregoing, no Notes may be repurchased by the Company on any date at the option of the Holders upon a Fundamental Change if the principal amount of the Notes has been accelerated, and such acceleration has not been rescinded, on or prior to such date (except in the case of an acceleration resulting from a default by the Company in the payment of the Fundamental Change Repurchase Price with respect to such Notes). The Trustee will promptly return to the respective Holders thereof any Physical Notes held by it during the acceleration of the Notes (except in the case of an acceleration resulting from a default by the Company in the payment of the Fundamental Change Repurchase Price with respect to such Notes), or any instructions for book-entry transfer of the Notes in compliance with the procedures of the Depository shall be deemed to have been cancelled, and, upon such return or cancellation, as the case may be, the Fundamental Change Repurchase Notice with respect thereto shall be deemed to have been withdrawn.

Section 15.03 *Withdrawal of Repurchase Notice or Fundamental Change Repurchase Notice.* (a) A Repurchase Notice or Fundamental Change Repurchase Notice may be withdrawn (in whole or in part) by means of a duly completed written notice of withdrawal delivered to the Paying Agent or other agent appointed for such purpose in accordance with this Section 15.03 prior to the close of business on the second Business Day immediately preceding the Repurchase Date or prior to the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date, as the case may be, specifying:

- (i) the principal amount of the Notes with respect to which such notice of withdrawal is being submitted,
- (ii) if Physical Notes have been issued, the certificate number of the Note in respect of which such notice of withdrawal is being submitted, and
- (iii) the principal amount, if any, of such Note that remains subject to the original Repurchase Notice or Fundamental Change Repurchase Notice, as the case may be, which portion must be in principal amounts of US\$1,000 or an integral multiple of US\$1,000;

provided, however, that if the Notes are Global Notes, the notice must comply with appropriate procedures of the Depository.

Section 15.04 *Deposit of Repurchase Price or Fundamental Change Repurchase Price.*

(a) The Company will deposit with the Paying Agent (or any other agent appointed for this purpose by the Company) (or if the Company is acting as its own Paying Agent, set aside, segregate and hold in trust as provided in Section 4.04) on or prior to 11:00 a.m., New York City time, on the Repurchase Date or Fundamental Change Repurchase Date, as the case may be, an amount of money sufficient to repurchase all of the Notes to be repurchased at the appropriate Repurchase Price or Fundamental Change Repurchase Price. Subject to receipt of funds and/or Notes by the Paying Agent (or other agent appointed for this purpose by the Company) and the

Trustee, as applicable, payment for Notes surrendered for repurchase (and not withdrawn in accordance with Section 15.03) will be made on the later of (i) the Repurchase Date or Fundamental Change Repurchase Date, as the case may be, (*provided* the Holder has satisfied the conditions in Section 15.01 or Section 15.02, as the case may be) and (ii) the time of book- entry transfer or the delivery of such Note to the Paying Agent or other agent appointed by the Company by the Holder thereof in the manner required by Section 15.01 or Section 15.02, as applicable, by a wire transfer of the immediately available funds in the amount payable to the Holders of such Notes entitled thereto as they shall appear in the Note Register; *provided, however*, that payments to the Depository shall be made by wire transfer of immediately available funds to the account of the Depository or its nominee.

(b) If by 11:00 a.m., New York City time, on the Repurchase Date or Fundamental Change Repurchase Date, as the case may be, the Paying Agent (or other agent appointed for this purpose by the Company) holds money sufficient to make payment on all the Notes or portions thereof that are to be repurchased on such Repurchase Date or Fundamental Change Repurchase Date, as the case may be, then, with respect to the Notes that have been properly surrendered for repurchase to the Paying Agent or other agent appointed for such purpose and not validly withdrawn, on such Repurchase Date or Fundamental Change Repurchase Date, as the case may be, (i) such Notes will cease to be outstanding, (ii) Special Interest, if and to the extent that any such accrued and unpaid Special Interest exists as of such date, will cease to accrue on such Notes (whether or not book-entry transfer of the Notes has been made or the Notes have been delivered to the Paying Agent or any other agent appointed for such purpose) and (iii) all other rights of the Holders of such Notes will terminate (other than the right to receive the Repurchase Price or Fundamental Change Repurchase Price, as the case may be, and the right of the Holder on the applicable Special Interest Record Date to receive previously accrued and unpaid Special Interest, if any, upon delivery or transfer of the Notes to the extent not included in the Repurchase Price or Fundamental Change Repurchase Price, as the case may be).

(c) Upon surrender of a Note that is to be repurchased in part pursuant to Section 15.01 or Section 15.02, the Company shall execute and the Trustee, upon receipt of a Company Order, shall authenticate and deliver to the Holder a new Note in an authorized denomination equal in principal amount to the unrepurchased portion of the Note surrendered.

Section 15.05 *Covenant to Comply with Applicable Laws Upon Repurchase of Notes*. In connection with any repurchase offer, the Company will, if required:

- (a) comply with the provisions of Rule 13e-4, Rule 14e-1 and any other tender offer rules under the Exchange Act;
- (b) file a Schedule TO or other required schedule under the Exchange Act; and
- (c) otherwise comply with all federal and state securities laws in connection with any offer by the Company to repurchase the Notes;

in each case, so as to permit the rights and obligations under this Article 15 to be exercised in the time and in the manner specified in this Article 15.

To the extent that the provisions of any securities laws or regulations enacted or adopted after the date on which the Notes are first issued conflict with the provisions of this Indenture relating to the Company's obligations to repurchase the Notes upon a Fundamental Change, the Company shall comply with the such securities laws and regulations and shall not be deemed to have breached its obligations under such provisions of this Indenture by virtue of such conflict.

ARTICLE 16
OPTIONAL REDEMPTION

Section 16.01 *Optional Redemption for Changes in the Tax Law of the Relevant Taxing Jurisdiction*. If the Company has, or on the next Special Interest Payment Date would, become obligated to pay to the Holder of any Note Additional Amounts that are more than a *de minimis* amount, as a result of:

(a) any change or amendment which is not publicly announced before, and becomes effective on or after January 21, 2021 (or, if the Relevant Taxing Jurisdiction was not a Relevant Taxing Jurisdiction on such date, the date on which such Relevant Taxing Jurisdiction became a Relevant Taxing Jurisdiction under this Indenture) in the laws or any rules or regulations of a Relevant Taxing Jurisdiction; or

(b) any change which is not publicly announced before, and becomes effective on or after January 21, 2021 (or, if the Relevant Taxing Jurisdiction was not a Relevant Taxing Jurisdiction on such date, the date on which such Relevant Taxing Jurisdiction became a Relevant Taxing Jurisdiction under this Indenture) in any written interpretation, administration or application of such laws, rules or regulations by any legislative body, court, governmental agency, taxing authority or regulatory or administrative authority of such Relevant Taxing Jurisdiction (including the enactment of any legislation and the announcement or publication of any judicial decision or regulatory or administrative interpretation or determination);

(each, a "**Change in Tax Law**"), the Company may, at its option, redeem all but not part of the Notes (except in respect of certain Holders that elect otherwise as described below) at a redemption price equal to 100% of the principal amount thereof (the "**Redemption Price**"), plus accrued and unpaid Special Interest, if any, to, but not including the date fixed by the Company for redemption, which shall be on or prior to the 40th Scheduled Trading Day immediately before the Maturity Date (the "**Tax Redemption Date**"), including, for the avoidance of doubt, any Additional Amounts with respect to such Redemption Price; provided that the Company may only redeem the Notes if: (i) the Company cannot avoid such obligations by taking commercially reasonable measures available to the Company (provided that changing the jurisdiction of incorporation of the Company shall be deemed not to be a commercially reasonable measure); and (ii) prior to or simultaneous with the Tax Redemption Notice, the Company delivers to the Trustee an opinion of outside legal counsel or a tax advisor of recognized standing in the Relevant Taxing Jurisdiction that the Company has or will become, on or before the Tax Redemption Date, obligated to pay such Additional Amounts as a result of a Change in Tax Law and an Officer's Certificate stating that such obligation cannot be avoided by taking reasonable measures available to the Company. The Trustee shall and is entitled to conclusively rely upon such opinion and Officer's Certificate (without further investigation and enquiry) and it shall be conclusive and binding on the Holders.

Notwithstanding anything to the contrary in this Article 16, neither the Company nor any successor Person may redeem any of the Notes in the case that Additional Amounts are payable in respect of PRC withholding tax and any other tax collected at source at the Applicable PRC Rate or less solely as a result of the Company or its successor Person being considered a PRC tax resident under the PRC Enterprise Income Tax law.

If the Redemption Date occurs after a Special Interest Record Date and on or prior to the corresponding Special Interest Payment Date, the Company shall pay or cause the Paying Agent to pay, on or at its election, before such Special Interest Payment Date, pay the full amount of accrued and unpaid Special Interest, if any, and any Additional Amounts with respect to such Special Interest, due on such Special Interest Payment Date to the record holder of the Notes as of the close of business on the Special Interest Record Date corresponding to such Special Interest Payment Date, and the Redemption Price payable to any Holder (other than a Holder that elects to not have its Notes redeemed pursuant to the provisions described below) shall be equal to 100% of the principal amount of such Note to be redeemed, including, for the avoidance of doubt, any Additional Amounts with respect to such Redemption Price. The Company shall notify the Trustee and the Paying Agent in writing of its election and the date on which such Special Interest, if any, and any Additional Amounts with respect to such Special Interest shall be paid at the time the Company provides notice of such redemption.

The Company shall give the Trustee, the Paying Agent and Holders of Notes not less than 50 Scheduled Trading Days' but no more than 60 Scheduled Trading Days' notice of redemption (a "**Tax Redemption Notice**") prior to the Tax Redemption Date, which will include the Redemption Price, the Tax Redemption Date and the Settlement Method that will apply to all conversions with a Conversion Date that occurs on or after the date the Company sends such Tax Redemption Notice and before the close of business on the second Business Day immediately before the related Tax Redemption Date. Concurrently with providing such notice, which will include the Redemption Price, the Tax Redemption Date and the Settlement Method that will apply to all conversions with a Conversion Date that occurs on or after the date the Company sends such notice of redemption and before the close of business on the second Business Day immediately before the related Tax Redemption Date, the Company shall publish a notice containing this information in a newspaper of general circulation in the City of New York or publish the information on the Company's website or through such other public medium as the Company may use at that time. The Tax Redemption Date must be a Business Day. The Tax Redemption Notice shall not be revoked or subject to conditions, and outstanding Notes will become due and payable at the Redemption Price on the Tax Redemption Date specified in the related Tax Redemption Notice.

At the Company's prior written request, the Trustee shall give the Tax Redemption Notice in the Company's name and at its expense; *provided, however*, that the Company shall have delivered to the Trustee not later than the close of business five Business Days prior to the date the Tax Redemption Notice is to be sent (unless a shorter period shall be satisfactory to the Trustee), an Officer's Certificate and a Company Order requesting that the Trustee give such Tax Redemption Notice together with the final form of the Tax Redemption Notice to be given setting forth the information to be stated therein as provided in the preceding paragraph. The Tax Redemption Notice, if given in the manner herein provided, shall be conclusively presumed to have been duly given, whether or not the Holder receives such notice. In any case, failure to give

such Tax Redemption Notice or any defect in the Tax Redemption Notice to the Holder of any Note designated for redemption as a whole or in part shall not affect the validity of the proceedings for the Tax Redemption of any other Note.

Upon receiving such notice of redemption, each Holder shall have the right to elect to not have its Notes redeemed, *provided* that (i) the Company shall not be obligated to pay any Additional Amounts on any payment with respect to such Notes solely as a result of such Change in Tax Law that resulted in the obligation to pay such Additional Amounts (whether upon conversion, required repurchase in connection with a Fundamental Change or on the Repurchase Date, at maturity or otherwise, and whether in cash, ADSs, or combination thereof, Reference Property or otherwise) after the Tax Redemption Date (or, if the Company fails to pay the Redemption Price on the Tax Redemption Date, such later date on which the Company pays the Redemption Price), and (ii) all future payments with respect to such Notes shall be subject to the deduction or withholding of any taxes of such Relevant Taxing Jurisdiction required by law to be deducted or withheld as a result of such Change in Tax Law; *provided further* that, notwithstanding the foregoing, if a Holder electing not to have its Notes redeemed converts its Notes in connection with the Company's election to redeem the Notes in respect of such Change in Tax Law pursuant to Section 14.03(g), the Company shall be obligated to pay Additional Amounts, if any, with respect to such conversion.

Subject to the applicable procedures of DTC in the case of Global Notes, a Holder electing to not have its Notes redeemed must deliver to the Trustee and the Paying Agent a written notice of election so as to be received by the Trustee and Paying Agent no later than the close of business on the second Business Day immediately preceding the Tax Redemption Date; *provided* that, a Holder that complies with the requirements for conversion in Section 14.02(b) shall be deemed to have delivered a notice of its election to not have its Notes so redeemed. A Holder may withdraw any notice of election (other than such a deemed notice of election in connection with a conversion) by delivering to the Paying Agent a written notice of withdrawal prior to the close of business on the second Business Day immediately preceding the Tax Redemption Date (or, if the Company fails to pay the Redemption Price on the Tax Redemption Date, such later date on which the Company pays the Redemption Price). If no election is made or deemed to have been made, the Holder shall have its Notes redeemed without any further action.

No Notes may be redeemed by the Company or its successor if the principal amount of the Notes has been accelerated, and such acceleration has not been rescinded, on or prior to the Tax Redemption Date.

Section 16.02 *Optional Redemption by the Company*. The Company may not redeem the Notes prior to February 6, 2024, except under the circumstances described in Section 16.01.

(a) On or after February 6, 2024 and on or prior to the 40th Scheduled Trading Day immediately prior to the Maturity Date, the Company may redeem for cash all or any portion of the Notes, at its option, if the Last Reported Sale Price of the ADSs has been at least 130% of the Conversion Price then in effect on (i) each of at least 20 Trading Days (whether or not consecutive) during the period of 30 consecutive Trading Days ending on, and including, the

Trading Day immediately prior to the date the Company provides a notice of redemption and (ii) the Trading Day immediately preceding the date the Company sends such notice.

(b) In case the Company exercises its option to redeem all or, as the case may be, any part of the Note, it shall fix a date for redemption (the “**Optional Redemption Date**”) and shall give the Holders, Trustee, Conversion Agent, Paying Agent and each Holder of the Notes not less than 50 Scheduled Trading Days’ but no more than 60 Scheduled Trading Days’ notice (an “**Optional Redemption Notice**”) prior to the Optional Redemption Date, and the redemption price (the “**Redemption Price**”) will be equal to 100% of the principal amount of the Notes to be redeemed, *plus* accrued and unpaid Special Interest, if any, to, but not including, the Optional Redemption Date (unless the Optional Redemption Date falls after a Special Interest Record Date but on or prior to the Special Interest Payment Date to which such Special Interest Record Date relates, in which case the Company shall instead pay on, or at its election, before the Special Interest Payment Date the full amount of accrued and unpaid Special Interest, if any, to the holder of record on such Special Interest Record Date, and the Redemption Price shall be equal to 100% of the principal amount of the Notes to be redeemed). The Optional Redemption Date must be a Business Day. The Company shall send to each Holder and the Trustee written Optional Redemption Notice containing certain information set forth in this Indenture, including:

(i) the Optional Redemption Date;

(ii) the Redemption Price;

(iii) the Settlement Method that will apply to all conversions with a Conversion Date that occurs on or after the date the Company sends such Optional Redemption Notice and before the close of business on the second Business Day immediately before the related Optional Redemption Date;

(iv) that on the Optional Redemption Date, the Redemption Price will become due and payable for each Note to be redeemed, and that Special Interest thereon, if any, shall cease to accrue on and after the Optional Redemption Date unless the Company defaults in the payment of the Redemption Price;

(v) the place or places where the Notes subject to such redemption are to be surrendered for payment of the Redemption Price;

(vi) that Holders may surrender Notes for conversion at any time prior to the close of business on the second Business Day prior to the Optional Redemption Date (unless the Company fails to pay the Redemption Price, in which case a Holder of Notes may convert such Notes until the Business Day immediately preceding the date on which the Redemption Price has been paid or duly provided for);

(vii) the Conversion Rate and, if applicable, the number of Additional ADSs added to the Conversion Rate in accordance with Section 14.03;

(viii) the CUSIP, ISIN or other similar numbers, if any, assigned to such Notes and that no representation is made as to the correctness or accuracy of the CUSIP or ISIN number listed in such notice or printed on the Notes; and

(ix) in case any Note is to be redeemed in part only, the portion of the principal amount thereof to be redeemed, and that upon surrender of such Note, a new Note in principal amount equal to the unredeemed portion thereof shall be issued.

An Optional Redemption Notice shall be irrevocable. At the Company's prior written request, the Paying Agent shall give the Optional Redemption Notice in the Company's name and at its expense; *provided, however*, that the Company shall have delivered to the Paying Agent not later than the close of business five Business Days prior to the date the Redemption Notice is to be sent (unless a shorter period shall be satisfactory to the Trustee), an Officer's Certificate and a Company Order requesting that the Paying Agent give such Optional Redemption Notice together with the Optional Redemption Notice to be given setting forth the information to be stated therein as provided in the preceding paragraph. The Optional Redemption Notice, if given in the manner herein provided, shall be conclusively presumed to have been duly given, whether or not the Holder receives such notice. In any case, failure to give such Optional Redemption Notice or any defect in the Optional Redemption Notice to the Holder of any Note designated for redemption as a whole or in part shall not affect the validity of the proceedings for the Optional Redemption of any other Note.

Concurrently with providing such notice of redemption, the Company shall publish a notice containing this information in a newspaper of general circulation in the City of New York or publish the information on the Company's website or through such other public medium as the Company may use at that time.

If the Company decides to redeem fewer than all of the outstanding Notes, the Trustee will select the Notes to be redeemed (in principal amounts of US\$1,000 or multiples thereof) by lot, on a pro rata basis or by another method the Trustee considers to be fair and appropriate and, in the case of a Global Note, in accordance with, and subject to, DTC's applicable procedures.

If the Trustee (or DTC with respect to Global Notes) selects a portion of a Holder's Notes for partial redemption and such Holder converts a portion of such Notes, the converted portion shall be deemed to be from the portion selected for redemption. In the event of any redemption in part, the Company shall not be required to register the transfer of or exchange any Note so selected for redemption, in whole or in part, except the unredeemed portion of any such Note being redeemed in part.

No Notes may be redeemed if the principal amount of the Notes has been accelerated, and such acceleration has not been rescinded, on or prior to the Optional Redemption Date (except in the case of an acceleration resulting from a Default by the Company in the payment of the Redemption Price with respect to such Notes).

ARTICLE 17 MISCELLANEOUS PROVISIONS

Section 17.01 *Provisions Binding on Company's Successors*. All the covenants, stipulations, promises and agreements of the Company contained in this Indenture shall bind its successors and assigns whether so expressed or not.

Section 17.02 *Official Acts by Successor Corporation*. Any act or proceeding by any provision of this Indenture authorized or required to be done or performed by any board, committee or Officer of the Company shall and may be done and performed with like force and effect by the like board, committee or officer of any corporation or other entity that shall at the time be the lawful sole successor of the Company.

Section 17.03 *Addresses for Notices, Etc*. Any notice or demand that by any provision of this Indenture is required or permitted to be given or served by the Trustee or by the Holders on the Company shall be deemed to have been sufficiently given or made, for all purposes if given or served by being deposited postage prepaid by registered or certified mail in a post office letter box addressed (until another address is filed by the Company with the Trustee) to 21 Vianet Group, Inc., Guanjie Building Southeast 1st Floor, 10# Jiuxianqiao East Road, Chaoyang District, Beijing, PRC 100016, Attention: Ms. Amber Gong Bo and Ms. Rene Jiang Ruirui. Any notice, direction, request or demand hereunder to or on the Trustee shall be given or made by being deposited postage prepaid by registered or certified mail in a post office letter box addressed to Citicorp International Limited at 20th Floor Citi Tower, One Bay East, 83 Hoi Bun Road, Kwun Tong, Kowloon, Hong Kong, attention: Agency & Trust, facsimile: +852 2323 0279. Any notice, direction or request to any of the Agents shall be given or served by being deposited postage prepaid by registered or certified mail in a post office letter box addressed to Citibank, N.A. at 14th Floor, 388 Greenwich Street, New York, New York 10013, United States of America, attention: Agency and Trust, facsimile: +1 201 258 3567, with a copy to the Corporate Trust Office.

All notices and other communications under this Indenture shall be in writing in English.

So long as and to the extent that the Notes are represented by Global Notes and such Global Notes are held by DTC, notices to owners of beneficial interests in the Global Notes may be given by delivery of the relevant notice to DTC for communication by it to entitled account holders in accordance with DTC's applicable procedures.

The Company hereby acknowledges that it is fully aware of the risks associated with transmitting instructions via electronic methods (including facsimile), and being aware of these risks, authorizes the Trustee to accept and act upon any instruction sent to it or any Paying Agent, Transfer Agent, Conversion Agent or Note Registrar in the Company's name or in the name of one or more appropriate authorized signers of the Company via electronic methods (including facsimile). The Trustee shall be entitled to rely on Section 7.06 of this Indenture when accepting or acting upon any instructions, communications or documents transmitted by facsimile, and shall not be liable in the event any facsimile transmission is not received, or is mutilated, illegible, interrupted, duplicated, incomplete, unauthorized or delayed for any reason, including (but not limited to) electronic or telecommunications failure.

Furthermore, notwithstanding the above, if any Trustee receives information or instructions delivered by electronic mail, other electronic method or other unsecured method of communication believed by it to be genuine and to have been sent by the proper person or persons, the Trustee or any Paying Agent, Transfer Agent, Conversion Agent or Note Registrar shall have (i) no duty or obligation to verify or confirm that the person who sent such instructions is in fact a person authorized to give instructions or directions on behalf of the

Company and (ii) absent its or their gross negligence or willful misconduct, no liability for any losses, liabilities, costs or expenses incurred or sustained by any holder, the Company or any other person as a result of such reliance on or compliance with such information or instructions.

The Trustee, by notice to the Company, may designate additional or different addresses for subsequent notices or communications.

Any notice or communication delivered or to be delivered to a Holder shall be mailed to it by first class mail, postage prepaid, at its address as it appears on the Note Register and shall be sufficiently given to it if so delivered within the time prescribed. Notwithstanding any other provision of this Indenture or any Note, where this Indenture or any Note provides for notice of any event (including any Fundamental Change Company Notice) to a Holder of a Global Note (whether by mail or otherwise), such notice shall be sufficiently given if given to the Depository (or its designee) pursuant to the standing instructions from the Depository or its designee, including by electronic mail in accordance with the Depository's applicable procedures.

Failure to mail or deliver a notice or communication to a Holder or any defect in it shall not affect its sufficiency with respect to other Holders. If a notice or communication is mailed or delivered, as the case may be in the manner provided above, it is duly given, whether or not the addressee receives it.

In case by reason of the suspension of regular mail service or by reason of any other cause it shall be impracticable to give such notice to Holders by mail, then such notification as shall be made with the approval of the Trustee shall constitute a sufficient notification for every purpose hereunder.

In addition to the foregoing, the Trustee agrees to accept and act upon notice, instructions or directions pursuant to this Indenture sent by unsecured e-mail, facsimile transmission or other similar unsecured electronic methods. If any party elects to give the Trustee e-mail or facsimile instructions (or instructions by a similar electronic method), the Trustee's understanding of such instructions shall be deemed controlling. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequent written instruction. The party providing electronic instructions agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Trustee, including, without limitation, the risk of the Trustee acting on unauthorized instructions, and the risk of interception and misuse by third parties.

Section 17.04 Governing Law; Jurisdiction. THIS INDENTURE AND EACH NOTE, AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS INDENTURE AND EACH NOTE, SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

The Company irrevocably consents and agrees, for the benefit of the Holders from time to time of the Notes and the Trustee, that any legal action, suit or proceeding against it with respect to obligations, liabilities or any other matter arising out of or in connection with this Indenture or the Notes may be brought in the courts of the State of New York or the courts of the

United States located in the Borough of Manhattan, New York City, New York and, until amounts due and to become due in respect of the Notes have been paid, hereby irrevocably consents and submits to the non-exclusive jurisdiction of each such court *in personam*, generally and unconditionally with respect to any action, suit or proceeding for itself in respect of its properties, assets and revenues.

The Company irrevocably and unconditionally waives, to the fullest extent permitted by law, any objection which it may now or hereafter have to the laying of venue of any of the aforesaid actions, suits or proceedings arising out of or in connection with this Indenture brought in the courts of the State of New York or the courts of the United States located in the Borough of Manhattan, New York City, New York and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.

To the extent that the Company has or hereafter may acquire any sovereign or other immunity from jurisdiction of any court or from any legal process with respect to itself or its property, the Company irrevocably waives such immunity in respect of its obligations hereunder or under any Note.

Section 17.05 *Service of Process*. The Company irrevocably appoints Cogency Global Inc. as its authorized agent in the Borough of Manhattan in the City of New York upon which process may be served in any such suit or proceeding, and agrees that service of process upon such agent, and written notice of said service to the Company by the person serving the same to 122 East 42nd Street, 18th Floor, New York, New York 10168, shall be deemed in every respect effective service of process upon the Company in any such suit or proceeding. The Company further agrees to take any and all action as may be necessary to maintain such designation and appointment of such agent in full force and effect for a period of six years from the date of this Indenture. If for any reason such agent shall cease to be such agent for service of process, the Company shall forthwith appoint a new agent of recognized standing for service of process in the State of New York and deliver to the Trustee a copy of the new agent's acceptance of that appointment within ten Business Days of such acceptance. Nothing herein shall affect the right of the Trustee, any Agent or any Holder to serve process in any other manner permitted by law or to commence legal proceedings or otherwise proceed against the Company in any other court of competent jurisdiction.

Section 17.06 *Evidence of Compliance with Conditions Precedent; Certificates and Opinions of Counsel to Trustee*. Upon any application or demand by the Company to the Trustee to take any action under any of the provisions of this Indenture, the Company shall, if requested by the Trustee, furnish to the Trustee an Officer's Certificate and/or Opinion of Counsel stating that such action is permitted by the terms of this Indenture; *provided*, however, that such Opinion of Counsel shall not be required in connection with the Notes initially issued hereunder.

Each Officer's Certificate provided for, by or on behalf of the Company in this Indenture and delivered to the Trustee with respect to compliance with this Indenture (other than the Officer's Certificates provided for in Section 4.09) shall include (a) a statement that the person making such certificate is familiar with the requested action and this Indenture; (b) a brief statement as to the nature and scope of the examination or investigation upon which the

statement contained in such certificate is based; (c) a statement that, in the judgment of such person, he or she has made such examination or investigation as is necessary to enable him or her to express an informed judgment as to whether or not such action is permitted by this Indenture; and (d) a statement as to whether or not, in the judgment of such person, such action is permitted by this Indenture.

Notwithstanding anything to the contrary in this Section 17.06, if any provision in this Indenture specifically provides that the Trustee shall or may receive an Opinion of Counsel in connection with any action to be taken by the Trustee or the Company hereunder, the Trustee shall be entitled to, or entitled to request, such Opinion of Counsel. Notwithstanding anything to the contrary herein, no Opinion of Counsel shall be required to be delivered in connection with (1) the removal of the restrictive legend and the mandatory exchange of the restricted CUSIP of the Restricted Securities to an unrestricted CUSIP pursuant to Section 2.05 (unless a new Global Notes is to be issued and authenticated) or (2) a request by the Company that the Trustee deliver a notice to Holders under this Indenture where the Trustee receives an Officer's Certificate with respect to such notice. With respect to matters of fact, an Opinion of Counsel may rely on an Officer's Certificate or certificates of public officials.

Section 17.07 *Legal Holidays*. In any case where any Special Interest Payment Date, Tax Redemption Date, Optional Redemption Date, Fundamental Change Repurchase Date, Conversion Date, Repurchase Date or Maturity Date is not a Business Day, then any action to be taken on such date need not be taken on such date, but may be taken on the next succeeding Business Day with the same force and effect as if taken on such date, and no Special Interest, if and to the extent any Special Interest is otherwise payable on such date, shall accrue in respect of the delay.

Section 17.08 *No Security Interest Created*. Nothing in this Indenture or in the Notes, expressed or implied, shall be construed to constitute a security interest under the Uniform Commercial Code or similar legislation, as now or hereafter enacted and in effect, in any jurisdiction.

Section 17.09 *Benefits of Indenture*. Nothing in this Indenture or in the Notes, expressed or implied, shall give to any Person, other than the Holders, the parties hereto, any Paying Agent, any Conversion Agent, any Transfer Agent, any Note Registrar and their successors hereunder, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 17.10 *Table of Contents, Headings, Etc*. The table of contents and the titles and headings of the articles and sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part hereof, and shall in no way modify or restrict any of the terms or provisions hereof.

Section 17.11 *Execution in Counterparts*. This Indenture may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument. Signatures of the parties hereto (including signatures on the Notes) transmitted by facsimile or PDF shall be deemed to be their original signatures for all purposes.

Section 17.12 *Severability*. In the event any provision of this Indenture or in the Notes shall be invalid, illegal or unenforceable, then (to the extent permitted by law) the validity, legality or enforceability of the remaining provisions shall not in any way be affected or impaired.

Section 17.13 *Waiver of Jury Trial*. EACH OF THE COMPANY AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, AND EACH HOLDER, BY ITS ACCEPTANCE OF A NOTE OR A BENEFICIAL INTEREST IN A GLOBAL NOTE, AS APPLICABLE, SHALL BE DEEMED TO HAVE WAIVED, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 17.14 *Force Majeure*. In no event shall the Trustee or the Agents be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, pandemic, epidemic, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee or the Agents, as the case may be, shall use reasonable efforts that are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

Section 17.15 *Calculations*. Except as otherwise provided herein, the Company shall be responsible for making all calculations called for under the Notes, and in no instance shall the Trustee or the Agents be responsible for making such calculations. These calculations include, but are not limited to, determinations of the Last Reported Sale Prices of the ADSs, the Daily VWAPs, the Daily Conversion Values, the Daily Settlement Amounts, accrued Special Interest, if any, payable on the Notes, the number of Additional ADSs to be added to the Conversion Rate upon a Make-Whole Fundamental Change, if any, the Conversion Rate of the Notes and any adjustments thereto. The Company shall make all these calculations in good faith and, absent manifest error, the Company's calculations shall be final and binding on Holders, the Trustee, the Paying Agent and the Conversion Agent. The Company shall provide a schedule of its calculations to each of the Trustee, the Paying Agent and the Conversion Agent, and each of the Trustee, the Paying Agent and the Conversion Agent is entitled to rely conclusively and without liability upon the accuracy of the Company's calculations without independent verification (and, neither the Trustee, the Paying Agent nor the Conversion Agent shall have any responsibility for such calculations). The Conversion Agent will forward the Company's calculations to any registered Holder of Notes upon the prior written request of that Holder at the sole cost and expense of the Company.

Section 17.16 *Patriot Act*. In order to comply with the laws, rules, regulations and executive orders in effect from time to time applicable to banking institutions, including, without limitation, those relating to the funding of terrorist activities and money laundering, including Section 326 of the USA PATRIOT Act of the United States ("**Applicable Law**"), the Trustee is are required to obtain, verify, record and update certain information relating to individuals and entities which maintain a business relationship with the Trustee. Accordingly, each of the parties

agree to provide to the Trustee, upon their request from time to time such identifying information and documentation as may be available for such party in order to enable the Trustee to comply with Applicable Law.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the date first above written.

21VIANET GROUP, INC.

By: /s/ Sheng Chen

Name: Sheng Chen
Title: Executive Chairman of the
Board of Directors

Signature Page to Indenture

CITICORP INTERNATIONAL
LIMITED, as Trustee

By: /s/ Vanessa Loh

Name: Vanessa Loh

Title: Senior Vice President

Signature Page to Indenture

[FORM OF FACE OF NOTE]

[INCLUDE FOLLOWING LEGEND IF A GLOBAL NOTE]

[THIS IS A GLOBAL NOTE WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF THE DEPOSITARY OR A NOMINEE OF THE DEPOSITARY, WHICH MAY BE TREATED BY THE COMPANY, THE TRUSTEE AND ANY AGENT THEREOF AS THE OWNER AND HOLDER OF THIS NOTE FOR ALL PURPOSES.]

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITARY TRUST COMPANY, A NEW YORK CORPORATION (“DTC”), TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE, OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.]

[INCLUDE FOLLOWING LEGEND IF A RESTRICTED SECURITY]

[THIS SECURITY, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION OF THIS SECURITY, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE “SECURITIES ACT”) AND MAY NOT BE OFFERED, SOLD, PLEDGED OR OTHERWISE TRANSFERRED EXCEPT IN ACCORDANCE WITH THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF OR OF A BENEFICIAL INTEREST HEREIN, THE ACQUIRER:

(1) FOR WHICH IT IS ACTING IS A “QUALIFIED INSTITUTIONAL BUYER” (WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT) AND THAT IT EXERCISES SOLE INVESTMENT DISCRETION WITH RESPECT TO EACH SUCH ACCOUNT AND THAT IT AND ANY SUCH ACCOUNT IS NOT, AND HAS NOT BEEN FOR THE IMMEDIATELY PRECEDING THREE MONTHS, AN AFFILIATE OF 21VIANET GROUP, INC. (THE “COMPANY”), AND

(2) AGREES FOR THE BENEFIT OF THE COMPANY THAT IT WILL NOT OFFER, SELL, PLEDGE OR OTHERWISE TRANSFER THIS SECURITY, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION OF THIS SECURITY, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY OR ANY BENEFICIAL INTEREST HEREIN OR THEREIN PRIOR TO THE DATE THAT IS THE LATER OF (X) ONE YEAR AFTER THE LAST ORIGINAL ISSUE DATE HEREOF OR SUCH SHORTER PERIOD OF TIME AS PERMITTED BY RULE 144

UNDER THE SECURITIES ACT OR ANY SUCCESSOR PROVISION THERETO AND (Y) SUCH LATER DATE, IF ANY, AS MAY BE REQUIRED BY APPLICABLE LAW, EXCEPT:

- (A) TO THE COMPANY OR ANY SUBSIDIARY THEREOF, OR
- (B) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BECOME EFFECTIVE UNDER THE SECURITIES ACT, OR
- (C) TO A QUALIFIED INSTITUTIONAL BUYER IN COMPLIANCE WITH RULE 144A UNDER THE SECURITIES ACT, OR
- (D) PURSUANT TO AN EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE).

PRIOR TO THE REGISTRATION OF ANY TRANSFER IN ACCORDANCE WITH (2)(D) ABOVE, THE COMPANY, THE ADS DEPOSITARY AND THE TRANSFER AGENT FOR THE NOTES RESERVE THE RIGHT TO REQUIRE THE DELIVERY OF SUCH LEGAL OPINIONS, CERTIFICATIONS OR OTHER EVIDENCE AS MAY REASONABLY BE REQUIRED IN ORDER TO DETERMINE THAT THE PROPOSED TRANSFER IS BEING MADE IN COMPLIANCE WITH THE SECURITIES ACT AND APPLICABLE STATE SECURITIES LAWS. NO REPRESENTATION IS MADE AS TO THE AVAILABILITY OF ANY EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT.

NO AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY OR PERSON THAT HAS BEEN AN AFFILIATE (AS DEFINED IN RULE 144 UNDER THE SECURITIES ACT) OF THE COMPANY DURING THE THREE IMMEDIATELY PRECEDING MONTHS MAY PURCHASE, OTHERWISE ACQUIRE OR OWN THIS NOTE, THE AMERICAN DEPOSITARY SHARES DELIVERABLE UPON CONVERSION HEREOF, IF ANY, AND THE CLASS A ORDINARY SHARES REPRESENTED THEREBY OR A BENEFICIAL INTEREST HEREIN OR THEREIN.]

21VIANET GROUP, INC.

0.00% Convertible Senior Note due 2026

No. [_____]

[Initially]¹ US\$ _____

CUSIP No. 90138V AA5²

21Vianet Group, Inc., a company duly organized and validly existing under the laws of the Cayman Islands (the “**Company**,” which term includes any successor company or corporation or other entity under the Indenture referred to on the reverse hereof), for value received hereby promises to pay to [CEDE & CO.]³ [_____] ⁴, or registered assigns, the principal sum [as set forth in the “Schedule of Exchanges of Notes” attached hereto]⁵ [of US\$[_____] ⁶], which amount, taken together with the principal amounts of all other outstanding Notes, shall not, unless permitted by the Indenture, exceed US\$600,000,000 in aggregate at any time, in accordance with the rules and procedures of the Depositary, on February 1, 2026, and any Special Interest thereon as set forth below.

This Note shall not bear regular interest, and the principal amount of this Note shall not accrete. Any Special Interest, if any, is payable semi-annually in arrears on each February 1 and August 1, commencing on August 1, 2021 (if any Special Interest is then payable), to Holders of record at the close of business on the preceding January 15 and July 15 (whether or not such day is a Business Day), respectively. Special Interest, if any, will be payable as set forth in Section 4.06(d), Section 4.06(e) and Section 6.03 of the within-mentioned Indenture, and any reference to interest on, or in respect of, any Note therein shall be deemed to refer solely to Special Interest if, in such context, Special Interest is, was or would be payable pursuant to any of such Section 4.06(d), Section 4.06(e) and Section 6.03, and any express mention of the payment of Special Interest, if any, in any provision therein shall not be construed as excluding Special Interest in those provisions thereof where such express mention is not made.

Any Defaulted Amounts shall not accrue interest unless Special Interest was payable on the required payment date, in which case such payments shall accrue interest per annum at the then-applicable Special Interest rate *plus* one percent, subject to the enforceability thereof under applicable law, from, and including, the relevant payment date to, but not including, the date on _____

¹ Include if a Global Note.

² This Note will be deemed to be identified by CUSIP No. 90138V AB3 from and after such time when (i) the Company delivers, pursuant to Section 2.05(c) of the within-mentioned Indenture, written notice to the Trustee of the occurrence of the Resale Restriction Termination Date and the removal of the restrictive legend affixed to this Note and (ii) this Note is identified by such CUSIP number in accordance with the applicable procedures of the Depositary.

³ Include if a Global Note.

⁴ Include if a Physical Note.

⁵ Include if a Global Note.

⁶ Include if a Physical Note.

which such Defaulted Amounts shall have been paid by the Company, at its election, in accordance with Section 2.03(c) of the Indenture.

The Company shall pay or cause the Paying Agent to pay the principal of and any Special Interest on this Note, so long as such Note is a Global Note, in immediately available funds to the Depositary or its nominee, as the case may be, as the registered Holder of such Note. As provided in and subject to the provisions of the Indenture, the Company shall pay or cause the Paying Agent to pay the principal of any Notes (other than Notes that are Global Notes) by check or wire transfer. The Company has initially designated Citibank, N.A. as its Paying Agent, Transfer Agent, Conversion Agent and Note Registrar in respect of the Notes and its agency in the Borough of Manhattan, the City of New York, as a place where Notes may be presented for payment or for registration of transfer.

Reference is made to the further provisions of this Note set forth on the reverse hereof, including, without limitation, provisions giving the Holder of this Note the right to convert this Note into cash, ADSs or a combination of cash and ADSs, as applicable, on the terms and subject to the limitations set forth in the Indenture. Such further provisions shall for all purposes have the same effect as though fully set forth at this place.

This Note, and any claim, controversy or dispute arising under or related to this Note, shall be construed in accordance with and governed by the laws of the State of New York (without regard to the conflicts of laws provisions thereof).

In the case of any conflict between this Note and the Indenture, the provisions of the Indenture shall control and govern.

This Note shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been signed manually or electronically by the Trustee or the Note Registrar under the Indenture.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed.

21VIANET GROUP, INC.

By: _____
Name:
Title:

A-5

Dated:

CERTIFICATE OF AUTHENTICATION

This is one of the Notes described in the within-named Indenture referred to in this Note.

CITICORP INTERNATIONAL LIMITED
as Trustee

By: _____
Name:
Title:

[FORM OF REVERSE OF NOTE]

21VIANET GROUP, INC.
0.00% Convertible Senior Note due 2026

This Note is one of a duly authorized issue of Notes of the Company, designated as its 0.00% Convertible Senior Notes due 2026 (the “**Notes**”), initially limited to the aggregate principal amount of US\$600,000,000, subject to Section 2.10 of the Indenture, all issued or to be issued under and pursuant to an Indenture dated as of January 26, 2021 (the “**Indenture**”), between the Company and Citicorp International Limited, as trustee (the “**Trustee**”), to which Indenture and all indentures supplemental thereto reference is hereby made for a description of the rights, limitations of rights, obligations, duties, indemnifications, privileges, disclaimers from liability and immunities thereunder of the Trustee, the Company and the Holders of the Notes. Additional Notes may be issued in an unlimited aggregate principal amount, subject to certain conditions specified in the Indenture.

In the case certain Events of Default, as defined in the Indenture, shall have occurred and be continuing, the principal of, and any Special Interest on, all Notes may be declared, by either the Trustee may, or Holders of at least 25% in aggregate principal amount of Notes then outstanding by notice to the Company or the Trustee may, and the Trustee at the written request of such Holders shall (subject to being indemnified and/or secured and/or pre-funded to its satisfaction) declare 100% of the principal of and accrued and unpaid Special Interest, if any, on all the Notes become, due and payable, in the manner, with the effect and subject to the conditions and certain exceptions set forth in the Indenture. In the case certain Events of Default relating to a bankruptcy (or similar proceeding) with respect to the Company or a Significant Subsidiary of the Company shall have occurred, the principal of, and any Special Interest on, all Notes shall automatically become immediately due and payable, as set forth in the Indenture.

Subject to the terms and conditions of the Indenture, the Company will make or cause the Paying Agent to make all payments in respect of the principal amount on the Maturity Date, the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, as the case may be, to the Holder who surrenders a Note to collect such payments in respect of the Note. The Company will pay or cause the Paying Agent to pay cash amounts in money of the United States that at the time of payment is legal tender for payment of public and private debts.

Subject to the terms and conditions of the Indenture, Additional Amounts will be paid in connection with any payments made and deliveries caused to be made by the Company or any successor to the Company under or with respect to the Indenture and the Notes, including, but not limited to, payments of principal (including, if applicable, the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price), premium, if any, payments of Special Interest, if any, and payments of cash and/or deliveries of ADSs or any other consideration due on conversion of a Note (together with payment of cash for any Fractional ADS or other consideration) to ensure that the net amount received by the beneficial owner of the Notes after any applicable withholding, deduction or reduction (and after deducting any taxes on the Additional Amounts) will equal the amounts that would have been received by such beneficial owner had no such withholding, deduction or reduction been required.

The Indenture contains provisions permitting the Company and the Trustee in certain circumstances, without the consent of the Holders of the Notes, and in certain other circumstances, with the consent of the Holders of not less than a majority in aggregate principal amount of the Notes at the time outstanding, evidenced as in the Indenture provided, to execute supplemental indentures modifying the terms of the Indenture and the Notes as described therein. It is also provided in the Indenture that, subject to certain exceptions, the Holders of a majority in aggregate principal amount of the Notes at the time outstanding may on behalf of the Holders of all of the Notes waive any past Default or Event of Default under the Indenture and its consequences.

No reference herein to the Indenture and no provision of this Note or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay or cause to be delivered, as the case may be, the principal (including the Redemption Price, the Repurchase Price and the Fundamental Change Repurchase Price, if applicable) of, accrued and unpaid Special Interest, if any, on, and the consideration due upon conversion of, this Note at the place, at the respective times, at the rate and in the lawful money herein prescribed.

The Notes are issuable in registered form without interest coupons in denominations of US\$1,000 principal amount and integral multiples thereof. In the manner and subject to the limitations provided in the Indenture, Notes may be exchanged for a like aggregate principal amount of Notes of other authorized denominations, without payment of any service charge but, if required by the Company or Trustee, with payment of a sum sufficient to cover any transfer or similar tax that may be imposed in connection therewith as a result of the name of the Holder of the new Notes issued upon such exchange of Notes being different from the name of the Holder of the old Notes surrendered for such exchange.

The Company may not redeem the Notes prior to February 6, 2024, except in the event of certain Changes in Tax Law as described in Section 16.01 of the Indenture. The Notes shall be redeemable at the Company's option in certain circumstances on or after February 6, 2024 and on or prior to the 40th Scheduled Trading Day immediately before the Maturity Date in accordance with the terms and subject to the conditions specified in the Indenture. No sinking fund is provided for the Notes.

The Holder has the right, at such Holder's option, to require the Company to repurchase for cash all of such Holder's Notes or any portion thereof (in principal amounts of US\$1,000 or integral multiples thereof) on the Repurchase Date at a price equal to the Repurchase Price.

Upon the occurrence of a Fundamental Change, the Holder has the right, at such Holder's option, to require the Company to repurchase for cash all of such Holder's Notes or any portion thereof (in principal amounts of US\$1,000 or integral multiples thereof) on the Fundamental Change Repurchase Date at a price equal to the Fundamental Change Repurchase Price.

Subject to the provisions of the Indenture, the Holder hereof has the right, at its option, during certain periods and upon the occurrence of certain conditions specified in the Indenture, prior to the close of business on the second Scheduled Trading Day immediately preceding the Maturity Date, to convert any Notes or portion thereof that is US\$1,000 principal amount of Notes or an integral multiple thereof, into cash, ADSs or a combination of cash and ADSs, as

applicable, at the Conversion Rate specified in the Indenture, as adjusted from time to time as provided in the Indenture.

Terms used in this Note and defined in the Indenture are used herein as therein defined.

ABBREVIATIONS

The following abbreviations, when used in the inscription of the face of this Note, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM = as tenants in common

UNIF GIFT MIN ACT = Uniform Gifts to Minors Act CUST = Custodian

TEN ENT = as tenants by the entirety

JT TEN = joint tenants with right of survivorship and not as tenants in common

Additional abbreviations may also be used though not in the above list.

[FORM OF NOTICE OF CONVERSION]

To: 21VIANET GROUP, INC.

[Address]

[Phone number]

[Facsimile number]

CITIBANK, N.A., as Conversion Agent

480 Washington Boulevard, 30th Floor
Jersey City, NJ 07310
Attention: Agency and Trust Conversion Unit
Email: Citinygats@citi.com
Fax: 1-201-258-3567

CITIBANK, N.A., as ADS Depositary

388 Greenwich Street
ADR Department New York, NY 10013
Email: keith.galfo@citi.com
lelie.deluca@citi.com
dr.china@citi.com

The undersigned registered holder of this Note hereby exercises the option to convert that Note, or the portion thereof (that is US\$1,000 principal amount or an integral multiple thereof) below designated, into ADSs in accordance with the terms of the Indenture referred to in this Note, and directs that any cash payable and ADSs deliverable upon such conversion, together with any cash payable for any Fractional ADS, and any Notes representing any unconverted principal amount hereof, be issued and delivered to the registered Holder hereof unless a different name has been indicated below. Terms defined in the Deposit Agreement, the Restricted Issuance Agreement or the Indenture referred to in this Notice are used herein as so defined. If any ADSs or any portion of this Note not converted are to be issued in the name of a Person other than the undersigned, the undersigned will pay all documentary, stamp, issue, transfer or similar taxes, if any, in accordance with Section 14.02(d) and Section 14.02(e) of the Indenture. Any amount required to be paid to the undersigned on account of Special Interest, if any, accompanies this Notice.

In connection with the conversion of this Note, or the portion hereof below designated, the undersigned acknowledges, represents to and agrees with the Company and the ADS Depositary that the undersigned is not an "affiliate" (as defined in Rule 144 under the Securities Act of 1933) of the Company and has not been an "affiliate" (as defined in Rule 144 under the

Securities Act of 1933) of the Company during the three months immediately preceding the date hereof.

[The undersigned further certifies:

1. The undersigned acknowledges (and if the undersigned is acting for the account of another person, that person has confirmed that it acknowledges) that the Restricted Securities received upon conversion of this Note (or securities represented thereby) have not been and are not expected to be registered under the Securities Act.

2. The undersigned further certifies that either:

(a) The undersigned is, and at the time ADSs are delivered in conversion of its Notes will be, the holder of the ADSs and the Ordinary Shares represented thereby, and the undersigned is not in the business of buying and selling securities or, if the undersigned is in such business, the undersigned did not acquire the Notes being converted from the Company or any affiliate thereof in the initial distribution of the Notes.

OR

(b) The undersigned is a broker-dealer acting on behalf of its customer; its customer has confirmed to the undersigned that it is, and at the time ADSs are delivered in conversion of the said Notes will be, the holder of the ADSs and the Ordinary Shares represented thereby, and it is not in the business of buying and selling securities or, if it is in such business, it did not acquire the Notes being converted from the Company or any affiliate thereof in the initial distribution of the Notes.

OR

(c) The undersigned is a qualified institutional buyer (as defined in Rule 144A under the Securities Act) acting for its own account or for the account of one or more qualified institutional buyers and the undersigned is (or such account or accounts are) the sole beneficial owner(s) of the ADSs to be received upon conversion of the Notes.

3. The undersigned acknowledges that the undersigned (and any such other account) may not continue to hold or retain any interest in Restricted Securities received upon conversion of this Note if the undersigned (or such other account) becomes an Affiliate of the Company.

4. The undersigned agrees (and if the undersigned is acting for the account of another person, that person has confirmed that it agrees) that, prior to the Resale Restriction Termination Date, the undersigned (and such other account) will not offer, sell, pledge or otherwise transfer the Restricted Security (or securities represented by such Restricted Security) except in accordance with the restrictions set forth in that legend and any applicable securities laws of the United States and any state thereof.]⁸

⁸ Include if a Restricted Security.

[The undersigned hereby instructs the ADS Depository to register the ADSs in the name of:

- 1. Name of Beneficial Owner to receive ADSs (English): _____
- 2. Address of Beneficial Owner to receive ADSs (English): _____
- 3. Name of Registered Holder of the Deposited Shares: _____
- 4. Number of Deposited Shares: _____
- 5. Number of ADSs to be issued: _____
- 6. Beneficial Owner's Tax ID Number: _____
- 7. Contact Name and Tel No/email address:⁹ _____

[The undersigned instructs the Depository to deliver the ADRs representing the ADSs to the following account:

ADS Receiving Broker (* are mandatory fields):

- a) DTC Broker Name*: _____
- b) DTC Broker's Participant Account with DTC *: _____
- c) DTC Broker Contact Name: _____
- d) DTC Broker Contact Tel No/email: _____
- e) Beneficial Owner's Account # with DTC Broker*: _____

OR

- e) Local Broker Name (have account with DTC Broker)*: _____
- Local Broker Sub-Account # with DTC Broker*: _____
- Local Broker Contact Name: _____
- Local Broker Contact Tel No/email: _____

ADS Delivering Party:

Name: Citibank, N.A.
DTC Account: #2655]¹⁰

[The undersigned hereby instructs any cash amount payable (if any) upon such conversion under this Notice of Conversion to be made to the following account:

Account Number: _____

⁹ Include if a Restricted Security.

¹⁰ Include bracketed language in the conversion Notice if the Note being converted is not a Restricted Security.

Account Name: _____
Recipient Address: _____
Bank: _____
Branch: _____
SWIFT or IBAN Code: _____]¹¹

For any ADS settlement inquiries, please contact Citibank, N.A. Broker Desk:

Tel: 1-877-CITIADR (1-877-248-4237)

Email: citiadr@citi.com

¹¹ Include bracketed language in the conversion Notice if the Note being converted is a Restricted Security.

Dated: _____

Signature(s)

Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if ADSs are to be issued, or Notes are to be delivered, other than to and in the name of the registered holder.

Fill in for registration of ADSs if to be issued, and Notes if to be delivered, other than to and in the name of the registered holder:

(Name)

(Street Address)

(City, State and Zip Code)
Please print name and address

Principal amount to be converted (if less than all):
US\$ _____,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

Social Security or Other Taxpayer
Identification Number

[FORM OF FUNDAMENTAL CHANGE REPURCHASE NOTICE]

To: 21VIANET GROUP, INC.

CITICORP INTERNATIONAL LIMITED, as Trustee

20/F, Citi Tower
One Bay East
83 Hoi Bun Road
Kwun Tong, Kowloon
Hong Kong
Facsimile: +852 2323 0279
Attention: Agency and Trust

CITIBANK, N.A., as Paying Agent

14th Floor, 388 Greenwich Street
New York, New York 10013
United States of America
Facsimile: +1-201-258-3567
Attention: Agency and Trust

The undersigned registered owner of this Note hereby acknowledges receipt of a notice from 21Vianet Group, Inc. (the “**Company**”) as to the occurrence of a Fundamental Change with respect to the Company and specifying the Fundamental Change Repurchase Date and requests and instructs the Company to pay to the registered holder hereof in accordance with Section 15.02 of the Indenture referred to in this Note (1) the entire principal amount of this Note, or the portion thereof (that is US\$1,000 principal amount or an integral multiple thereof) below designated, and (2) if such Fundamental Change Repurchase Date does not fall during the period after a Special Interest Record Date and on or prior to the corresponding Special Interest Payment Date, accrued and unpaid Special Interest, if any, thereon to, but not including, such Fundamental Change Repurchase Date.

In the case of Physical Notes, the certificate numbers of the Notes to be repurchased are as set forth below:

Certificate Number(s): _____

Dated: _____

Signature (s)

Social Security or Other Taxpayer
Identification Number

Principal amount to be repaid (if less than all): US\$____,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

[FORM OF REPURCHASE NOTICE]

To: 21VIANET GROUP, INC.
CITICORP INTERNATIONAL LIMITED, as Trustee

20/F, Citi Tower
One Bay East
83 Hoi Bun Road
Kwun Tong, Kowloon
Hong Kong
Facsimile: +852 2323 0279
Attention: Agency and Trust

CITIBANK, N.A., as Paying Agent

14th Floor, 388 Greenwich Street
New York, New York 10013
United States of America
Facsimile: +1-201-258-3567
Attention: Agency and Trust

The undersigned registered owner of this Note hereby acknowledges receipt of a notice from 21Vianet Group, Inc. (the “**Company**”) regarding the right of Holders to elect to require the Company to repurchase the entire principal amount of this Note, or the portion thereof (that is US\$1,000 principal amount or an integral multiple thereof) below designated, in accordance with the applicable provisions of the Indenture referred to in this Note, at the Repurchase Price to the registered Holder hereof.

In the case of certificated Notes, the certificate numbers of the Notes to be purchased are as set forth below:

Certificate Number(s): _____

Dated: _____

Signature (s)

Social Security or Other Taxpayer
Identification Number

Principal amount to be repaid (if less than all): US\$____,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

[FORM OF ASSIGNMENT AND TRANSFER]

For value received _____ hereby sell(s), assign(s) and transfer(s) unto _____ (Please insert social security or Taxpayer Identification Number of assignee) the within Note, and hereby irrevocably constitutes and appoints _____ attorney to transfer the said Note on the books of the Company, with full power of substitution in the premises.

In connection with any transfer of the within Note occurring prior to the Resale Restriction Termination Date, as defined in the Indenture governing such Note, the undersigned confirms that such Note is being transferred:

- To 21Vianet Group, Inc. or a subsidiary thereof; or
- Pursuant to a registration statement that has become or been declared effective under the Securities Act of 1933, as amended; or
- Pursuant to and in compliance with Rule 144A under the Securities Act of 1933, as amended; or
- Pursuant to and in compliance with Rule 144 under the Securities Act of 1933, as amended (if available).

Dated: _____

Signature(s)

Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if Notes are to be delivered, other than to and in the name of the registered holder.

NOTICE: The signature on the assignment must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

[FORM OF AUTHORIZATION CERTIFICATE]

I, [Name], [Title], acting on behalf of 21Vianet Group, Inc. (the “**Company**”) hereby certify that:

(A) the persons listed below are (i) authorized Officers of the Company for purposes of the Indenture (the “**Indenture**”) dated as of January 26, 2021 between the Company and Citicorp International Limited, as trustee, in relation to the 0.00% Convertible Senior Notes due 2026 (the “**Notes**”), (ii) duly elected or appointed, qualified and acting as the holder of the respective office or offices set forth opposite their names and (iii) the duly authorized persons who executed or will execute the Indenture and the Notes issued pursuant to the Indenture by their manual or facsimile signatures and were at the time of such execution, duly elected or appointed, qualified and acting as the holder of the offices set forth opposite their names;

(B) each of the individuals listed below have the authority to receive call backs at the telephone numbers noted below upon request of Citicorp International Limited in connection with the Notes issued pursuant to the Indenture; and

(C) each signature appearing below is the person’s genuine signature.

IN WITNESS WHEREOF, I have hereunto executed and delivered this certificate on behalf of the Company as of the date indicated.

Dated: _____

[Name]

By: _____

Name:

Title:

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Name	Title, Fax No., Email	Signature	Tel No.

Loan Agreement

The Loan Agreement (hereinafter referred to as this “Agreement”) is concluded on January 11, 2021 by and between:

(1) **Abitcool (China) Broadband Inc.** (hereinafter referred to as the “Lender”); and

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

(2) **Sheng Chen** (hereinafter referred to as “Borrower”).

Identity card No.: [***]

For the purpose of this Agreement, the Lender and the Borrower are referred to separately as a “Party” and collectively as both “Parties.”

Whereas:

The Borrower holds 100% equity interests of WiFire Network Technology (Beijing) Co., Ltd., a limited liability company incorporated and registered in China (hereinafter referred to as the “Borrower’s Company”).

The Lender is a wholly foreign-owned enterprise established in the People’s Republic of China (hereinafter referred to as the “PRC” or “China”) which has technical consulting and service resources, and intends to provide a loan for the Borrower.

Upon negotiation, the Parties agree as follows:

1. Loan

- 1.1 Subject to the terms and conditions hereof, the Lender agrees to provide the Borrower a loan of RMB 1,000,000. The term of the loan is ten years, and is renewable upon approval by both Parties.
- 1.2 Subject to the full satisfaction of all the precedent conditions provided in Article 2 hereof, the Lender agrees to remit the said loan to the account designated by the Borrower in one lump sum within seven days after receiving a written notice requesting the loan from the Borrower. The Borrower shall issue a receipt confirmation to the Lender on the same day as they receive the aforesaid monies. The loan undertakings made by the Lender under this paragraph shall only apply to the Borrower itself, but will not apply to any successor or assigns thereof.
- 1.3 The Borrower agrees to receive the aforesaid loan provided by the Lender, and hereby agree and guarantee to use the loan only for financing of the Borrower’s Company so as to develop the business of the Borrower’s Company. Unless the prior written consent of the Lender is obtained, the Borrower shall not use the loan for any other purpose or transfer or mortgage their equities or other interests in the Borrower’s Company to any third party.

1.4 The Lender and the Borrower hereby unanimously agree and confirm that to the extent permissible by the applicable laws, the Lender shall be entitled but not be obliged to purchase or designate another person (whether a legal person or natural person) to purchase at any time, all or part of the equities held by the Borrower in the Borrower's Company at a price agreed by both Parties.

1.5 The Lender and the Borrower hereby unanimously agree and confirm that the loan hereunder is an interest-free loan.

2. Preconditions of the Loan

The Lender shall be obliged to provide the Borrower with the loan according to Clause 1.1 hereof only after all of the following conditions have been satisfied or waived by the Lender in writing.

2.1 The Lender having received a drawdown notice duly signed by the Borrower on time according to Clause 1.2 hereof.

2.2 The Borrower and the Lender having signed an equity pledge agreement (hereinafter referred to as the "Equity Pledge Agreement"), according to which the Borrower agree to pledge all the equity interests held by the Borrower to the Lender.

2.3 The Borrower, the Lender and the Borrower's Company having duly executed an exclusive call option agreement, according to which the Borrower will, to the extent permissible by the PRC laws, irrevocably grant an exclusive call option to purchase all the equity interests of the Borrower to the Lender (hereinafter referred to as "the Exclusive Call Option Agreement").

2.4 The Equity Pledge Agreement and the Exclusive Call Option Agreement having full legal effect, there being no breach of such agreements, and all filing formalities, approvals, authorizations, registrations and government procedures having been obtained or completed (if necessary).

2.5 The representations and undertakings made by the Borrower under Clause 3.2 hereof being true, complete, accurate and not misleading, and shall remain so on the date of drawdown notice and the drawdown, as if such representations and undertakings were made on such dates.

2.6 The Borrower having not breached any undertakings made by them under Article 4 hereof, and no event that may affect the fulfilment by the Borrower of obligations under this Agreement has occurred or is expected to occur.

3. Representations and Warranties

3.1 From the date hereof until the date of termination of this Agreement, the Lender represents and warrants to the Borrower that:

(a) the Lender is a company duly registered and existing under the PRC laws;

- (b) the Lender has the power to execute and perform this Agreement. The execution and performance of this Agreement by the Lender conform to the business scope and articles of association or other constitutional documents of the Lender, and the Lender has obtained all necessary and proper approvals and authorities for the execution and performance of the Agreement;
 - (c) the execution and performance of this Agreement by the Lender neither breach any laws, regulations, government approvals, authorisations, notices or other government documents by which the Lender is bound or affected, nor breach any agreement entered into by the Lender with any third party or any undertakings issued to any third party; and
 - (d) Once executed, this Agreement constitutes a legal, valid and enforceable obligation of the Lender.
- 3.2 From the date hereof until the date of termination of this Agreement, the Borrower represents and warrants that:
- (a) the Borrower's Company is a limited liability company duly incorporated and existing under the PRC laws, and the Borrower is a lawful holder of equity interests of the Borrower's Company;
 - (b) The Borrower has the power to execute and perform this Agreement. The execution and performance of this Agreement by the Borrower conforms to the articles of association or other constitutional documents of the Borrower's Company, and the Borrower has obtained all necessary and proper approvals and authorities for the execution and performance of this Agreement;
 - (c) the execution and performance of this Agreement by the Borrower neither breach any laws, regulations, government approvals, authorisations, notices or other government documents by which the Lender is bound or affected, nor breach any agreement entered into by the Lender with any third party or any undertakings issued to any third party;
 - (d) Once executed, this Agreement constitutes a legal, valid and enforceable obligation of the Lender;
 - (e) The Borrower has duly paid all payable contributions for the equity interests held by them, and have obtained the capital verification report for the paid contributions issued by a qualified accounting firm;
 - (f) Except those specified in the Equity Pledge Agreement, the Borrower does not create any mortgage, pledge or any other security interest on the equity interest of the Borrower, issue an offer to transfer their equities to any third party, make undertakings with respect to any offer for the equity interests of the Borrower issued by any third party,

or conclude any agreement with any third party on the transfer of their equity interests.

- (g) There are no actual or potential disputes, litigations, arbitrations, administrative proceedings or any other legal proceedings relating to the Borrower and/or the equity interests owned by the Borrower; and
- (h) The Borrower's Company has obtained or completed all government approvals, authorizations, licenses, registrations and filings necessary for its conduct of business within the scope of its business license and its ownership of its assets.

4. Undertakings of the Borrower

4.1 The Borrower, in the capacity of major shareholders of the Borrower's Company, undertake that throughout the term of this Agreement, they will cause the Borrower's Company:

- (a) without the prior written consent of the Lender, not to supplement, alter or revise its constitutional documents in any form whatsoever, increase or decrease its registered capital, or change its capital structure in any form whatsoever;
- (b) to maintain its due existence, prudently and effectively operate its business and handle its affairs in accordance with fair financial and business standards and practices;
- (c) without prior written consent of the Lender and at any time as of the date of this Agreement, not to sell, transfer, mortgage or otherwise dispose of any legal or beneficial interest of its assets, businesses or income, or permit creation of such other security interest thereon;
- (d) without prior written consent of the Lender, not to incur, inherit, guarantee or allow the existence of any debt, except for (i) any debt incurred during its ordinary course of business rather than from borrowing; and (ii) any debt which has been disclosed to and obtained the written consent from Party A;
- (e) to conduct all its business operations at all times in the ordinary course to maintain its asset value;
- (f) without prior written consent of the Lender, not to enter into any material agreement other than those executed in its ordinary course of business (for purpose of this paragraph, a material agreement means any agreement with a contact value exceeding RMB 5 million)
- (g) without prior written consent of the Lender, not to provide any loan or credit to any person;
- (h) upon the Lender's request, to provide the Lender with all information regarding its operations and financial conditions;

- (i) to buy and maintain requisite insurance policies from an insurer acceptable to the Lender, the amount and type of which will be the same with or equivalent to those maintained by the companies having similar operations, properties or assets in the same region;
- (j) without prior written consent of the Lender, not to merge or combine with any person, or acquire or invest in any person;
- (k) to immediately notify the Lender of any actual or potential litigation, arbitration or administrative proceeding regarding its assets, business and income;
- (l) in order to maintain its ownership of all its assets, to execute all requisite or appropriate documents, conduct all requisite or appropriate actions, and make all requisite or appropriate claims, or make requisite or appropriate defense against all claims;
- (m) without prior written consent of the Lender, not to distribute dividends to any shareholders in any form whatsoever; provided, however, that once required by the Lender, to immediately distribute all distributable profits to its shareholders; and
- (n) to strictly comply with the provisions of the Exclusive Call Option Agreement, and refrain from any action/omission that suffices to affect the validity and enforceability of the Exclusive Call Option Agreement.

4.2 The Borrower undertakes that throughout the term of this Agreement,

- (a) save as otherwise stipulated by the Equity Pledge Agreement, without prior written consent of the Lender, they will not sell, transfer, mortgage or otherwise dispose of any legal or beneficial interest of the equity interests owned by them, or permit creation of such other security interest thereon;
- (b) they will procure that without prior written consent of the Lender, the shareholders appointed by them will not approve to sell, transfer, pledge or otherwise dispose any legal or beneficial interest of the equity interests held by them in the Borrower's Company, or allow other security interests to be created on it, except to the Lender or the Lender's designated person;
- (c) they will procure that without prior written consent of the Lender, the shareholders appointed by them will not approve the merger, consolidation with, purchase of or investment in any person by the Borrower's Company;
- (d) they will immediately notify the Lender of any actual or potential litigation, arbitration or administrative proceeding regarding the equity interests owned by them;
- (e) in order to maintain their ownership of the equity interests owned by

them, they will execute all requisite or appropriate documents, conduct all requisite or appropriate actions, and make all requisite or appropriate claims, or make requisite or appropriate defense against all claims;

- (f) without prior written consent of the Lender, they will refrain from any action/omission that may adversely affect the business operations and asset value of the Borrower's Company;
- (g) to the extent permissible by the PRC laws, they will transfer unconditionally and immediately all their equity interests in the Borrower's Company to the Lender or its designated representative upon the request of the then current parent of the Lender at any time;
- (h) if the Lender purchases the equity interests owned by the Borrower in accordance with the Exclusive Call Option Agreement, they will firstly use the proceeds from such purchase to repay the loan to the Lender; and
- (i) they will strictly comply with the provisions of this Agreement, the Equity Pledge Agreement and the Exclusive Call Option Agreement, duly perform all obligations under such agreements, and will refrain from any action/omission that suffices to affect the validity and enforceability of such agreements.

5. Liability for Breach of the Agreement

If the Borrower fails to fulfil repayment obligations within a period specified hereunder, they shall pay a late penalty interest at a daily rate of 0.01% of outstanding payable amount for each overdue day until the Borrower has repaid the full amount of the principal of the loan, and the late penalty interest and other amounts thereon.

6. Notices

Unless a written notice has been sent to change any of the following addresses, notices hereunder shall be sent to the following addresses by personal delivery, fax or registered letter. A notice shall be deemed served on the date of receipt specified on the acknowledgement of receipt thereof, if sent by registered letter, or upon the date when it is sent, if sent by personal delivery or fax. If a notice is sent by fax, the original shall be immediately sent to the following addresses by registered letter or personal delivery after transmission.

If to the Lender:

Address:

Fax No.:

If to the Borrower: Sheng Chen

Address:

7. Confidentiality Responsibility

Both Parties acknowledge and confirm that any oral or written materials exchanged by and between the Parties in connection with this Agreement are confidential. Both Parties shall keep in confidence all such information and not disclose it to any third party without prior written consent from the other Parties unless: (a) such information is known or will be known by the public (except by disclosure of the receiving party without authorization); (b) such information is required to be disclosed in accordance with applicable laws or regulations or rules of stock exchange; or (c) if any information is required to be disclosed by any party to its legal or financial advisor for the purpose of the transaction of this Agreement, provided that such legal or financial advisor shall also comply with the confidentiality obligation similar to that stated hereof. Any disclosure by any employee or agency engaged by any Party shall be deemed the disclosure of such Party and such Party shall assume the liabilities for its breach of contract pursuant to this Agreement. This Article shall survive the termination of this Agreement for any reason whatsoever.

8. Governing Laws and Resolution of Disputes

- 8.1 The formation, validity, performance, interpretation amendment, and termination of this Agreement and the resolution of the disputes arising hereunder shall be governed by the PRC laws.
- 8.2 The Parties shall first strive to resolve any dispute arising from the interpretation and performance of this Agreement through friendly consultation. In case no settlement can be reached through consultation within thirty (30) days after the request for consultation is made by any Party to the other, either Party may submit such dispute to China International Economic and Trade Arbitration Commission for arbitration in accordance with its then effective rules. The arbitration shall take place in Beijing. The arbitration award shall be final and binding upon both Parties.
- 8.3 Where any dispute occurs arising from the interpretation and performance of this Agreement or when any dispute is under arbitration, both Parties hereto shall continue to exercise all their rights and fulfil all their obligations hereunder except for the matters in dispute.

9. Miscellaneous

- 9.1 This Agreement shall take effect as of the date of execution by both Parties, and become invalid on the day when both Parties have fulfilled their respective obligations hereunder.
- 9.2 This Agreement shall be executed in two originals with equal legal force, with each party holding one copy.
- 9.3 The invalidity of any clause hereof shall not affect the legal force of any other clauses hereof.
- 9.4 The appendices hereto shall be an integral part of this Agreement and shall have the same legal force as this Agreement.

[Signature Page to Loan Agreement]

Lender: /s/ Abitcool (China) Broadband Inc.

Borrower: /s/ Chen Sheng

Equity Pledge Agreement

The Equity Pledge Agreement (hereinafter referred to as this “Agreement”) is executed in Beijing on January 11, 2021 by and between:

Pledgee: Abitcool (China) Broadband Inc.

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

Pledgor: Sheng Chen

Gender: Male

PRC ID card No.: [***]

Address: Room 1502, Unit 2, Building 4, Shangdijiyuan, Haidian District, Beijing

Whereas:

1. The Pledgor is a citizen of the People’s Republic of China (hereinafter referred to as the “PRC” or “China”), who hold 100% equity interests of WiFire Network Technology (Beijing) Co., Ltd. WiFire Network Technology (Beijing) Co., Ltd. (hereinafter referred to as the “WiFire Network”) is a company registered in Beijing, China which is engaged in technical promotion services, computer system services, and sale of electronic products, computers, software and auxiliary equipment;
2. The Pledgee is a wholly foreign-owned company registered in Dongguan, China, which is lawfully engaged in technical service business as permitted by relevant PRC government authorities. The Pledgee and WiFire Network, which is owned by the Pledgor, entered into an exclusive technical consulting and service agreement (hereinafter referred to as the “Service Agreement”) on January 11, 2021; and
3. In order to secure the Pledgee’s normal collection of technical consulting and service fees from WiFire Network, which is owned by the Pledgor, the Pledgor pledges all its equity interests in the WiFire Network as the guarantee for the consulting and service fees under the Service Agreement.

In order to perform the terms of the Service Agreement, the Pledgor and the Pledgee agree as follows upon consultation:

1. Definitions

Save as otherwise stipulated hereunder, the following terms shall have the following meanings:

- 1.1 Pledge Right: refers to all contents set out in Article 2 hereof.
- 1.2 Equity Interests: refer to all 100% equity interests legally held by the Pledgor in WiFire Network.
- 1.3 Pledge Rate: refers to the percentage of the value of the Equity Interests

pledged hereunder to the exclusive technical consulting and service fees under the Service Agreement.

1.4 Term of Pledge: refers to the term specified in Article 3.2 hereof.

1.5 Service Agreement: refers to the Exclusive Technical Consulting and Service Agreement concluded by and between the WiFire Network and the Pledgee on January 11, 2021.

1.6 Event of Default: refers to any circumstances set out in Article 7 hereof.

1.7 Notice of Default: refers to any notice issued by the Pledgee in accordance with this Agreement specifying an Event of Default.

2. Transfer of the Pledge Right and the Pledge Right

2.1 The Pledgor pledges all its Equity Interests in WiFire Network to the Pledgee. The Pledge Right refers to the priority right the Pledgee owns, with respect to the proceedings arising from selling at a discount, auction of, or selling off the Equity Interests pledged by the Pledgor to the Pledgee.

3. Pledge Rate and Term of Pledge

3.1 Pledge Rate

3.1.1 The Pledge Rate of the Pledge Right is approximately 100%.

3.2 Term of Pledge

3.2.1 This Agreement shall take effect as of the date when the pledge of the Equity Interests hereunder is recorded in the register of shareholders of WiFire Network and registered at the market supervision and management authority, and the Term of Pledge shall be the same as that of the Service Agreement.

3.2.2 During the Term of Pledge, if WiFire Network fails to pay the technical consulting and service fees pursuant to the Service Agreement, the Pledgee has the right to dispose of the Pledge Right in accordance with this Agreement.

4. Possession and Management of Pledge Certificates

4.1 During the Term of Pledge, the Pledgor shall deliver the register of shareholders and capital contribution certificate of WiFire Network within one (1) week upon the date hereof, to the Pledgee for its possession.

4.2 The Pledgee shall be entitled to the dividends generated by the Equity Interests.

5. Representations and Warranties of the Pledgor

5.1 The Pledgor is the lawful owner of the Equity Interests.

5.2 Once the Pledgee intends to exercise the rights as the Pledgee under this

Agreement at any time, it shall be protected from any interference from any other party.

5.3 The Pledgee has the right to dispose of or transfer the Pledge Right in the way as described hereunder.

5.4 The Pledgor has ever created any other pledge right over the Equity Interests except towards the Pledgee.

6. Covenants from the Pledgor

6.1 During the term of this Agreement, the Pledgor covenants to the Pledgee that,

6.1.1 without prior written consent of the Pledgee, they will not transfer the Equity Interests, or create or allow the existence of any new pledge upon the Equity Interests which may affect the rights and interests of the Pledgee;

6.1.2 they will abide by and exercise all the provisions of laws and regulations in relation to the pledge of rights, and present to the Pledgee any and all notices, directions or suggestions issued or promulgated by competent authorities within five (5) days upon the receipt of such notices, directions or suggestions, and shall comply with such notices, directions or suggestions, or present their opposite opinions and representations regarding the above mentioned issues according to the reasonable request of the Pledgee or with the consent from the Pledgee; and

6.1.3 they shall give prompt notice to the Pledgee regarding any events or received notices that may affect the Equity Interests or any part of the rights affiliated thereto held by the Pledgor, or may change any warranties or obligations of the Pledgor under this Agreement or may affect the performance of the obligations hereunder by the Pledgor.

6.2 The Pledgor agrees that, the right to exercise its rights over the Pledge Right acquired by the Pledgee pursuant to the terms of this Agreement shall not be interfered or impaired by any legal proceedings initiated by the Pledgor, or the successors or agents of the Pledgor or such other person.

6.3 The Pledgor warrants to the Pledgee that, in order to protect or consummate the guaranty provided by this Agreement regarding the payment of the technical consulting and service fees under the Service Agreement, the Pledgor will faithfully sign, or cause any other party which is materially related to the Pledge Right to sign, any and all right certificates and deeds, and/or take, or cause any other party which is materially related to the Pledge Right to take, any and all actions, as required by the Pledgee, and will facilitate the exercise of the rights and authorizations granted to the Pledgee under this Agreement, enter into any amendment to related equity certificate with the Pledgee or the Pledgee's designated person (individual/legal person), and provide to the Pledgee any and all notices, orders and decisions as deemed necessary by the Pledgee within a reasonable period of time.

6.4 The Pledgor undertakes to the Pledgee it will abide by and perform all warranties, undertakings, agreements, representations and conditions, for the benefit of the Pledgee. The Pledgor shall indemnify the Pledgee any and all losses suffered by it due to the Pledgor' failure or partial failure in performance of its warranties, undertakings, agreements, representations and conditions.

7. Event of Default

7.1 Any of the following is deemed as an Event of Default:

- 7.1.1 Any representation or warranty of the Pledgor under Article 5 of this Agreement is substantially misleading or incorrect, and/or the Pledgor breaches any of their representations and warranties under Article 5 of this Agreement;
- 7.1.2 The Pledgor breaches its covenants under Article 6 hereof;
- 7.1.3 The Pledgor breaches any provision hereof;
- 7.1.4 Except as agreed in Article 6.1.1 hereof, the Pledgor waives the pledged Equity Interests or transfer the pledged Equity Interests without the written consent from the Pledgee;
- 7.1.5 Any external borrowings, guaranty, indemnification, undertakings or any other repayment liabilities of the Pledgor (1) is required to be repaid or performed early due to their default; or (2) has been due but not yet been repaid or performed, which makes the Pledgee believe that the ability of the Pledgor to perform their obligations under this Agreement has been impaired;
- 7.1.6 The Pledgor fails to repay general debts or other liabilities;
- 7.1.7 This Agreement is deemed to be illegal or the Pledgor is unable to continue to perform its obligations hereunder due to promulgation of relevant laws;
- 7.1.8 Any consent, permit, approval or authorization from the competent authorities necessary for making this Agreement enforceable, legal or valid is revoked, suspended, invalidated or materially amended;
- 7.1.9 Adverse changes occur with respect to the assets owned by the Pledgor, which makes the Pledgee believe that the ability of the Pledgor to perform their obligations under this Agreement has been impaired; and
- 7.1.10 Other circumstances occur which make the Pledgee unable to exercise or dispose of the Pledge Right as provided under the relevant laws.

7.2 In the event that the Pledgor is aware of or discover that any issue described in the above Article 7.1 or any other issue which may cause the occurrence of such mentioned issues has occurred, the Pledgor shall give a prompt written

notice to the Pledgee.

7.3 Unless the Event of Default specified in above Article 7.1 has been resolved to the satisfaction of the Pledgee, the Pledgee may serve a written Notice of Default to the Pledgor immediately following or at any time after the occurrence of the Event of Default, to require the Pledgor to immediately pay all the due and outstanding amounts and other amounts payable under the Services Agreement or dispose of the Pledge Right in accordance with Article 8 hereof.

8. Exercise of Pledge Right

8.1 Prior to the full payment of the Consulting Service Fees under the Service Agreement, the Pledgor shall not transfer the Pledge Right without the written consent of the Pledgee.

8.2 In exercising the Pledge Right, the Pledgee shall issue a Notice of Default to the Pledgor.

8.3 Subject to Article 7.3 hereof, the Pledgee may exercise the right to dispose of the Pledge Right at the same time of or at any time after the service of the Notice of Default pursuant to Article 7.3.

8.4 The Pledgee has the right to sell at a discount all or part of the Equity Interests hereunder in accordance with legal procedures or has the priority to receive the proceeds arising from auction of or selling off the Equity Interests, until all the outstanding Consulting Service Fees and such other payable amounts under the Service Agreement have been paid in full.

8.5 When the Pledgee is disposing of the Pledge Right in accordance with this Agreement, the Pledgor should not create any obstacle, and shall provide any necessary assistance, to help the Pledgee realize the Pledge Right.

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[Signature Page to Equity Pledge Agreement]

Pledgee: /s/ Abitcool (China) Broadband Inc.

Pledgor: /s/ Sheng Chen

Exhibits:

1. Shareholders' Register of WiFire Network Technology (Beijing) Co., Ltd.;
 2. Capital Contribution Certificate on the Establishment of WiFire Network Technology (Beijing) Co., Ltd.;
 3. Exclusive Technical Consulting and Service Agreement
-

Power of Attorney

The undersigned Sheng Chen, a citizen of the People's Republic of China (the "PRC") with ID Card No. [***] and a holder of 100% of the equity interests of WiFire Network Technology (Beijing) Co., Ltd. (the "Target Company") (my "Equity Interests"), hereby irrevocably authorizes Abitcool (China) Broadband Inc. (the "WFOE") to exercise the following rights in respect of my Equity Interests during the term of this Power of Attorney:

The WFOE is hereby authorized to exercise on my behalf as my sole and exclusive agent the rights in respect of my Equity Interests, including without limitation: 1) to attend shareholders' meetings of the Target Company; 2) to exercise all my rights and voting rights as a shareholder of the Target Company according to laws and the articles of association of the Target Company, including without limitation the rights to sell, transfer, pledge or dispose of all or any part of my Equity Interests; and 3) to designate and appoint, as my authorized representative, the legal representative (chairperson), director, supervisor, general manager and any other senior management of the Target Company.

Any and all actions associated with my Equity Interests made by the WFOE will be deemed as my action, and any and all documents relating to my Equity Interests executed by the WFOE shall be deemed to be executed and acknowledged by me.

The WFOE may delegate this Power of Attorney by assigning its rights relating to the conduct of the aforesaid matters to any other person or entity at its own discretion without prior notice to or consent from me.

Throughout the term hereof, this Power of Attorney shall be irrevocable and effective as of the date hereof.

During the term of this Power of Attorney, I hereby waive all of the rights that have been authorized to the WFOE and will not exercise any such right by myself.

Signature: /s/ Sheng Chen

January 11, 2021

Power of Attorney

Abitcool (China) Broadband Inc. (the “Company”) holds 100% voting rights of WiFire Network Technology (Beijing) Co., Ltd. (the “Target Company”) (the “Voting Rights of the Target Company”).

With respect to the Voting Rights of the Target Company, the Company hereby irrevocably authorizes WiFire Group Inc. (a limited liability company duly incorporated and existing under the laws of the British Virgin Islands, with its registered address at Palm Grove House, P.O. Box 438, Road Town, Tortola, British Virgin Islands (“BVI”) to exercise the following rights during the term of this Power of Attorney:

BVI is hereby authorized to exercise on behalf of the Company as its sole and exclusive agent the rights in respect of the Voting Rights of the Target Company, including without limitation: 1) to attend shareholders’ meetings of the Target Company; 2) to exercise all rights of the Company as a shareholder of the Target Company according to laws and the articles of association of the Target Company; and 3) to designate and appoint, as the authorized representative of the Company, the legal representative (chairperson), director, supervisor, general manager and any other senior management of the Target Company.

Any and all actions associated with the Voting Rights of the Target Company made by BVI will be deemed as the action of the Company, and any and all documents relating to the Voting Rights of the Target Company executed by BVI shall be deemed to be executed and acknowledged by the Company.

BVI may delegate this Power of Attorney by assigning its rights relating to the conduct of the aforesaid matters to any other person or entity at its own discretion without prior notice to or consent from the Company.

Throughout the term of this Power of Attorney, this Power of Attorney shall be irrevocable and continuously valid from the date of execution of this Power of Attorney.

During the term of this Power of Attorney, the Company hereby waives all of the rights that have been authorized to BVI and will not exercise any such right by itself.

/s/ Abitcool (China) Broadband Inc.

January 11, 2021

Exclusive Technical Consulting and Service Agreement

This Exclusive Technical Consulting and Service Agreement (hereinafter referred to as this "Agreement") is concluded in Beijing on January 11, 2021 by and between:

Party A: Abitcool (China) Broadband Inc.

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

Party B: WiFire Network Technology (Beijing) Co., Ltd.

Registered address: Room 802, Information Building, No. 13, Linyin North Street, Pinggu District, Beijing

Whereas:

- (1) Party A is a wholly foreign-owned enterprise duly incorporated in the People's Republic of China (hereinafter referred to as the "PRC" or "China"), which has technical consulting and service resources;
- (2) Party B is a domestic company registered in China, which engages in technical promotion services, computer system services, sale of electronic products, computers, software and auxiliary equipment.
- (3) Party A agrees to provide Party B with technical consulting and relevant services, and Party B agrees to receive the technical consulting and services provided by Party A.

Therefore, upon negotiations, both Parties agree as follows:

1. Technical Consulting and Services; Sole and Exclusive Rights and Interests

- 1.1 During the term of this Agreement, Party A agrees to provide Party B with relevant technical consulting and services (see details in Exhibit 1 attached hereto) as Party B's consulting and services provider subject to the terms and conditions hereof. Party A further agrees that during the term of this Agreement, it will not provide any third party with technical consulting and services with respect to the foregoing business, unless with prior written consent from Party B.
- 1.2 Party B agrees to accept the technical consulting and services provided by Party A. Party B further agrees that during the term hereof, it will not accept the technical consulting and services with respect to the foregoing business operations from any third party, unless with prior written consent from Party A.
- 1.3 Any and all rights, ownership, interests and intellectual property rights arising from the performance of this Agreement, including without limitation, copyrights, patents, technical secrets, trade secrets and others, whether is developed by Party A or by Party B based on the intellectual property owned

by Party A, will be solely and exclusively owned by Party A.

2. Calculation and Payment of Technical Consulting and Service Fees (“Consulting Service Fees”)

Both parties agree to determine and pay the Consulting Service Fees hereunder according to the method specified in Exhibit 2.

3. Representations and Warranties

3.1 Party A hereby represents and warrants that:

- 3.1.1 it is a company duly incorporated and validly existing under the laws of the PRC;
- 3.1.2 its execution and performance of this Agreement are within the scope of its corporate power and business; it has taken necessary corporate actions and obtained appropriate authorization and necessary consents and approvals from third parties and government authorities, and the execution of this Agreement will not constitute a breach of any law or contract which has binding or other effect upon it; and
- 3.1.3 this Agreement, once executed, constitutes its legal, valid and binding obligation, and is enforceable against it pursuant to its terms.

3.2 Party B hereby represents and warrants that:

- 3.2.1 it is a company duly incorporated and validly existing under the laws of the PRC, and engages in technical promotion services, computer system services, sale of electronic products, computers, software and auxiliary equipment.
- 3.2.2 its execution and performance of this Agreement are within the scope of its corporate power and business; it has taken necessary corporate actions and obtained appropriate authorization and necessary consents and approvals from third parties and government authorities, and the execution of this Agreement will not constitute a breach of any law or contract which has binding or other effect upon it; and
- 3.2.3 this Agreement, once executed, constitutes its legal, valid and binding obligation, and is enforceable against it pursuant to its terms.

4. Confidentiality

4.1 Party B agrees to take reasonably best efforts to keep in confidence Party A’s confidential information and materials (“Confidential Information”) that it may be aware of or have access to in connection with its acceptance of Party A’s exclusive consulting and services. Without prior written consent from Party A, Party B shall not disclose, offer or transfer any Confidential Information to any third party. If this Agreement terminates and upon Party A’s request, Party B shall return to Party A or destroy all of the documents, materials or software containing Confidential Information, and shall delete any Confidential Information from all relevant

memory devices and cease to use any Confidential Information.

4.2 Both parties agree that this Article 4 will survive any change, termination or expiration of this Agreement.

5. Compensations

Party B shall indemnify and hold Party A harmless from and against any losses, damage, obligations and expenses incurred or arising from the contents of the technical consulting and services that Party B requires Party A to provide, or resulting from any litigations, claims or other requests filed against Party A.

6. Effectiveness and Term

6.1 This Agreement shall take effect as of the date first written above. The term of this Agreement shall be ten (10) years unless it is early terminated in accordance with relevant provisions of this Agreement or any other agreement separately entered into by and between the Parties.

6.2 This Agreement may be extended upon Party A's written confirmation prior to the expiration of this Agreement and the extended term shall be agreed between the Parties upon consultation.

7. Termination

7.1 Termination upon expiry: This Agreement shall terminate upon its expiration date, unless it is renewed pursuant to relevant clauses hereof.

7.2 Early termination: During the term hereof, in no event shall Party B terminate this Agreement earlier, unless Party A commits gross negligence, fraud or other illegal action, or goes bankrupt. Notwithstanding the foregoing, Party A shall have the right to terminate this Agreement at any time by issuing a thirty (30) days' prior written notice to Party B.

7.3 Survival: After the termination of this Agreement, the respective rights and obligations of the Parties under Articles 4 and 5 shall nonetheless remain valid.

8. Resolution of Disputes

The parties hereto shall strive to settle any dispute arising from the interpretation or performance of the terms under this Agreement through friendly consultation in good faith. In case no settlement can be reached through consultation, either Party may submit such dispute to China International Economic and Trade Arbitration Commission for arbitration in accordance with its then effective rules. The arbitration shall take place in Beijing. The arbitration proceedings shall be conducted in Chinese. The arbitration award shall be final and binding upon both Parties.

9. Force Majeure

9.1 "Force Majeure Event" shall mean any event beyond the reasonable controls of the Party so affected, which are unavoidable even if the affected Party takes a reasonable care, including but not limited to governmental acts, Act of God, fires, explosions, storms, floods, earthquakes, morning and evening tides, lightning or

wars. However, any shortage of credits, funding or financing shall not be deemed as the events beyond reasonable controls of the affected Party. The affected Party shall forthwith inform the other Party of the details concerning the exemption of liabilities and the steps that need to be taken to complete discharging such liabilities.

9.2 In the event that the performance of this Agreement is delayed or interrupted due to the said Force Majeure Event, the affected Party shall be excused from any liability to the extent of the delayed or interrupted performance. The affected Party shall take appropriate measures to minimize or eliminate the adverse impacts therefrom and strive to resume the performance of this Agreement so delayed or interrupted. The Parties agree to use their best efforts to recover the performance of this Agreement once the said Force Majeure Event disappears.

10. Notices

Notices or other communications required to be given by any Party pursuant to this Agreement shall be written in Chinese and English and delivered personally or sent by registered mail, postage prepaid mail, recognized express delivery or facsimile transmission to the addresses of the other Parties set forth below.

If to Party A: Abitcool (China) Broadband Inc.

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

Telephone No.: []

Attention: []

Party B: WiFire Network Technology (Beijing) Co., Ltd.

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

Telephone No.: []

Attention: []

11. Assignment

Party B shall not assign its rights and obligations under this Agreement to any third party without prior written consent of Party A.

12. Severability

If any provision of this Agreement is held void, invalid or unenforceable due to its inconsistency with relevant laws, it shall be void and invalid only to the extent governed by such relevant laws and the validity of other provisions hereof shall not be affected.

13. Amendment and Supplement to Agreement

Any amendment and supplement to this Agreement shall be made in writing by the Parties. Any agreements on such amendment and supplement duly executed by both Parties shall be deemed as a part of this Agreement and shall have the same legal effect as this Agreement.

14. Governing Law

This Agreement shall be governed by and construed in accordance with the PRC laws.

IN WITNESS THEREOF, each Party hereto has caused this Agreement duly executed by their respective authorized representative as of the date first written above.

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Party A: /s/Abitcool (China) Broadband Inc.

Party B: /s/ WiFire Network Technology (Beijing) Co., Ltd.

Exhibit 1: List of Technical Consulting and Services

Party A will provide Party B with the following technical consulting and services:

1. maintenance of machine room, network and software.
2. provision and maintenance of office network conditions.
3. overall security services of the system.
4. overall architectural design and implementation of system network, including the installation of server system, and round-the-clock routine maintenance.

Exhibit 2: Calculation and Payment of Technical Consulting and Services Fee

1. The service fees shall be calculated and paid as per RMB 1,000/hour, which may be adjusted by Party A at any time at its sole discretion.
2. The service fees shall be paid on a monthly basis. Every month, Party B shall pay the service fees to the account designated by Party A within 5 days after examining and verifying the invoice issued and provided by Party A.

Exclusive Services Agreement

This Exclusive Services Agreement (this "Agreement") is concluded in Beijing on January 11, 2021 by and between:

Party A: Abitcool (China) Broadband Inc.

Registered address: Room 10, 3/F, Administrative Service Building, No.6 Zhongxing Road, Hongmei Town, Dongguan

Party B: WiFire Network Technology (Beijing) Co., Ltd.

Registered address: Room 802, Information Building, No. 13, Linyin North Street, Pinggu District, Beijing

Upon equal and voluntary negotiation, both Parties reach a consensus on the provision of Internet technical services and management consulting services under the Exclusive Technical Consulting and Service Agreement entered into by and between Party A and Party B on January 11, 2021, and hereby agree as follows:

1. During the term of this Agreement, Party A shall provide Party B with, and Party B agrees to receive from Party A, the management consulting and Internet technical services.
2. During the term of this Agreement, without the prior consent of Party A, Party B shall not seek any entity or individual other than Party A to provide management consulting and Internet technologies or such other similar services.
3. Service fees shall be calculated and paid as per RMB1,000/hour, which may be adjusted by Party A at any time at its sole discretion and decision. Service fees shall be paid on a monthly basis. Every month, Party B shall pay the Service Fees within 5 days after examining and verifying the invoice issued and provided by Party A.
4. All intellectual property rights generated in Party A providing services hereunder shall belong to Party A; provided, however, that if compulsory legal provisions have provided otherwise, such compulsory legal provisions shall apply with respect to the determination of the ownership of the intellectual property rights.
5. The Parties shall each ensure that they have all rights, qualifications and capacity necessary for negotiation, execution and performance of this Agreement.
6. The Parties shall each keep confidential the confidential information obtained from the other signing party in the process of negotiation, execution and performance of this Agreement.
7. This Agreement shall terminate when a new agreement has been entered into between the Parties in connection with service matters set out hereunder.
8. This Agreement shall be executed in two counterparts, with each party holding one copy.

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[Signature Page to Exclusive Services Agreement]

Party A: /s/ Abitcool (China) Broadband Inc.

Party B: /s/ WiFire Network Technology (Beijing) Co., Ltd.

Exclusive Call Option Agreement
by and among
WiFire Group Inc.
Sheng Chen
and
WiFire Network Technology (Beijing) Co., Ltd.

January 11, 2021

Exclusive Call Option Agreement

The Exclusive Call Option Agreement (the "Agreement") is concluded by and among the following parties on January 11, 2021:

- (1) **WiFire Group Inc.**, a limited liability company duly established and existing under the laws of British Virgin Islands, with its registered address at Palm Grove House, P.O. Box 438, Road Town, Tortola, British Virgin Islands ("BVI") ("Party A");
- (2) **Sheng Chen**, a citizen of the People's Republic of China (the "PRC" or "China"), holding a PRC identity card (identity card No.: [***]), with the address at Room 1502, Unit 2, Building 4, Shangdijiayuan, Haidian District, Beijing ("Party B"); and
- (3) **WiFire Network Technology (Beijing) Co., Ltd.**, a limited liability company duly established and existing under the PRC laws, with its registered address at Room 802, Information Building, No. 13, Linyin North Street, Pinggu District, Beijing ("Party C").

In this Agreement:

Party A, Party B and Party C are referred to individually as a "Party" and collectively as the "Parties."

Whereas:

1. Party B holds 100% equity interests of Party C;
2. Party C and a wholly-owned subsidiary of an affiliated company of Party A, Abitcool (China) Broadband Inc., have entered into a series of agreements including Exclusive Technical Service Agreement.

Now, the Parties agree as follows upon negotiation:

1. Purchase and Sale of Equity Interests

1.1 Grant of Rights

Party B hereby irrevocably grants an irrevocable exclusive right to Party A to purchase all or part of the equity interests in Party C at any time, at the price specified in Article 1.3 of this Agreement in accordance with the procedures determined by Party A at its own discretion and to the extent permitted by the PRC laws (the "Call Option"). No party other than Party A and its designated person (the "Designated Person") may have the Call Option. Party C hereby agrees Party B to grant the Call Option to Party A. For purpose of this Section 1.1 and this Agreement, "person" means any individual, corporation, joint venture, partnership, enterprise, trust or non-corporation organization.

1.2 Procedures

Party A may exercise the Call Option subject to its compliance with the PRC laws and regulations. In exercising the Call Option, Party A shall issue a written notice (the "Equity Interest Purchase Notice") to Party B which notice will specify: (a) Party A's decision to exercise the Call Option; (b) the percentage of equity interest to be purchased from Party B (the "Purchased Equity Interest"); (c) the date of purchase/equity interest transfer.

1.3 Equity Purchase Price

Unless any laws require an appraisal, the purchase price of all the Purchased Equity Interest of Party C (the "Equity Purchase Price") shall be RMB1 million.

1.4 Transfer of the Purchased Equity Interest

Each time Party A exercises the Call Option:

- (a) Party B shall cause Party C to promptly convene a shareholders' meeting, during which a resolution shall be adopted to approve transfer of the equity interest to Party A and/or its Designated Person by Party B;
- (b) Party B shall enter into an equity interest transfer agreement with Party A (or its Designated Person, when applicable) pursuant to the terms and conditions of this Agreement and the Equity Interest Purchase Notice;
- (c) The relevant Parties shall execute all other contracts, agreements or documents, obtain all governmental approvals and consents, and conduct all actions that are necessary to transfer the effective ownership of the Purchased Equity Interest to Party A and/or the Designated Person free from any security interest and cause Party A and/or the Designated Person to be registered as the owner of the Purchased Equity Interest. For the purpose of this paragraph and this Agreement, "Security Interest" includes guarantees, mortgages, third-party rights or interests, any call option, right of acquisition, right of first refusal, right of set-off, ownership detainment or other security arrangements, but for the avoidance of doubts, excludes any security interest arising from this Agreement or Party B's Equity Pledge Agreement. Party B's Equity Pledge Agreement provided in this paragraph and this Agreement shall mean the equity pledge agreement by and between Abitcool (China) Broadband Inc. and Party B on the date hereof, pursuant to which Party B shall pledge all its equity interests in Party C to Abitcool (China) Broadband Inc. to provide security for Party C's performance of its obligations under the exclusive technical consulting and services agreement by and between Party C and Abitcool (China) Broadband Inc.

1.5 Payment

Party A shall pay the Equity Purchase Price to the account designated by Party B within 5 days after Party A exercises the Call Option.

2. Covenants regarding the Equity Interest

2.1 Covenants of Party C

Party C hereby undertakes that:

- (a) without prior written consent of Party A, it will not supplement, change or amend its constitutional documents, increase or decrease its registered capital, or otherwise change its registered capital structure;
 - (b) it will maintain its due existence, prudently and effectively operate its business and handle its affairs in accordance with fair financial and business standards and practices;
 - (c) without prior written consent of Party A and at any time as of the date of this Agreement, it will not sell, transfer, mortgage or otherwise dispose of any legal or beneficial interest of its assets, businesses or income, or permit creation of such other security interest thereon;
 - (d) without prior written consent of Party A, it will not incur, inherit, guarantee or allow the existence of any debt, except for (i) any debt incurred during its ordinary course of business rather than from borrowing; and (ii) any debt which has been disclosed to and obtained the written consent from Party A;
 - (e) it will at all times conduct business operations in the ordinary course to maintain its asset value, and refrain from any action/omission that may adversely affect its business operations and asset value;
 - (f) without prior written consent of Party A, it will not enter into any material agreement other than those executed in its ordinary course of business (for purpose of this paragraph, a material agreement means any agreement with a contact value exceeding RMB 5 million);
 - (g) without prior written consent of Party A, it will not provide any loan or credit to any person;
 - (h) upon Party A's request, it will provide Party A with all information regarding its operations and financial conditions;
 - (i) it will buy and maintain requisite insurance policies from an insurer acceptable to Party A, the amount and type of which will be the same with those maintained by the companies having similar operations, properties or assets in the same region;
 - (j) it will immediately notify Party A of any actual or potential litigation, arbitration or administrative proceeding regarding its assets, business and income; and
 - (k) in order to maintain its ownership of all its assets, it will execute all requisite or appropriate documents, conduct all requisite or appropriate actions, and make all requisite or appropriate claims, or make requisite or appropriate defense against all claims.
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2.2 Covenants of Party B

Party B hereby undertakes that:

- (a) without prior written consent of Party A and at any time as of the date of this Agreement, it will not sell, transfer, mortgage or otherwise dispose of any legal or beneficial interest of any equity interest, or permit creation of such other security interest thereon, except for the pledge created upon Party C's equity interests held by Party B pursuant to Party B's Equity Pledge Agreement;
- (b) it will procure that without prior written consent of Party A, the shareholders appointed by it will not approve Party C to sell, transfer, pledge or otherwise dispose any legal or beneficial interest of the equity interests held by it in Party C, or allow other security interests to be created on it, except for the pledge created upon Party C's equity interests held by Party B pursuant to Party B's Equity Pledge Agreement;
- (c) it will procure that without prior written consent of Party A, the shareholders appointed by it will not approve Party C's merger, consolidation with, purchase of or investment in any person;
- (d) it will immediately notify Party A of any actual or potential litigation, arbitration or administrative proceeding regarding the equity interests owned by it;
- (e) it will cause Party C's shareholders' meeting to vote for the transfer of the Purchased Equity Interest provided hereunder;
- (f) in order to maintain its ownership of the equity interests owned by it, it will execute all requisite or appropriate documents, conduct all requisite or appropriate actions, and make all requisite or appropriate claims, or make requisite or appropriate defense against all claims;
- (g) at the request of Party A at any time, it will transfer unconditionally and immediately the equity interests owned by it to Party A's designated person; and
- (h) it will strictly comply with the provisions of this Agreement and other agreements jointly or severally executed by any of the Parties, duly perform all obligations under such agreements, and refrain from any act or omission that suffices to affect the validity and enforceability of these agreements.

3. Representations and Warranties

Representations and warranties of Party B and Party C

Each of Party B and Party C represents and warrants, jointly and severally, to Party A that as of the date of this Agreement and as of each date of equity interest transfer:

- (a) it has the rights and powers to execute and deliver this Agreement and any equity interest transfer agreement (each a "Transfer Agreement") executed
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pursuant to this Agreement for each transfer of the Purchased Equity Interest contemplated hereunder to which it is a party, and perform its obligations under this Agreement and any Transfer Agreement. Once executed, this Agreement and each of the Transfer Agreements to which it is a party will constitute its legal, valid and binding obligation and may be enforceable against it according to the terms hereof and thereof;

- (b) neither its execution and delivery of this Agreement or any Transfer Agreement, nor its performance of the obligations hereunder or thereunder will: (i) result in a breach of any applicable PRC laws; (ii) conflict with its articles of association or any other organizational documents; (iii) result in a breach of, or constitute a default under, any agreement or instrument to which it is a party or by which it is bound; (iv) result in a breach of any conditions on which the grant and/or continued effect of any of its permits or approvals is based; or (v) result in the suspension, cancellation or imposition of additional conditions on any of the permits or approvals issued to it;
- (c) Party B has good and salable ownership of and creates no security interest upon any of such assets;
- (d) Party C has no outstanding debt, except for those (i) incurred during its ordinary course of business, and (ii) already disclosed to and approved in writing by Party A;
- (e) Party C is in compliance with all laws and regulations applicable to asset purchase; and
- (f) there are currently no existing, pending or potential litigations, arbitrations or administrative procedures relating to the equity interests, Party C's assets or the company.

4. Effectiveness Date

This Agreement shall be effective as of the date of its execution, and terminate when Party A acquires the entire equity interests held by Party B in Party C to the extent permissible by the PRC laws.

5. Governing Law and Resolution of Disputes

5.1 Governing Law

The formation, validity, performance and interpretation of this Agreement and the resolution of the disputes arising hereunder shall be governed by the PRC laws.

5.2 Resolution of Disputes

The Parties shall first strive to resolve any dispute arising from the interpretation and performance of this Agreement through friendly consultation. In case no settlement can be reached through consultation within thirty (30) days after the request for consultation is made by any Party to the other, any Party may submit such dispute to

China International Economic and Trade Arbitration Commission for arbitration in accordance with its then effective rules. The arbitration shall take place in Beijing. The arbitration award shall be final and binding upon all the Parties.

6. Taxes and Fees

Each Party shall bear any and all taxes, costs and expenses related to transfer and registration as required by the PRC laws incurred by or imposed on such Party arising from the preparation and execution of this Agreement and each of the Transfer Agreements, and the consummation of the transactions contemplated hereunder and thereunder.

7. Notices

Notices or other communications required to be given by any Party or the company pursuant to this Agreement shall be written in Chinese and delivered personally or sent by mail or facsimile transmission to the addresses of the other Parties set forth below or other designated addresses notified by such other Parties to such Party from time to time. A notice is deemed to be duly served: (a) on the date of delivery, if sent by personal delivery; (b) on the tenth (10th) day after the date when the air registered mail with postage prepaid has been sent out (as is shown on the postmark), or the fourth (4th) day after submitted to an internationally recognized courier service agency; and (c) upon the receipt time as is shown on the transmission confirmation of relevant documents.

If to Party A:
Address:
Postal Code:
Fax No.:

If to Party B:
Address:
Postal Code:
Fax No.:

If to Party C:
Address:
Postal Code:
Fax No.:

8. Confidentiality Responsibilities

All Parties acknowledge and confirm that any oral or written materials exchanged by and between the Parties in connection with this Agreement are confidential. All Parties shall keep in confidence all such information and not disclose it to any third party without prior written consent from the other Parties unless: (a) such information is known or will be known by the public (except by disclosure of the receiving party without authorization); (b) such information is required to be disclosed in accordance with applicable laws or regulations or rules of stock exchange; or (c) if any information is required to be disclosed by any party to its legal or financial advisor for the purpose of the transaction of this Agreement, provided that such legal or

financial advisor shall also comply with the confidentiality obligation similar to that stated hereof. Any disclosure by any employee or agency engaged by any Party shall be deemed the disclosure of such Party and such Party shall assume the liabilities for its breach of contract pursuant to this Agreement. This Article shall survive the termination of this Agreement for any reason whatsoever.

9. Further Assurances

The Parties agree to promptly sign any document and take any further action reasonably necessary or advisable for the implementation of all provisions and purposes hereof.

10. Miscellaneous

10.1 Revision, amendment and supplementation

The Parties shall sign a written agreement for the revision, amendment or supplementation of the Agreement.

10.2 Compliance with Laws and Regulations

The Parties shall comply with and guarantee that their business operations are in full compliance with all the PRC laws and regulations officially promulgated and publicly available.

10.3 Entire agreement

Except the written revision, supplements or amendments made after the execution of this Agreement, this Agreement and Appendix 1 hereto constitute an entire agreement entered into by the Parties with respect to the subject matter hereof, and supersede all prior oral or written negotiations, representations and agreements reached with respect to the subject matter hereof.

10.4 Headings

The headings hereof are for convenience only, and shall not be used to interpret, explain or otherwise affect the meanings of the provisions hereof.

10.5 Language

This Agreement shall be written in Chinese and executed in four counterparts.

In witness whereof, the Parties have caused this Agreement to be executed by their respective authorized representatives as of the date first written above.

Party A: /s/ WiFire Group Inc.

Party B: /s/ Sheng Chen

Party C: /s/ WiFire Network Technology (Beijing) Co., Ltd.

Letter of Commitment

To: WiFire Group Inc.

With the view to expedite the business development of WiFire Network Technology (Beijing) Co., Ltd. (the "Target Company"), the undersigned hereby make the following commitments:

1. Since the establishment of the Target Company, the Target Company has not distributed any dividends or made other forms of asset distribution to Sheng Chen.
2. If the Target Company distributes any dividends or makes other forms of asset distribution to Sheng Chen in the future, Sheng Chen will transfer, for free of charge, relevant amount received by them to WiFire Group Inc. or any company designated by it within five working days after receiving such amount.

Hereby undertake.

Undertaking Party:

/s/ Chen Sheng

/s/ WiFire Network Technology (Beijing) Co., Ltd.

January 11, 2021

Letter of Commitment

To: WiFire Network Technology (Beijing) Co., Ltd.

Starting from the date hereof, if any of WiFire Network Technology (Beijing) Co., Ltd. and the companies which it is able to consolidate statements with it in accordance with US GAAP occurs to any loss in any year, as the request of the loss-incurring company, WiFire Group Inc., through its subsidiary in the PRC (namely, Abitcool (China) Broadband Inc.), will provide financial assistance free of charge to the loss-incurring company, in order to ensure the operation of the loss-incurring company. WiFire Group Inc. covenants that if the loss-incurring company is unable to repay the financial assistance, it will waive the right to demand the repayment.

This Letter of Commitment shall be irrevocable and continuously valid, and the validity term shall commence from January 11, 2021.

Hereby undertake.

Undertaking party:

/s/ WiFire Group Inc.

January 11, 2021

Equity Pledge Agreement

This Equity Pledge Agreement (hereinafter referred to as the “**Agreement**”) is made and entered into by and between the following Parties on December 10, 2020 in Shanghai:

Pledgee: Shanghai Edge Connect Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

Pledgor: Shanghai Rongyan Yunqi Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

In this Agreement, the Pledgee and the Pledgor are hereinafter individually referred to as a “Party” and collectively referred to as the “Parties”.

WHEREAS:

1. The Pledgee is a wholly foreign-owned company registered in Shanghai, China, and is legally engaged in technical service business with the permission of the relevant Chinese government authority.
 2. The Pledgor is a domestically-funded enterprise registered in Shanghai, China which owns 100% of the equity of Shanghai Zhiyan Yunwei Technology Co., Ltd.
 3. Shanghai Zhiyan Yunwei Technology Co., Ltd. is a domestically-funded company registered in Shanghai, China. Shanghai Zhiyan Yunwei Technology Co., Ltd. and Beijing 21Vianet Broadband Data Center Co., Ltd. entered into an Equity Transfer Agreement on Shanghai Blue Cloud Technology Co., Ltd. (hereinafter referred to as the “**Equity Transfer Agreement**”) on December 10, 2020. Upon completion of the transaction under the Equity Transfer Agreement, Shanghai Zhiyan Yunwei Technology Co., Ltd. will hold 100% of the equity of Shanghai Blue Cloud Technology Co., Ltd.
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4. The Pledgee and Shanghai Zhiyan Yunwei Technology Co., Ltd. entered into the Exclusive Technical Consulting and Service Agreement (hereinafter referred to as the “**Service Agreement**”) on December 10, 2020.
5. The Pledgor, the Pledgee and Shanghai Zhiyan Yunwei Technology Co., Ltd. entered into the Exclusive Option Agreement (hereinafter referred to as the “**Exclusive Option Agreement**”) on December 10, 2020.
6. The Pledgor issued a Power of Attorney (hereinafter referred to as the “**Power of Attorney**”) to the Pledgee on December 10, 2020.
7. The Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. issued a Letter of Undertaking (together with the Service Agreement, the Exclusive Option Agreement, the Power of Attorney and other agreements or documents that may be signed or issued from time to time by the Pledgor, the Pledgee and Shanghai Zhiyan Yunwei Technology Co., Ltd., collectively referred to as the “**Master Agreements**”) to the Pledgee on December 10, 2020.
8. In order to guarantee the rights of the Pledgee under the Master Agreements, the Pledgor pledges all the equity held by it in Shanghai Zhiyan Yunwei Technology Co., Ltd. to the Pledgee as a guarantee for the performance of the obligations under the Master Agreements by the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd.

In order to guarantee the performance of the terms of the Master Agreements by the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd., the Pledgor and the Pledgee agree to enter into this Agreement in accordance with the following terms.

1. Definitions

Unless otherwise provided in this Agreement, the following terms shall have the following meanings:

- 1.1 Pledge Right: means all the contents set forth in Article 2 of this Agreement.
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- 1.2 Pledged Equity: means 100% of the equity legally held by the Pledgor in Shanghai Zhiyan Yunwei Technology Co., Ltd.
- 1.3 Pledge Term: means the period specified in Article 3.1 of this Agreement.
- 1.4 Event of Default: means any of the circumstances set forth in Article 7 of this Agreement.
- 1.5 Notice of Default: means the notice issued by the Pledgee under this Agreement announcing the Event of Default.

2. Pledge

- 2.1 The Pledgor agrees to irrevocably pledge to the Pledgee 100% of the equity held by it in Shanghai Zhiyan Yunwei Technology Co., Ltd. (including any dividends paid for such equity) as a guarantee for the performance of all the obligations under the Master Agreements by the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. (hereinafter referred to as the “**Pledge**”). The Pledge Right refers to the Pledgee’s right to be reimbursed in priority with the price of the Pledged Equity through the evaluation in terms of money or auction or sale of the Pledged Equity.
 - 2.2 The Parties hereto agree that, for the purpose of the pledge registration of the Pledged Equity, RMB50 million (hereinafter referred to as the “**Initial Registration Amount**”) shall be deemed as the estimated amount of the creditor’s rights under the Master Agreements on the date of this Agreement to conduct the initial pledge registration. During the terms of the Master Agreements and this Agreement, the Pledgee shall have the right to require the Pledgor to adjust the Initial Registration Amount for any reason at any time, and the Pledgor shall promptly complete the adjustment as required by the Pledgee and complete the registration of equity pledge change.
 - 2.3 The scope guaranteed by the Pledge under this Agreement includes all the debts, obligations and liabilities of the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. under the Master Agreements, the expenses incurred for the exercise of the rights of creditors and the Pledge Right, all direct, indirect, derivative losses and losses of predictable benefits that are suffered by the Pledgee as a result of any Event of Default (the basis of the amount of such losses includes but is not limited to the Pledgee’s reasonable business plan and profit forecast) and any other related expenses (hereinafter referred to as “Guaranteed Debts”).
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2.4 For avoidance of doubt, the amount of the Pledgor's capital contribution to Shanghai Zhiyan Yunwei Technology Co., Ltd. or the Initial Registration Amount is irrelevant to the scope of pledge or the Guaranteed Debts. The scope of pledge and the amount of the actual Guaranteed Debts shall not be limited by the amount of the shareholder's capital contribution or the Initial Registration Amount. No shareholder shall assert in any way for any reason through any procedure that the scope of pledge or the Guaranteed Debts shall be limited by the capital contribution amount or the Initial Registration Amount. The final and actual amount of the Guaranteed Debts shall be subject to the agreement of the Parties, or shall be the amount actually incurred or adjudicated by the arbitration institution as provided in Article 10 hereof in case of failure to reach an agreement.

3. Pledge Term

3.1 The Pledge Term is 20 years unless the Pledge is released earlier by the Parties by signing an agreement. After expiration of the Pledge Term, the Pledge shall remain effective unless (1) the Parties hereto agree in writing to terminate this Agreement, or (2) all the Master Agreements have been performed, have expired or have been terminated, and all the obligations of the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. have been performed. For the purpose of registration of the Pledge, the term recorded at the initial pledge registration is 20 years. After expiration of such term, the Pledgor shall cooperate with the Pledgee regarding the registration procedures of the extension of the term of the pledge registration according to the requests of the Pledgee.

3.2 During the Pledge Term, if the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. fail to perform the obligations under the Master Agreements and such failure constitutes a material breach, the Pledgee shall have the right to exercise the Pledge Right in accordance with the provisions of this Agreement, dispose of all or part of the Pledged Equity, and be reimbursed in priority with the proceeds from the disposal of the Pledged Equity.

4. Possession of the Certificate of the Pledge Right

4.1 Shanghai Zhiyan Yunwei Technology Co., Ltd. shall, within one week after the Agreement comes into force, promptly submit an application for pledge registration to the market supervision and administration department (hereinafter referred to as the "**Administration for Industry and Commerce**") according to the requests of the Pledgee. The Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. shall submit and complete all documents and procedures required by Chinese laws and regulations and the competent Administration for Industry and Commerce to ensure that the Pledge Right under this Agreement is effectively established and enforceable.

- 4.2 Within the Pledge Term provided in this Agreement, the Pledgor shall deliver to the Pledgee its equity contribution certificate in Shanghai Zhiyan Yunwei Technology Co., Ltd., the register of shareholders and the original pledge registration certificate issued by the Administration for Industry and Commerce for safekeeping. The Pledgor shall deliver the above documents to the Pledgee within one week from the effective date of this Agreement.
- 4.3 The Pledgee has the right to obtain dividends generated from the Pledged Equity during the Pledge Term.
- 4.4 If the equity held by the Pledgor in Shanghai Zhiyan Yunwei Technology Co., Ltd. increases (including the equity formed by increasing the capital contribution, obtaining shares without consideration, converting the capital reserve into share capital, splitting or otherwise, hereinafter collectively referred to as “**New Equity**”), after occurrence of the above circumstances, the New Equity will be automatically pledged to the Pledgee, and automatically be bound by the provisions of this Agreement. Shanghai Zhiyan Yunwei Technology Co., Ltd. shall, upon the request of the Pledgee and within fifteen (15) business days after such equity change, promptly register the change of the pledge with the Administration for Industry and Commerce. The original pledge registration certificate issued by the Administration for Industry and Commerce (if any) shall be kept by the Pledgee or its designee.

5. The Pledgor’s Representations and Warranties

- 5.1 The Pledgor is the legal owner of the Pledged Equity.
- 5.2 Once the Pledgee exercises the Pledgee’s rights according to this Agreement at any time, there shall be no interference from any other party.
-

5.3 The Pledgee has the right to dispose of and transfer the Pledge Right in the manner specified in this Agreement.

5.4 The Pledgor does not create any other Pledge Right on the Pledged Equity other than the one set forth in this Agreement.

6. The Pledgor's Undertakings

6.1 During the Pledge Term, the Pledgor undertakes to the Pledgee as follows:

6.1.1 Without the prior written consent of the Pledgee, the Pledgor shall not transfer the Pledged Equity and shall not create or permit the existence of any pledge that may affect the rights and interests of the Pledgee;

6.1.2 The Pledgor will observe and perform all the provisions of the laws and regulations on the pledge of rights, and will, within five days upon receipt of the notice, instruction or suggestion issued or made by the relevant competent authority regarding the Pledge Right, produce such notice, instruction or suggestion to the pledgee, and will, at the same time, comply with such notice, instruction or suggestion, or raise an objection and a statement to the above matters according to the reasonable requests of the Pledgee or with the consent of the Pledgee;

6.1.3 The Pledgor will promptly notify the Pledgee of any event or received notice that may affect the rights of the Pledged Equity or any part thereof, and any event or received notice that may change any of the Pledgor's warranties and obligations hereunder or may affect the Pledgor's performance of its obligations hereunder.

6.2 The Pledgor agrees that the Pledgee's exercise of the Pledgee's rights according to the Pledge Right obtained under the terms of this Agreement shall not be interrupted or impaired by the Pledgor or the Pledgor's successor or the Pledgor's principal or any other person through legal procedures.

6.3 The Pledgor warrants to the Pledgee that in order to protect or improve the guarantee hereunder for the performance of the obligations under the Master Agreements by the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd., the Pledgor will honestly sign and cause other interested parties regarding the Pledge Right to sign all the title certificates and contracts requested by the Pledgee, and/or perform and cause other interested parties of the Pledge Right to conduct the act requested by the Pledgee, and will provide convenience for the exercise of the rights and authorization granted to the Pledgee in this Agreement, sign all the documents related to the change of the equity certificate with the Pledgee or its designated person (natural person/legal person), and provide the Pledgee with all the notices, orders and decisions relating to the Pledge Right that it deems necessary within a reasonable period.

6.4 The Pledgor warrants to the Pledgee that, for the benefit of the Pledgee, the Pledgor will comply with and perform all the warranties, undertakings, agreements, representations and conditions. If the Pledgor fails to perform or fully perform its warranties, undertakings, agreements, representations and conditions, the Pledgor shall compensate the Pledgee for all the losses caused thereby.

7. Event of Default

7.1 Any of the following events shall be deemed as an Event of Default:

7.1.1 Any representation or warranty made by the Pledgor in Article 5 of this Agreement is materially misleading or wrong, and/or the Pledgor breaches any representation or warranty made in Article 5 of this Agreement;

7.1.2 The Pledgor breaches the undertakings in Article 6 of this Agreement;

7.1.3 The Pledgor breaches any provision of this Agreement;

7.1.4 Except for the provisions of Article 6.1.1 hereof, the Pledgor waives the Pledged Equity or transfers the Pledged Equity without the written consent of the Pledgee;

7.1.5 Any loan, guarantee, compensation, undertaking or other debt repayment liability of the Pledgor (1) is requested to be repaid or performed in advance due to breach of contract; or (2) has fallen due but cannot be repaid or performed on time, so that the Pledgee deems that the Pledgor's ability to perform its obligations under this Agreement has been affected;

- 7.1.6 The Pledgor is unable to pay general debts or other debts;
 - 7.1.7 This Agreement becomes illegal due to the promulgation of relevant laws or the Pledgor is unable to continue to perform its obligations hereunder;
 - 7.1.8 All the governmental consents, permits, approvals or authorizations required to make this Agreement enforceable, legal or effective are withdrawn, suspended, invalidated or materially modified;
 - 7.1.9 An adverse change occurs to the property owned by the Pledgor, so that the Pledgee deems that the Pledgor's ability to perform its obligations under this Agreement has been affected;
 - 7.1.10 Any other circumstance under which the Pledgee is unable to exercise the Pledge Right according to relevant laws.
- 7.2 The Pledgor shall immediately notify the Pledgee in writing if it knows or discovers that any of the matters mentioned in Article 7.1 or any event that may lead to the above matters has occurred.
- 7.3 Unless the default matters set forth in Article 7.1 are remedied according to the opinions of the Pledgee, the Pledgee may send a Notice of Default to the Pledgor in writing at any time upon or after a default matter occurs to the Pledgor, requesting the Pledgor or Shanghai Zhiyan Yunwei Technology Co., Ltd. to immediately remedy its default under the Master Agreements, or exercise the Pledge Right according to the provisions of Article 8 of this Agreement.

8. Exercise of the Pledge Right

- 8.1 The Pledgor shall not transfer the Pledged Equity without the written consent of the Pledgee before the obligations of the Pledgor and Shanghai Zhiyan Yunwei Technology Co., Ltd. under the Master Agreements have been fully performed.
 - 8.2 The Pledgee shall give a Notice of Default to the Pledgor when exercising the Pledge Right.
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- 8.3 Subject to the provisions of Article 7.3, the Pledgee may exercise the Pledge Right at the same time as the Notice of Default is given in accordance with Article 7.3 or at any time after the Notice of Default is given.
- 8.4 The Pledgee shall have the right to evaluate all or part of the Pledged Equity under this Agreement in terms of money in accordance with legal procedures, or to be reimbursed in priority with the proceeds from the auction or sale of the Pledged Equity, until all the amounts payable but not paid under the Master Agreements have been reimbursed.
- 8.5 When the Pledgee exercises the Pledge Right in accordance with this Agreement, the Pledgor shall not set up obstacles and shall provide necessary assistance to enable the Pledgee to realize its Pledge Right.

9. Effective Date

This Agreement is executed on the date above written and shall come into force upon completion of the registration procedures with competent authority regarding the transaction under the Equity Transfer Agreement after duly executed by the Parties.

10. Governing Law and Dispute Resolution

10.1 Governing Law

The conclusion, validity, interpretation and performance of this Agreement and the settlement of disputes hereunder shall be governed by Chinese laws.

10.2 Dispute Resolution

Any dispute arising from the interpretation and performance of this Agreement shall first be settled by the Parties through friendly negotiation. If the dispute cannot be settled within 30 days after either Party sends a written notice to the other Party requesting settlement through negotiation, then either Party shall submit such dispute to Shanghai International Economic and Trade Arbitration Commission (Shanghai International Arbitration Center) for arbitration in accordance with its arbitration rules in effect at that time. The place of arbitration shall be Shanghai. The arbitral award shall be final and binding on the Parties.

11. Expenses

The Parties shall be liable for any and all costs incurred by or levied on them in connection with the preparation and execution of this Agreement and the completion of the transactions contemplated by this Agreement in accordance with Chinese laws.

12. Notice

Any notice or other communication required to be given by either Party under this Agreement shall be written in Chinese and shall be delivered in writing to the Party concerned. The date on which such notice or other communication shall be deemed to have been actually delivered shall be determined as follows: (a) When a notice is delivered by hand, it shall be deemed to have been actually delivered on the date when it is delivered by hand; (b) Any notice sent by letter shall be deemed to have been actually delivered on the tenth day after the date on which a registered airmail with postage prepaid is posted (as indicated on the postmark) or on the fourth day after it is delivered to an internationally recognized courier service; and (c) Any notice sent by e-mail or fax shall be deemed to have been actually delivered at the receiving time shown on the transmission confirmation of the relevant document when the sender's e-mail system confirms that the e-mail is sent to the recipient's e-mail receiving system.

13. Duty of Confidentiality

The Parties acknowledge and confirm that any oral or written information exchanged among them in connection with this Agreement is confidential. Each Party shall keep all such information confidential and shall not disclose any such information to any third party without the prior written consent of the other Party, except that (a) such information is or will be known to the public (but is not disclosed to the public by one of the receiving Parties); (b) the information is required to be disclosed by applicable legislation or the rules or regulations at the place of listing; or (c) the information is required to be disclosed by either Party to its legal or financial adviser in connection with the transaction and such legal or financial adviser is subject to a duty of confidentiality similar to that under this article. Any disclosure by any employee of or organization engaged by either Party shall be deemed as such Party's disclosure, and such Party shall be liable for breach of contract in accordance with this Agreement. This article shall survive the termination of this Agreement regardless of the reason for such termination.

14. Further Assurance

The Parties agree to promptly execute such documents and take such further actions as may be reasonably necessary or in their favor for the implementation of the provisions and purposes of this Agreement.

15. Miscellaneous

15.1 Revision, Amendment and Supplement

This Agreement shall not be revised, amended or supplemented unless a written agreement is signed by the Parties.

15.2 Compliance with Laws and Regulations

The Parties shall comply with and shall ensure that their operations are in full compliance with all applicable laws and regulations.

15.3 Entire Agreement

Except for any revision, amendment or supplement made in writing by the Parties after the execution of this Agreement, this Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof and supersedes all prior negotiations, representations and agreements, whether oral or written, with respect to the subject matter hereof.

15.4 Headings

The headings of this Agreement are for convenience of reading only and shall not be used to interpret, explain or otherwise affect the meanings of the provisions of this Agreement.

15.5 Language

This Agreement is written in Chinese and is made in duplicate.

(The remainder of this page is intentionally left blank)

(This page contains no text as the signature page of the Equity Pledge Agreement)

Pledgee:

Shanghai Edge Connect Technology Co., Ltd.

Authorized Representative (Signature): /s/ Lu Lang

Pledgor:

Shanghai Rongyan Yunqi Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Yang Haifeng

Power of Attorney

This Enterprise, Shanghai Rongyan Yunqi Technology Co., Ltd., owns 100% of the equity (hereinafter referred to as the “**Target Company’s Equity**”) of Shanghai Zhiyan Yunwei Technology Co., Ltd. (hereinafter referred to as the “**Target Company**”). A series of agreements including the Exclusive Technical Consulting and Service Agreement, the Exclusive Option Agreement and the Equity Pledge Agreement (collectively referred to as the “**Controlling Agreements**”) have been entered into by and among this Enterprise, Shanghai Edge Connect Technology Co., Ltd. (hereinafter referred to as “WFOE”) and the Target Company.

In order to ensure the performance of the Controlling Agreements, with respect to the Target Company’s Equity, this Enterprise hereby irrevocably authorizes the WFOE to exercise the following rights during the term of this Power of Attorney:

WFOE is authorized to exercise relevant rights including but not limited to the following with respect to the matters related to the Target Company’s Equity with full authority for and on behalf of this Enterprise as the only and exclusive agent of this Enterprise: 1) Exercise all the shareholder’s rights and voting rights enjoyed by this Enterprise in accordance with the laws and the articles of association of the Target Company, and make shareholders’ resolutions, including but not limited to selling or transferring or pledging or disposing of all or part of the equity of the Target Company; and 2) Designate and appoint the legal representative (Chairman of the board), directors, supervisors, general manager and other senior managers of the Target Company as the authorized representative of this Enterprise.

All the acts of WFOE in relation to the voting rights of the Target Company shall be deemed to be the acts of this Enterprise, and all the documents signed by WFOE shall be deemed to be signed by this Enterprise, and the above are acknowledged by this Enterprise.

WFOE has the right to delegate the above matters to other persons or entities without prior notice to this Enterprise or the consent of this Enterprise.

This Power of Attorney is irrevocable and shall remain in force as long as this Enterprise is a shareholder of the Target Company, commencing from the effective date of the Controlling Agreements. Notwithstanding the foregoing, this Power of Attorney may be terminated in any of the following circumstances: 1) WFOE may unilaterally terminate this Power of Attorney at any time upon written notice thirty (30) days in advance to this Enterprise; 2) WFOE purchases all the equity of the Target Company pursuant to the Exclusive Option Agreement.

During the term of this Power of Attorney, this Enterprise hereby waives all the rights granted to WFOE through this Power of Attorney and will not exercise such rights on its own.

Shanghai Rongyan Yunqi Technology Co., Ltd.

(Seal)

Authorized Representative (Signature): /s/ Yang Haifeng

December 10, 2020

Exclusive Technical Consulting and Service Agreement

This Exclusive Technical Consulting and Service Agreement (hereinafter referred to as the “**Agreement**”) is made and entered into by and between the following Parties on December 10, 2020 in Shanghai:

Party A: Shanghai Edge Connect Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

Party B: Shanghai Zhiyan Yunwei Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

In this Agreement, Party A and Party B are hereinafter individually referred to as a “Party” and collectively referred to as the “Parties”.

WHEREAS:

1. Party A is a wholly foreign-owned enterprise established in the People’s Republic of China (hereinafter referred to as the “PRC” or “China”) with resources for technical consulting and services;
 2. Party B is a domestically-funded company registered in the PRC. An Equity Transfer Agreement on Shanghai Blue Cloud Technology Co., Ltd. (hereinafter referred to as the “Equity Transfer Agreement”) was entered into by and between Party B and Beijing 21Vianet Broadband Data Center Co., Ltd. on December 10, 2020. Upon completion of the transaction under the Equity Transfer Agreement, Party B will hold 100% of the equity of Shanghai Blue Cloud Technology Co., Ltd. (hereinafter referred to as “Shanghai Blue Cloud”). The main business of Shanghai Blue Cloud is to provide cloud computing services and other business related to cloud computing services.
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3. Party A agrees to provide technical consulting and relevant services to Party B (including its subsidiary Shanghai Blue Cloud), and Party B agrees to accept the technical consulting and services provided by Party A.

NOW, THEREFORE, the Parties agree as follows after reaching a consensus through consultation:

1. Technical Consulting and Services; Exclusive Rights and Interests

- 1.1 During the term of this Agreement, Party A agrees to provide Party B with relevant technical consulting and services in accordance with the provisions of this Agreement (see Annex 1 for details). Party A further agrees that Party A shall not provide any third party with the same or similar technical consulting and services as those under this Agreement during the term of this Agreement without the prior written consent of Party B.
- 1.2 Party B agrees to accept the technical consulting and services provided by Party A. Party B further agrees that Party B shall not accept the same or similar technical consulting and services provided by any third party as those under this Agreement during the term of this Agreement without the prior written consent of Party A.
- 1.3 Any and all rights, ownership, interests and intellectual property rights arising from the performance of this Agreement, including but not limited to copyrights, patents, know-how, trade secrets, etc., whether they are developed by Party A on its own or developed by Party B based on Party A's intellectual property rights, shall vest in Party A, and Party A shall have the exclusive rights and interests thereto and therein, provided that in case of different provisions in mandatory legal norms, the ownership of the intellectual property rights shall be determined according to the provisions of the mandatory legal norms.

2. Calculation and Payment of Technical Consulting and Service Fees (hereinafter referred to as "Consulting and Service Fees")

The Parties agree that the Consulting and Service Fees under this Agreement shall be determined and paid in the manner set forth in Annex 2.

3. Representations and Warranties

3.1 Party A hereby represents and warrants as follows:

3.1.1 Party A is a company legally incorporated and validly existing under the laws of the PRC.

3.1.2 For executing and performing this Agreement, Party A has taken necessary corporate actions and obtained appropriate authorization and the consent and approval of third parties and government departments within its corporate power and scope of business, and shall not violate the restrictions of laws and contracts that are binding or have an effect on it.

3.1.3 Upon execution, this Agreement shall constitute a legal, valid and binding obligation of Party A, and is enforceable against Party A in accordance with the terms of this Agreement.

3.2 Party B hereby represents and warrants as follows:

3.2.1 Party B is a company legally incorporated and validly existing under the laws of the PRC.

3.2.2 For executing and performing this Agreement, Party B has taken necessary corporate actions and obtained appropriate authorization and the consent and approval of third parties and government departments within its corporate power and scope of business, and shall not violate the restrictions of laws and contracts that are binding or have an effect on it.

3.2.3 Upon execution, this Agreement shall constitute a legal, valid and binding obligation of Party B, and is enforceable against Party B in accordance with the terms of this Agreement.

4. Confidentiality Clause

4.1 Party B agrees to endeavor to take all reasonable confidentiality measures to maintain the confidentiality of the confidential data and information (hereinafter referred to as "Confidential Information") that Party B knows or has access to as a result of receipt of the exclusive technical consulting and services provided by Party A. Without the prior written consent of Party A, Party B shall not disclose, give or transfer such Confidential Information to any third party. Upon termination hereof, Party B shall return all documents, materials or software containing Confidential Information to Party A as required by Party A, or destroy the same on its own, and delete all Confidential Information from any relevant memory device, and shall not continue to use such Confidential Information.

4.2 The Parties agree that, whether this Agreement is modified, rescinded or terminated, this article will remain in effect.

5. Indemnity

5.1 If any Party breaches this Agreement, such Party shall immediately indemnify the other Party from and against any loss, damage, liability, claimed loss, etc. (hereinafter referred to as "Loss") caused by such breach. However, if the Loss suffered by the other Party is due to the intentional misconduct, violation of laws, breach of contracts, gross negligence and other reasons of/attribution to the other Party or its directors, managers, employees or agents, the breaching Party is not required to indemnify the other Party from and against such Loss.

5.2 Notwithstanding the foregoing, Party B shall indemnify and hold harmless Party A from and against any loss, damage, obligation and expense caused by any litigation, claim or other demand (whether caused by Party B's breach of contract or not) arising from or out of the content of the technical consultation and services that Party B requires Party A to provide.

6. Effectiveness and Term

6.1 This Agreement is executed on the date above written and shall come into force upon completion of the registration procedures with competent authority regarding the transaction under the Equity Transfer Agreement after duly executed by the Parties.

6.2 This Agreement shall be permanently valid unless terminated in accordance with the terms of this Agreement or the provisions of any other relevant agreement otherwise entered into by the Parties.

7. Termination

7.1 Early Termination.

During the term of this Agreement, Party B shall not terminate this Agreement in advance unless Party A commits gross negligence, fraud or other illegal acts or goes bankrupt. Notwithstanding the foregoing, Party A shall have the right to terminate this Agreement at any time by giving written notice to Party B 30 days in advance.

7.2 Terms after Termination.

The rights and obligations of the Parties under Articles 4 and 5 shall survive the termination of this Agreement.

8. Settlement of Disputes

In case of any dispute between the Parties over the interpretation and performance of any provision hereof, the Parties shall settle the dispute through friendly consultation. If no agreement can be reached through negotiation, either Party shall submit the relevant dispute to Shanghai International Economic and Trade Arbitration Commission (Shanghai International Arbitration Center) for arbitration in accordance with its arbitration rules then in effect. The place of arbitration shall be Shanghai. The language of arbitration shall be Chinese. The arbitral award shall be final and binding on the Parties.

9. Force Majeure

9.1 "Event of Force Majeure" means any event that is beyond the reasonable control of a Party and is unavoidable under the reasonable attention of the affected Party, including but not limited to acts of government, natural force, fire, explosion, storms, floods, earthquakes, tides, lightning or war, and epidemics. However, lack of credit, capital or financing shall not be deemed to be a matter beyond the reasonable control of a Party. The Party seeking release from its obligations under this Agreement as a result of an "Event of Force Majeure" shall, as soon as possible, notify the other Party of such release and advise the other Party of the steps to be taken to complete its performance.

9.2 When the performance of this Agreement is delayed or hindered by an “Event of Force Majeure” as defined above, the affected Party shall not be liable under this Agreement to the extent that it is delayed or hindered. The affected Party shall take appropriate measures to reduce or eliminate the impact of the “Event of Force Majeure” and shall make efforts to resume the performance of obligations delayed or hindered by the “Event of Force Majeure”. Once the Event of Force Majeure is eliminated, the Parties agree to make best efforts to resume the performance under this Agreement.

10. Notice

Any notice or other communication required to be given by either Party under this Agreement shall be written in Chinese and shall be delivered in writing to the Party concerned. The date on which such notice or other communication shall be deemed to have been actually delivered shall be determined as follows: (a) When a notice is delivered by hand, it shall be deemed to have been actually delivered on the date when it is delivered by hand; (b) Any notice sent by letter shall be deemed to have been actually delivered on the tenth day after the date on which a registered airmail with postage prepaid is posted (as indicated on the postmark) or on the fourth day after it is delivered to an internationally recognized courier service; and (c) Any notice sent by e-mail or fax shall be deemed to have been actually delivered at the receiving time shown on the transmission confirmation of the relevant document when the sender’s e-mail system confirms that the e-mail is sent to the recipient’s e-mail receiving system.

11. Taxes and Expenses

The Parties shall be liable for any and all taxes and expenses incurred by or levied on them in connection with the preparation and execution of this Agreement and the performance hereof in accordance with the laws of the PRC.

12. Assignment

Party B shall not assign its rights and obligations hereunder to any third party without the prior written consent of Party A.

13. Severability

If any provision of this Agreement is invalid or unenforceable due to inconsistency with relevant laws, such provision shall have no legal effect only within the jurisdiction of relevant laws and shall not affect the legal effect of the other provisions of this Agreement.

14. Amendment and Supplement to the Agreement

This Agreement shall be amended and supplemented by the Parties in writing. Amendment agreements and supplementary agreements duly signed by the Parties in connection with this Agreement shall constitute an integral part of this Agreement and have the same legal effect as this Agreement.

15. Governing Law

This Agreement shall be governed by and construed in accordance with the laws of the PRC.

16. Languages and Counterparts

This Agreement is written in Chinese and is made in duplicate.

IN WITNESS WHEREOF, the Parties have caused their authorized representatives to execute this Agreement as of the date above written.

(The remainder of this page is intentionally left blank)

(This page contains no text as the signature page of the Exclusive Technical Consulting and Service Agreement)

Party A:

Shanghai Edge Connect Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

Party B:

Shanghai Zhiyan Yunwei Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

Annex 1: List of Technical Consulting and Service Contents

Party A shall provide Party B with the following technical consulting and services:

1. Provide technology development and transfer as well as technical advisory services.
 2. Provide staff-related vocational training and pre-job training services.
 3. Provide product research and development consulting and services.
 4. Provide network and software maintenance services.
 5. Provide office network conditions and maintenance services.
 6. Provide overall security services for the system.
 7. Provide the overall architecture design and implementation services of the system network, including the installation of the server system and 7×24 daily maintenance.
 8. Other technical consulting and services related to the main business of Party B (including its subsidiaries).
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Annex 2: Calculation and Payment Method for Technical Consulting and Service Fees

1. Basic technical consulting and service fees shall be calculated according to RMB1,000 per person per man-hour. Party A may charge additional technical consulting and service fees according to the actualities. The final amount of technical consulting and service fees charged by Party A shall be the amount determined by Party A.
 2. Party A shall determine the payment time of technical consulting and service fees on its own, and Party B shall fully cooperate with Party A.
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Exclusive Option Agreement

This Exclusive Option Agreement (hereinafter referred to as the “**Agreement**”) is made and entered into by and among the following Parties on December 10, 2020 in Shanghai:

Party A: Shanghai Edge Connect Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

Party B: Shanghai Rongyan Yunqi Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

Party C: Shanghai Zhiyan Yunwei Technology Co., Ltd.

Registered Address: Room 2207A, 28 Maji Road, China (Shanghai) Pilot Free Trade Zone

In this Agreement, Party A, Party B and Party C are hereinafter individually referred to as a “Party” and collectively referred to as the “Parties”.

WHEREAS:

1. Party B holds 100% of the equity interests of Party C;
 2. Party C and Beijing 21Vianet Broadband Data Center Co., Ltd. entered into an Equity Transfer Agreement on Shanghai Blue Cloud Technology Co., Ltd. (hereinafter referred to as the “**Equity Transfer Agreement**”) on December 10, 2020. Upon completion of the transaction under the Equity Transfer Agreement, Party C will hold 100% of the equity of Shanghai Blue Cloud Technology Co., Ltd.
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3. Party C and Party A entered into an Exclusive Technical Consulting and Service Agreement (hereinafter referred to as the “**Service Agreement**”) on December 10, 2020.
4. Party B and Party C issued a Letter of Undertaking (hereinafter referred to as the “**Letter of Undertaking on Dividends**”) to Party A on December 10, 2020;
5. On December 10, 2020, Party B and Party A entered into an Equity Pledge Agreement (hereinafter referred to as the “**Equity Pledge Agreement**”) and Party B issued a Power of Attorney (hereinafter referred to as the “**Power of Attorney**”) to Party A.
6. Party A issued a Letter of Undertaking (together with the Service Agreement, the Letter of Undertaking on Dividends, the Equity Pledge Agreement and the Power of Attorney as mentioned above, collectively referred to as the “**Controlling Agreements**”) to Party C on December 10, 2020.

NOW, THEREFORE, the Parties agree as follows after reaching a consensus through consultation:

1. **Equity Sale and Purchase**

1.1 Grant of the Right

Party B hereby irrevocably grants Party A an irrevocable exclusive right, that is, Party A or the third party designated by Party A has the Equity Option all or part of Party C’s equity (hereinafter referred to as the “**Equity Option**”) held by Party B at any time according to the exercise steps determined by Party A and the price specified in Article 1.3 of this Agreement to the extent permitted by Chinese laws. Except for Party A and the third party designated by Party A, no third party shall have the Equity Option. Party C hereby agrees that Party B may grant Party A the Equity Option. For the purpose of this article and this Agreement, a “person” refers to an individual, a company, a joint venture, a partnership, an enterprise, a trust or an unincorporated organization.

1.2 Exercise Steps

Party A's exercise of its Equity Option shall be subject to compliance with the provisions of Chinese laws and regulations. When exercising the Equity Option, Party A shall give Party B a written notice (hereinafter referred to as the "**Equity Purchase Notice**"), which shall set forth the following: (a) Party A's decision to exercise the Equity Option; (b) The quantity of equity that Party A intends to purchase from Party B (hereinafter referred to as the "**Purchased Equity**"); and (c) The Purchase Date/Equity Transfer Date.

1.3 Equity Purchase Price

The purchase price of the Purchased Equity (the "**Equity Purchase Price**") shall be the lowest price permitted by Chinese laws and administrative regulations, except where evaluation is required by relevant laws and regulations.

1.4 Transfer of the Purchased Equity

When Party A exercises the Equity Option each time:

- (a) Party B shall, through the shareholders' resolution, approve the transfer of the equity to Party A and/or the third party designated by Party A;
- (b) Party B shall enter into an equity transfer agreement with Party A or its designated third party in accordance with the provisions of this Agreement and the Equity Purchase Notice;
- (c) The relevant Party shall sign all such agreements or documents, obtain all such government approvals and consents, and take all such actions as are required to transfer the ownership of the Purchased Equity to Party A and/or its designated third party and make Party A and/or its designated third party the registered owner of the Purchased Equity without attaching any security interest. For the purposes of this article and this Agreement, "security interest" includes security, mortgage, third party's rights or interests, any option, acquisition rights, preemptive rights, rights of offset, retention of title or other security arrangements. For avoidance of doubt, security interest arising under the Equity Pledge Agreement shall not be included.

2. Undertakings Relating to Equity, Business Operation and Personnel

Arrangements

2.1 Party C's Undertakings

Party C hereby undertakes as follows:

- (a) Party C accepts Party A's suggestions on its personnel arrangements and transfer, daily operation, dividend distribution and financial management system, and Party C will strictly comply with and perform such suggestions accordingly;
 - (b) Without the prior written consent of Party A, Party C shall not make supplement to, alter or modify its articles of association in any form, increase or decrease its registered capital, or otherwise change its registered capital structure;
 - (c) Without prior written consent of Party A, Party C shall not engage in any activities beyond the scope of its normal business, or engage in any business activities inconsistent with its previous operations;
 - (d) Without the prior written consent of Party A, Party C shall not merge, integrate or form a joint entity with any third party, or be merged, acquired or controlled by any third party, or restructure its main business and assets, or acquire or invest in any person;
 - (e) Party C will maintain its good standing, prudently and effectively manage its business and handle its affairs in accordance with good financial and commercial standards and practices, in order to maintain the value of Party C's assets and the normal operation of Party C, and it will not conduct any act/omission that may affect its business condition and the value of its assets;
 - (f) Without the prior written consent of Party A, Party C shall not sell, transfer, mortgage or otherwise dispose of the legal or beneficiary interest of any of its significant assets, business or income, or allow any security interest to be created thereon except that any such act, with the confirmation of Party A, occurs during normal operation or is carried out according to relevant provisions of the Control Agreements;
 - (g) No debt shall be incurred, inherited or allowed to exist without the prior written consent of Party A, except (i) any debt incurred in the normal or ordinary course of business other than by borrowing money, and (ii) any debt disclosed to and with the written consent of Party A;
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- (h) Without the prior written consent of Party A, Party C shall not enter into any material agreement (for the purpose of this paragraph, "material agreement" means an agreement whose amount exceeds RMB 5 million), except for the agreement relating to the normal business included in the approved annual business plan or budget plan;
 - (i) Party A shall not provide any loan, guarantee or other credit to any person without the prior written consent of Party A.
 - (j) Party C shall not employ, change or dismiss any director or senior manager without the prior written consent of Party A.
 - (k) Without the prior written consent of Party A, Party C shall not distribute dividends, equity interests or shareholders' equity in any way. However, upon Party A's written request, Party C shall immediately distribute all or part of distributable profits to Party B, and then Party B shall immediately and unconditionally pay or transfer the aforesaid distribution to Party A;
 - (l) Party C shall not dissolve, liquidate or distribute the remaining property without the prior written consent of Party A.
 - (m) Party C will provide Party A with all the information on its operation and financial position at the request of Party A;
 - (n) At the request of Party A, Party C shall purchase and maintain the relevant insurance from an insurance company approved by Party A, and the amount and type of such insurance shall be the same as those normally taken out by a company operating similar business and owning similar property or assets in the same area;
 - (o) Party C shall immediately notify Party A of any litigation, arbitration or administrative proceedings that occur or may occur in connection with its assets, business or income;
 - (p) In order to maintain its ownership of all its assets, Party C shall execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or appropriate charges or conduct necessary or appropriate defense against all claims;
 - (q) Party C shall submit its important certificates, licenses and seals to Party A for safekeeping, including but not limited to its business license, contract seal, financial seal and official seal;
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- (r) Party C shall possess such government permits, licenses, authorizations and approvals as are necessary to conduct its business and shall ensure that all such government permits, licenses, authorizations and approvals shall remain in effect throughout the term of this Agreement;
- (s) Party C shall promptly inform Party A of any circumstance that may have a material adverse effect on Party C's business or operation, and make its best efforts to prevent the occurrence of such circumstance and the expansion of losses;
- (t) Party C shall provide Party A with and allow Party A to use any technical or other data that Party A deems necessary or useful; and
- (u) Without the prior written consent of Party A, Party C shall not cause any of its branches or subsidiaries to fail to comply with the aforesaid undertakings or enter into any contract, agreement or other legal document that may result in any breach of the aforesaid undertakings.

2.2 Party B's Undertakings

Party B hereby undertakes as follows:

- (a) Without the prior written consent of Party A, Party B shall not sell, transfer, mortgage or otherwise dispose of all or part of Party C's equity held by it and all the legal or beneficiary interests thereof, or allow any other security interest to be created thereon, except for the pledge created on Party C's equity pursuant to the Equity Pledge Agreement;
 - (b) Without the prior written consent of Party A, Party B shall not make any shareholders' resolution approving Party C to engage in activities beyond its normal business scope or to engage in business activities inconsistent with its previous operation;
 - (c) Without the prior written consent of Party A, Party B shall not make any shareholders' resolution approving the sale, transfer, mortgage or other disposal of all or part of Party C's equity held by it and all the legal or beneficiary interests thereof, or allowing any other security interest to be created thereon, except the approval of pledge to be created on Party C's equity according to the Equity Pledge Agreement;
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- (d) Without the prior written consent of Party A, Party B shall not make any shareholders` resolution approving Party C to merge, integrate or form a joint entity with any third party, or to be merged, acquired or controlled by any third party, or to restructure its major business and assets, or to acquire or invest in any person;
 - (e) Without the prior written consent of Party A, Party B shall not make any shareholders` resolution approving Party C's employment, change or dismissal of any director or senior manager;
 - (f) Without the prior written consent of Party A, Party B shall not make any shareholders` resolution approving Party C to distribute dividends, equity interests or shareholders' equity in any way. However, upon Party A's written request, Party B shall immediately cause Party C to distribute all or part of distributable profits to Party B, and then Party B shall immediately and unconditionally pay or transfer the aforesaid distribution to Party A;
 - (g) Without the prior written consent of Party A, Party B shall not make any shareholders` resolution approving the dissolution, liquidation and distribution of the remaining property of Party C;
 - (h) Party B shall immediately notify Party A of any litigation, arbitration or administrative proceedings that occur or may occur in connection with Party C's equity owned by it;
 - (i) When Party A exercises the Equity Option, Party B shall make a shareholders` resolution approving the transfer of the Purchased Equity as provided in this Agreement;
 - (j) In order to maintain its ownership of Party C's equity, Party B shall execute all necessary or appropriate documents, take all necessary or appropriate actions and bring all necessary or appropriate charges or conduct necessary or appropriate defense against all claims;
 - (k) Upon Party A's request at any time, Party B shall unconditionally and immediately transfer Party C's equity held by it to Party A's designated representative at any time;
 - (l) Party B shall strictly comply with all the provisions of this Agreement and other agreements jointly or separately signed by Party B, Party C and Party A, and earnestly perform all its obligations under such agreements, and shall not conduct any act/omission that may affect the validity and enforceability of such agreements;
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- (m) Party B shall promptly inform Party A of any circumstance that may have a material adverse effect on Party C's business or operation, and make its best efforts to prevent the occurrence of such circumstance and the expansion of losses; and
 - (n) Without the prior written consent of Party A, no shareholders' resolution shall be made to approve any branch or subsidiary of Party C to fail to comply with the aforesaid undertakings or enter into any contract, agreement or other legal document that may result in any breach of the aforesaid undertakings.
- 2.3 Party B further undertakes that during the term of this Agreement, (i) except with Party A's written consent, Party B will not directly or indirectly (whether through Party B or any other natural person or legal entity) participate in, engage in, acquire or hold (in any case whether as a shareholder, partner, agent, employee or otherwise) any business that competes or may compete with Party C or any of its affiliates, or have the interests therein; (ii) any act or omission of Party B will not cause any conflict of interest between Party B and Party A (including but not limited to Party A's shareholders); and (iii) in the event of such conflict of interest (and Party A may decide at its absolute discretion whether such conflict of interest occurs), Party B shall, subject to Chinese laws, take any action directed by Party A to eliminate such conflict of interest.
- 2.4 Party B shall only appoint a person designated by Party A as the director of Party C, and the specific procedures shall be carried out in accordance with relevant laws, regulations and the articles of association. Party B and Party C shall facilitate the appointment of the personnel designated by Party A as the general manager, chief financial officer and other senior managers of Party C. If any of the above directors or senior managers designated by Party A resigns or is dismissed at the request of Party A, Party B and Party C shall, at the request of Party A, dismiss such person from Party C and appoint another candidate designated by Party A to succeed such person.
- 2.5 Party C agrees to provide its idle funds to Party A or Party A's subsidiaries for use by means of entrusted loans or fund lending. The specific method shall be agreed in a separate agreement signed by the Parties.

3. Representations and Warranties

Party B and Party C hereby jointly and severally make the following representations and warranties to Party A on the date of execution of this Agreement and on each purchase date/equity transfer date:

- (a) It has the authority and capacity to enter into and deliver this Agreement and any equity transfer agreement (each is referred to as a "**Transfer Agreement**") to which it is a party and that is signed for each transfer of the Purchased Equity pursuant to this Agreement and to perform its obligations under this Agreement and any Transfer Agreement. Upon execution, this Agreement and each Transfer Agreement to which it is a party shall constitute legal, valid and binding obligations and shall be enforceable in accordance with the terms of the Transfer Agreement;
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- (b) Neither the execution and delivery of this Agreement or any Transfer Agreement nor the performance of its obligations under this Agreement or any Transfer Agreement will: (i) result in a breach of any relevant Chinese law; (ii) conflict with its constitution or other organizational documents; (iii) result in or constitute a breach of any agreement or document to which it is a party or that is binding on it; (iv) result in a breach of any condition for the grant and/or continuous validity of any license or approval granted to it; or (v) cause any license or approval granted to it to be suspended or revoked or subject to additional conditions;
 - (c) Party B has good and marketable title to Party C's equity held by it. Party B has not created any security interest on Party C's equity held by it, except the pledge created on Party C's equity in accordance with the Equity Pledge Agreement;
 - (d) Party C does not have any outstanding debts, except (i) debts which are confirmed by Party A to be incurred in the ordinary course of its business, and (ii) debts which have been disclosed to Party A and approved by Party A in writing; and
 - (e) Party C has good and marketable title to all of its assets. Party C does not create any security interest on all of its assets; and
 - (f) There are currently no litigation, arbitration or administrative proceedings that are ongoing or pending or likely to occur in connection with Party C's equity or assets or with respect to Party C.
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4. Effective Date

This Agreement is executed on the date written above and shall come into force upon completion of the registration procedures with competent authority regarding the transaction under the Equity Transfer Agreement after duly executed by the Parties. This Agreement shall be terminated upon Party A's acquisition of all of Party C's equity held by Party B to the extent permitted by Chinese laws.

5. Governing Law and Dispute Resolution

5.1 Governing Law

The conclusion, validity, interpretation and performance of this Agreement and the settlement of disputes hereunder shall be governed by Chinese laws.

5.2 Dispute Resolution Method

Any dispute arising from the interpretation and performance of this Agreement shall first be settled by the Parties through friendly negotiation. If the dispute cannot be settled within 30 days after any Party sends a written notice to the other Party requesting settlement through negotiation, then any Party shall submit such dispute to Shanghai International Economic and Trade Arbitration Commission (Shanghai International Arbitration Center) for arbitration in accordance with its arbitration rules in effect at that time. The place of arbitration shall be Shanghai. The arbitral award shall be final and binding on the Parties.

6. Taxes and Expenses

Each Party shall be liable for any and all transfer and registration taxes, costs and expenses incurred by or levied on it in connection with the preparation and execution of this Agreement and each Transfer Agreement and the completion of the transactions contemplated by this Agreement and each Transfer Agreement in accordance with Chinese laws.

7. Notice

Any notice or other communication required to be given by any Party under this Agreement shall be written in Chinese and shall be delivered in writing to the Parties concerned. The date on which such notice or other communication shall be deemed to have been actually delivered shall be determined as follows: (a) When a notice is delivered by hand, it shall be deemed to have been actually delivered on the date when it is delivered by hand; (b) Any notice sent by letter shall be deemed to have been actually delivered on the tenth day after the date on which a registered airmail with postage prepaid is posted (as indicated on the postmark) or on the fourth day after it is delivered to an internationally recognized courier service; and (c) Any notice sent by e-mail or fax shall be deemed to have been actually delivered at the receiving time shown on the transmission confirmation of the relevant document when the sender's e-mail system confirms that the e-mail is sent to the recipient's e-mail receiving system.

8. Duty of Confidentiality

The Parties acknowledge and confirm that any oral or written information exchanged among them in connection with this Agreement is confidential. Each Party shall keep all such information confidential and shall not disclose any such information to any third party without the prior written consent of the other Party, except that (a) such information is or will be known to the public (but is not disclosed to the public by one of the receiving Parties); (b) the information is required to be disclosed by applicable legislation or the rules or regulations at the place of listing; or (c) the information is required to be disclosed by any Party to its legal or financial adviser in connection with the transaction and such legal or financial adviser is subject to a duty of confidentiality similar to that under this article. Any disclosure by any employee of or organization engaged by any Party shall be deemed as such Party's disclosure, and such Party shall be liable for breach of contract in accordance with this Agreement. This article shall survive the termination of this Agreement regardless of the reason for such termination.

9. Further Assurance

The Parties agree to promptly execute such documents and take such further actions as may be reasonably necessary or in their favor for the implementation of the provisions and purposes of this Agreement.

10. Miscellaneous

10.1 Revision, Amendment and Supplement

This Agreement shall not be revised, amended or supplemented unless a written agreement is signed by the Parties.

10.2 Compliance with Laws and Regulations

Each Party shall comply with and shall ensure that its operations are in full compliance with all applicable laws and regulations.

10.3 Entire Agreement

Except for any revision, amendment or supplement made in writing by the Parties after the execution of this Agreement, this Agreement constitutes the entire agreement among the Parties with respect to the subject matter hereof and supersedes all prior negotiations, representations and agreements, whether oral or written, with respect to the subject matter hereof.

10.4 Headings

The headings of this Agreement are for convenience of reading only and shall not be used to interpret, explain or otherwise affect the meanings of the provisions of this Agreement.

10.5 Language

This Agreement is written in Chinese and is made in triplicate.

(The remainder of this page is intentionally left blank)

(This page contains no text as the signature page of the Exclusive Option Agreement)

Party A:

Shanghai Edge Connect Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

Party B:

Shanghai Rongyan Yunqi Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Yang Haifeng

Party C:

Shanghai Zhiyan Yunwei Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

Letter of Undertaking

To: Shanghai Edge Connect Technology Co., Ltd.

In order to accelerate the business development of Shanghai Zhiyan Yunwei Technology Co., Ltd. (hereinafter referred to as the "Target Company") and its subsidiaries, the Promisor undertakes as follows:

1. Ever since the establishment of the Target Company, the Target Company has not distributed any dividends or other forms of assets to Shanghai Rongyan Yunqi Technology Co., Ltd.;
2. If the Target Company distributes dividends or other forms of assets to Shanghai Rongyan Yunqi Technology Co., Ltd. in the future, Shanghai Rongyan Yunqi Technology Co., Ltd. shall, within five working days upon receipt of the relevant fund, transfer such fund free of charge to Shanghai Edge Connect Technology Co., Ltd. or its designated party.
3. This Letter of Undertaking shall come into force at the same time as a series of agreements concluded by and among Shanghai Edge Connect Technology Co., Ltd., Shanghai Rongyan Yunqi Technology Co., Ltd. and Shanghai Zhiyan Yunwei Technology Co., Ltd., such as the Exclusive Technical Consulting and Service Agreement, the Exclusive Option Agreement and the Equity Pledge Agreement.
4. This Letter of Undertaking shall be irrevocable and effective as of the effective date.

The above undertakings are hereby made for your attention.

Promisor:

Shanghai Rongyan Yunqi Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Yang Haifeng

Shanghai Zhiyan Yunwei Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

December 10, 2020

Letter of Undertaking

To: Shanghai Zhiyan Yunwei Technology Co., Ltd.

From the effective date of this Letter of Undertaking, if Shanghai Zhiyan Yunwei Technology Co., Ltd. or any company whose financial statements can be consolidated by it according to the accounting standards for enterprises suffers losses in any year, this Enterprise will provide free financial assistance in the next year to the company that suffers losses, and the amount of the financial assistance will not be less than the amount of the company's losses, so that the company that suffer losses can avoid the impact of financial losses in that year. The financial assistance provided by this Enterprise according to this Letter of Undertaking is not required to be returned.

This Letter of Undertaking shall come into force at the same time as a series of agreements concluded by and among this Enterprise, Shanghai Rongyan Yunqi Technology Co., Ltd. and Shanghai Zhiyan Yunwei Technology Co., Ltd., such as the Exclusive Technical Consulting and Service Agreement, the Exclusive Option Agreement and the Equity Pledge Agreement.

This Letter of Undertaking shall be irrevocable and effective as of the effective date.

The above undertakings are hereby made for your attention.

Promisor:

Shanghai Edge Connect Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lulang

December 10, 2020

Supplementary Agreement to the Exclusive Option Agreement

This Supplementary Agreement to the Exclusive Option Agreement (hereinafter referred to as the "**Supplementary Agreement**") is made and entered into by and between the following Parties on December 10, 2020 in Shanghai:

Party A: Shanghai Edge Connect Technology Co., Ltd.

Registered Address: Room 2207A, 28 Magi Road, China (Shanghai) Pilot Free Trade Zone

Party B: Shanghai Rongyan Yunqi Technology Co., Ltd.

Registered Address: Room 2207A, 28 Magi Road, China (Shanghai) Pilot Free Trade Zone

Party C: Shanghai Zhiyan Yunwei Technology Co., Ltd.

Registered Address: Room 2207A, 28 Magi Road, China (Shanghai) Pilot Free Trade Zone

In this Supplementary Agreement, Party A, Party B and Party C are hereinafter individually referred to as a "**Party**" and collectively referred to as the "**Parties**".

With respect to the Exclusive Option Agreement signed by the Parties on December 10, 2020 (the "**Original Agreement**"), the Parties enter into the following supplementary agreement:

1. Supplementary Provisions

Article 1.3 of the Original Agreement is as follows:

The purchase price of the Purchased Equity (the "**Equity Purchase Price**") shall be the lowest price permitted by Chinese laws and administrative regulations, except where evaluation is required by relevant laws and regulations.

Now it is amended as follows:

Except as required by Chinese laws and administrative regulations (whether expressed or implied), when Party A exercises the exclusive option with respect to the Purchased Equity in accordance with the provisions of the Original Agreement and this Agreement, the purchase price of the Purchased Equity (the "**Equity Purchase Price**") shall be RMB 1. If the Equity Purchase Price is not RMB 1 according to the requirements of laws and administrative regulations, Party B agrees to return the Equity Purchase Price to Party A or its designated person through legal means according to the specific instructions of Party A upon receipt of the Equity Purchase Price.

2. Miscellaneous

- 2.1 This Supplementary Agreement is a supplementary agreement to the Original Agreement. If this Supplementary Agreement has other provisions, the provisions of this Supplementary Agreement shall apply; if this Supplementary Agreement does not have relevant provisions, the provisions of the Original Agreement shall apply.
- 2.2 This Supplementary Agreement shall come into force as of the date of execution by the Parties.
- 2.3 This Supplementary Agreement shall not be revised, amended or supplemented unless a written agreement is signed by the Parties.
- 2.4 This Supplementary Agreement is written in Chinese and is made in triplicate.

(The remainder of this page is intentionally left blank)

(This page contains no text as the signature page of the Supplementary Agreement to the Exclusive Option Agreement)

Party A:

Shanghai Edge Connect Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

Party B:

Shanghai Rongyan Yunqi Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Yang Haifeng

Party C:

Shanghai Zhiyan Yunwei Technology Co., Ltd. (Seal)

Authorized Representative (Signature): /s/ Lu Lang

SHARE REPURCHASE AGREEMENT

THIS SHARE REPURCHASE AGREEMENT (this “**Agreement**”) is made and entered into as of March 23, 2021 (the “**Effective Date**”) by and between:

- (1) 21Vianet Group, Inc., a company organized under the laws of the Cayman Islands (the “**Company**”), and
- (2) Tuspark Innovation Venture Limited, a company organized under the laws of the British Virgin Islands (“**Tuspark**”).

WHEREAS, Tuspark is the record shareholder of 111,053,390 Class B ordinary shares, par value US\$0.00001 each, of the Company (the “**Tuspark Class B Ordinary Shares**”).

WHEREAS, the Company and Tuspark are parties to that certain share subscription agreement, dated May 23, 2016 (the “**Existing Agreement**”).

WHEREAS, the Company desires to repurchase from Tuspark, and Tuspark desires to sell to the Company, certain number of Tuspark Class B Ordinary Shares on the terms and conditions set forth in this Agreement.

NOW, THEREFORE, in consideration of the foregoing recitals, the mutual promises hereinafter set forth, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto hereby agree as follows:

1. AGREEMENT TO REPURCHASE AND SELL ORDINARY SHARES.

Subject to the terms and conditions hereof, Tuspark hereby agrees to sell to the Company, and the Company hereby agrees to repurchase from Tuspark, 48,634,493 Tuspark Class B Ordinary Shares at a price of US\$5.346 per share for an aggregate purchase price of US\$259,999,999.58 (the “**Repurchase Price**”). The price of US\$5.346 per ordinary share is calculated based on the price of US\$32.076 per American depository share (“**ADS**”) of the Company, each representing six Class A ordinary shares of the Company, which is the product of (i) the 30-Day VWAP, multiplied by (ii) 88%. “**30-Day VWAP**” means the daily volume weighted average price of the ADSs for the consecutive thirty (30) trading days ended on March 22, 2021. The Tuspark Class B Ordinary Shares to be repurchased and sold pursuant to this Section 1 are collectively referred to as the “**Repurchase Shares**.”

2. CLOSINGS; DELIVERIES.

2.1 Closing. The closing of the repurchase and sale of the Repurchase Shares hereunder shall take place remotely via the electronic exchange of closing documents and signatures on the seventh (7th) business day after the Effective Date, or at such other time and place as may be mutually agreed upon by the Company and Tuspark (the “**Closing**”). The date and time of the Closing are referred to herein as the “**Closing Date**.”

2.2 Deliveries by Tuspark. At the Closing, Tuspark shall deliver to the Company the following:

(a) an instrument of transfer in respect of the Repurchase Shares, in the form as attached hereto as Exhibit A, duly signed by an authorized signatory of Tuspark;

- Shares);
- (b) the original share certificate(s) representing all Tuspark Class B Ordinary Shares (including the Repurchase Shares);
 - (c) a director resignation letter, in the form as attached hereto as Exhibit B, duly signed by Mr. Wenbin Chen; and
 - (d) any other document requested by the Company that it deems reasonably necessary for the consummation of the transactions contemplated hereby (including without limitation the Ordinary Share Conversion (as defined below)), and, if applicable, duly signed by an authorized signatory of Tuspark.

2.3 Delivery by the Company. At the Closing, subject to the delivery of all of the documents in accordance with Section 2.2 hereof, the Company shall pay the Repurchase Price to Tuspark in U.S. dollars by wire transfer (evidenced by delivery to Tuspark of a copy of the irrevocable wiring instructions delivered by the Company to its bank (known as "MT-103" and containing SWIFT number of such remittance)), or by such other method mutually agreeable to the Company and Tuspark, of immediately available funds to such bank account(s) designated in writing by Tuspark.

3. CLOSING CONDITIONS

3.1 Conditions to Company's Obligations to Effect its Closing. The obligation of the Company to purchase the Repurchase Shares from Tuspark as contemplated by this Agreement is subject to the satisfaction, on or before the Closing Date, of each of the following conditions, any of which may only be waived in writing by the Company in its sole discretion:

- (a) Tuspark shall have delivered to the Company each of the documents in accordance with Section 2.2 hereof.
- (b) The representations and warranties set forth in Section 4 hereof shall be true and correct as of the Effective Date and the Closing Date.
- (c) Tuspark shall have performed and complied with all agreements required by this Agreement to be performed or complied with by Tuspark.
- (d) All consents, authorizations, orders and approvals of, filings or registrations with and the expiration of all waiting periods imposed by, any third person, including any governmental authority, which are required for or in connection with the execution and delivery by Tuspark of this Agreement and the consummation by Tuspark of the transactions contemplated hereby shall have been obtained or made, in form and substance reasonably satisfactory to the Company, and shall be in full force and effect.
- (e) No action shall have been taken or threatened, and no law shall exist or have been enacted, promulgated or issued or deemed applicable to the transactions contemplated hereby by any governmental authority that would (i) make the consummation of any transactions contemplated hereby illegal or substantially delay the consummation of any material aspect of any transactions contemplated hereby, or (ii) render Tuspark unable to consummate any transactions contemplated hereby.

3.2 Conditions to Tuspark's Obligations to Effect its Closing. The obligation of Tuspark to sell the Repurchase Shares as contemplated by this Agreement is subject to the satisfaction, on or before the Closing Date, of the following conditions, any of which may only be waived in writing by Tuspark in its sole discretion:

(a) All corporate and other actions required to be taken by the Company in connection with the purchase and sale of the Repurchase Shares shall have been completed.

(b) No governmental authority of competent jurisdiction shall have enacted, issued, promulgated, enforced or entered any law (whether temporary, preliminary or permanent) that is in effect and restrains, enjoins, prevents, prohibits or otherwise makes illegal the consummation of the transactions contemplated by this Agreement.

4. REPRESENTATIONS, WARRANTIES AND ACKNOWLEDGEMENTS OF TUSPARK

Tuspark represents, warrants and acknowledges to the Company as of the Effective Date and the Closing Date, as follows:

4.1 Due Authorization. Tuspark is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization, and has all requisite power, authority and capacity, including authorization from its President's Office Meeting (总裁办公会), to enter into this Agreement and to perform its obligations hereunder.

4.2 Title to Tuspark Class B Ordinary Shares. Tuspark is the sole record owner of the Tuspark Class B Ordinary Shares, free and clear of any mortgage, pledge, lien, encumbrance, security interest or charge of any kind, rights of first refusal, conditional sales or other title retention agreements, covenants, conditions or other similar restrictions or other encumbrances of any nature whatsoever.

4.3 Compliance with Other Instruments and Agreements. The execution, delivery and performance of and compliance with this Agreement and the consummation of the transactions contemplated hereby will not (i) result in any violation, breach or default, or be in conflict with or constitute, with or without the passage of time or the giving of notice or both, either a default under any contract to which Tuspark is a party or by which it may be bound, (ii) conflict with or result in a breach or violation in any material respect of any applicable laws or the constitutional documents of Tuspark, or (iii) require any prior consent or approval.

4.4 "Big Person" Representation. Tuspark acknowledges that the Company may possess material information not known to Tuspark as of the Effective Date and the Closing Date. Tuspark agrees that none of the Company, its officers, directors, shareholders (other than Tuspark), agents, employees or representatives shall have any liability to Tuspark with respect to the non-disclosure of any information in their possession relating either directly or indirectly to the Company's financial condition, results of operations, businesses, properties, assets, liabilities, management, projections, appraisals, plans, prospects and other information relating to the Company or the value of the Tuspark Class B Ordinary Shares.

5. COVENANTS, UNDERTAKINGS AND FURTHER ASSURANCES

5.1 Conversion into Class A Ordinary Shares. Tuspark hereby instructs the Company to, and the Company undertakes and agrees to, convert 62,418,897 Tuspark Class B Ordinary Shares into the equal number of Class A ordinary shares, par value US\$0.00001 each, of the Company (the “**Class A Ordinary Shares**”) with immediate effect from the Closing Date (the “**Ordinary Share Conversion**”). Tuspark hereby irrevocably and unconditionally appoints the Company as its sole and exclusive true and lawful proxy and attorney-in-fact, with full power of substitution, to take any action that the Company deems reasonably necessary to effect the Ordinary Share Conversion, including without limitation the preparation, execution and delivery of any documents, and payment of any expenses and fees. The expenses and fees payable in connection with the Ordinary Share Conversion shall be borne by Tuspark. Upon completion of the Ordinary Share Conversion, Tuspark will hold an aggregate of 94,415,771 Class A Ordinary Shares, and the Company agrees to, as soon as practicable and in any event within ninety (90) days after the Effective Date, cooperate with Tuspark to register the Class A Ordinary Shares then held by it with the U.S. Securities and Exchange Commission for the purpose of making such shares eligible for resale on the open market in the form of ADSs.

5.2 Termination of Board Representation Rights. Tuspark’s right to appoint one director and nominate one independent director to the Company’s board of directors (the “**Board**”) pursuant to the Existing Agreement shall automatically and irrevocably terminate immediately upon the completion of the Closing. If any director(s) appointed by Tuspark pursuant to the Existing Agreement is sitting on the Board on or after the Closing Date, Tuspark shall immediately procure such director(s) to resign from the Board or otherwise remove such director(s) from the Board.

5.3 Further Assurances. Each party hereto shall take all actions necessary to perform its obligations and otherwise effect the provisions of this Agreement. No party shall take any actions that would be reasonably expected to interfere, compromise or otherwise delay the transactions contemplated hereby.

6. MISCELLANEOUS

6.1 Governing Law; Arbitration. This Agreement shall be governed by and construed under the laws of Hong Kong, without regard to principles of conflicts of law thereunder. In the event the parties are unable to settle a dispute between them regarding this Agreement, such dispute shall be referred to and finally settled by arbitration in Hong Kong under the auspices of the Hong Kong International Arbitration Centre in accordance with the UNCITRAL Arbitration Rules (“**UNCITRAL Rules**”) then in effect, which rules are deemed to be incorporated by reference into this Section 6.1, subject to the following: (i) the arbitration tribunal shall consist of three (3) arbitrators to be appointed according to the UNCITRAL Rules, and (ii) the language of the arbitration shall be Chinese. The award of the arbitration tribunal shall be final and binding upon the disputing parties, and either party may apply to a court of competent jurisdiction for enforcement of such award. The prevailing party shall be entitled to reasonable attorney’s fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled. Notwithstanding the foregoing, the request by any party for specific performance or preliminary or permanent injunctive relief, whether prohibitive or mandatory, shall not be subject to arbitration and may be adjudicated in any court of competent jurisdiction, and nothing herein shall be construed to limit any party’s ability to seek and obtain such relief in any suit, action or proceeding by delivery of a copy thereof in accordance with the provisions of Section 6.2.

6.2 Notices. All notices, requests and other communications to any party shall be in writing (including facsimile transmission and electronic mail (“**e-mail**”) transmission, so long as a receipt of such e-mail is requested and received) and shall be given,

if to the Company, to:

21Vianet Group, Inc.
Guanjie Building, Southeast 1st Floor
10# Jiuxianqiao East Road
Chaoyang District, Beijing 100016
Attention: Sharon Liu, Chief Financial Officer
Email: liu.xiao@21vianet.com

With a copy (which shall not constitute notice) to:

Cooley LLP
c/o 3501, 35/F, Two Exchange Square
8 Connaught Place
Central, Hong Kong
Attn: Will H. Cai, Esq.
Email: wcai@cooley.com

if to Tuspark, to:

Tuspark Innovation Venture Limited
Address: 北京市海淀区中关村东路1号创新大厦A座15层
Attention: 曾垂兰
E-mail: zengcl@tusholdings.com

6.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto. This Agreement and the rights and obligations therein may not be assigned by any party thereto without the written consent of the other party.

6.4 Entire Agreement. This Agreement constitutes the entire understanding and agreement between the parties hereto with regard to the subjects hereof and thereof; provided, however, that nothing in this Agreement or related agreements shall be deemed to terminate or supersede the provisions of any confidentiality and non-disclosure agreements executed by the parties hereto prior to the date hereof, which agreements shall continue in full force and effect until terminated in accordance with their respective terms.

6.5 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one instrument. facsimile and e-mailed copies of signatures shall be deemed to be originals for purposes of the effectiveness of this Agreement.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement as of the date and year first above written.

COMPANY:

21Vianet Group, Inc.

By: /s/ Sheng Chen

[Signature Page to Share Repurchase Agreement]

IN WITNESS WHEREOF, the parties hereto have caused their respective duly authorized representatives to execute this Agreement as of the date and year first above written.

TUSPARK:

**Tuspark Innovation Venture
Limited**

By: /s/ Chuilan Zeng

[Signature Page to Share Repurchase Agreement]

EXHIBIT B

Irrevocable Director Resignation Letter

21Vianet Group, Inc. (the "Company")
Guanjie Building Southeast 1st Floor
10# Jiuxianqiao East Road,
Chaoyang District, Beijing, 100016
The People's Republic of China
Attention: Board of Directors

March 23, 2021

Ladies and Gentlemen:

I hereby irrevocably and unconditionally resign, effective as of the Closing Date (as such term is defined in the Share Repurchase Agreement dated March 23, 2021 by and between the Company and Tuspark Innovation Venture Limited), from my position as a Director of the Company. My resignation is not the result of any dispute or disagreements with the Company on any matter relating to the Company's operations, policies or practices.

Sincerely yours,

Name: Wenbin Chen

List of Significant Subsidiaries and Principal Consolidated Affiliated Entities*

Significant Subsidiaries	Jurisdiction of Incorporation
21ViaNet Group Limited	Hong Kong
21Vianet Mobile Limited	Hong Kong
21Vianet Ventures Limited	Hong Kong
Diyixian.com Limited	Hong Kong
Hongkong Fastweb Holdings Co., Limited	Hong Kong
Dermot Holdings Limited	British Virgin Islands
21Vianet DRP Investment Holdings Limited	Hong Kong
Shihua DC Investment Holdings Limited	Cayman
Shihua DC Investment Holdings 2 Limited	Cayman
EdgeBlue Limited	Cayman
Asia Quality Limited	Cayman
21ViaNet@Xian Holding Limited	Cayman
21Vianet DRP Daxing Private Limited	Cayman
Shihua DC Investment SH1 Limited	Cayman
21Vianet Data Center Co., Ltd.	PRC
21Vianet Anhui Suzhou Technology Co., Ltd.	PRC
Joytone Infotech Co., Ltd.	PRC
21Vianet (Foshan) Technology Co., Ltd.	PRC
21Vianet (Xi'an) Technology Co., Ltd.	PRC
Abitcool (China) Broadband Inc.	PRC
21Vianet Hangzhou Information Technology Co., Ltd.	PRC
21Vianet Zhuhai Financial Leasing Co., Ltd.	PRC
Foshan Zhuoyi Intelligence Data Co., Ltd.	PRC
Shenzhen Diyixian Telecommunication Co., Ltd.	PRC
Beijing Hongyuan Network Technology Co., Ltd.	PRC
Shanghai Waigaoqiao Free Trade Zone Hongming Logistics Co., Ltd.	PRC
Shanghai Edge Connect Technology Co., Ltd.	PRC
Principal Consolidated Affiliated Entities	
Beijing Yiyun Network Technology Co., Ltd. (previously known as Beijing aBitCool Network Technology Co., Ltd.)	PRC
Beijing iJoy Information Technology Co., Ltd.	PRC
Shanghai iJoy Information Technology Co., Ltd.	PRC
WiFire Network Technology (Beijing) Co., Ltd.	PRC
Beijing 21Vianet Broad Band Data Center Co., Ltd.	PRC
Beijing Yilong Xinda Technology Co., Ltd.	PRC
Langfang Xunchi Computer Data Processing Co., Ltd.	PRC
Shanghai Blue Cloud Technology Co., Ltd.	PRC
21Vianet (Xi'an) Information Outsourcing Industry Park Services Co., Ltd	PRC
Beijing Yichengtaihe Investment Co., Ltd.	PRC
Guangzhou Lianyun Big Data Co., Ltd.	PRC
Beijing Xianghu Yunlian technology Co., Ltd.	PRC
Shanghai Hujiang Songlian Technology Co., Ltd.	PRC
Beijing Shuhai Hulian technology Co., Ltd.	PRC
Nantong Chenghong Cloud Computing Co., Ltd.	PRC
Shanghai Zhiyan Yunwei Technology Co., Ltd.	PRC

* Other entities of 21Vianet Group, Inc. have been omitted from this list since, considered in the aggregate as a single entity, they would not constitute a significant subsidiary.

**Certification by the Principal Executive Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Samuel Yuan-Ching Shen, certify that:

1. I have reviewed this annual report on Form 20-F of 21Vianet Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 28, 2021

By: /s/ Samuel Yuan-Ching Shen

Name: Samuel Yuan-Ching Shen

Title: Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Sharon Xiao Liu, certify that:

1. I have reviewed this annual report on Form 20-F of 21Vianet Group, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;
4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 28, 2021

By: /s/ Sharon Xiao Liu

Name: Sharon Xiao Liu

Title: Chief Financial Officer

**Certification by the Principal Executive Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of Vianet Group, Inc. (the "Company") on Form 20-F for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Samuel Yuan-Ching Shen, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2021

By: /s/ Samuel Yuan-Ching Shen
Name: Samuel Yuan-Ching Shen
Title: Chief Executive Officer

**Certification by the Principal Financial Officer
Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002**

In connection with the Annual Report of 21Vianet Group, Inc. (the "Company") on Form 20-F for the year ended December 31, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sharon Xiao Liu, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 28, 2021

By: /s/ Sharon Xiao Liu
Name: Sharon Xiao Liu
Title: Chief Financial Officer

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in the following Registration Statements of 21Vianet Group, Inc.:

- i) Form S-8 No. 333-177273, pertaining to the 2010 Share Incentive Plan;
- ii) Form S-8 No. 333-187695, pertaining to the 2010 Share Incentive Plan, as amended;
- iii) Form S-8 No. 333-197495, pertaining to the 2014 Share Incentive Plan;
- iv) Form S-8 No. 333-208121, pertaining to the 2014 Share Incentive Plan, as amended;
- v) Form S-8 No. 333-222521, pertaining to the 2014 Share Incentive Plan, as amended;
- vi) Form S-8 No. 333-251568, pertaining to the 2020 Share Incentive Plan; and
- vii) Form F-3 No. 333-240044.

of our reports dated April 28, 2021, with respect to the consolidated financial statements of 21Vianet Group, Inc. and the effectiveness of internal control over financial reporting of 21Vianet Group, Inc., included in this Annual Report (Form 20-F) for the year ended December 31, 2020.

/s/ Ernst & Young Hua Ming LLP

Shanghai, People's Republic of China

April 28, 2021

Consent of Han Kun Law Offices

To: 21Vianet Group, Inc.

Guanjie Building Southeast 1st Floor, 10# Jiuxianqiao East Road
Chaoyang District, Beijing 100016
the People's Republic of China

Date: April 28, 2021

Dear Sirs,

We consent to the reference to our firm under the headings “Item 3.D—Risk Factors,” “Item 4.B—Business Overview—Regulation,” “Item 4.C—Organizational Structure—Contractual Arrangements with Our Variable Interest Entities and Their Shareholders” and “Item 5.A—Operating Results” in 21Vianet Group, Inc.’s Annual Report on Form 20-F for the year ended December 31, 2020, which will be filed with the Securities and Exchange Commission (the “SEC”), and further consent to the incorporation by reference of the summaries of our opinions under these captions into the registration statement on Form S-8 (File No. 333-177273) pertaining to 21Vianet Group, Inc.’s 2010 Share Incentive Plan, the registration statement on Form S-8 (File No. 333-187695) pertaining to 21Vianet Group, Inc.’s 2010 Share Incentive Plan, as amended, the registration statement on Form S-8 (File No. 333-197495) pertaining to 21Vianet Group, Inc.’s 2014 Share Incentive Plan, the registration statement on Form S-8 (File No. 333-208121) pertaining to 21Vianet Group, Inc.’s 2014 Share Incentive Plan, as amended, the registration statement on Form S-8 (File No. 333-222521) pertaining to 21Vianet Group, Inc.’s 2014 Share Incentive Plan, and Form S-8 (File No. 333-251568) pertaining to the 2020 Share Incentive Plan. We also consent to the filing with the SEC of this consent letter as an exhibit to the Annual Report on Form 20-F for the year ended December 31, 2020.

Yours faithfully,

/s/ Han Kun Law Offices
Han Kun Law Offices
