CHINA UNICOM (HONG KONG) Ltd
Form 20-F
April 20, 2018
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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(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, 2017

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 1-15028

CHINA UNICOM (HONG KONG) LIMITED

(Exact Name of Registrant as Specified in Its Charter)

N/A	Hong Kong
(Translation of Registrant s Name Into English)	(Jurisdiction of Incorporation or Organization)

75th Floor, The Center

99 Queen s Road Central

Hong Kong

(Address of Principal Executive Offices)

Yung Shun Loy Jacky

Telephone: +852 2121 3220

Facsimile: +852 2121 3232

75th Floor, The Center

99 Queen s Road Central

Hong Kong

(Name, Telephone, E-mail and/or Facsimile Number and Address of Company Contact person)

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

Title of Each Class	Name of Each Exchange On Which Registered
Ordinary shares	The New York Stock Exchange, Inc.*

* Not for trading, but only in connection with the listing on The New York Stock Exchange, Inc. of American depositary shares, or ADSs, each representing 10 ordinary 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.

As of December 31, 2017, 30,598,124,345 ordinary shares were issued and outstanding.

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 (§232.405 of this chapter) of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post 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 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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Note Regarding Forward-Looking Statements

This annual report contains certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Such forward-looking statements may include, without limitation, statements relating to (i) our plans and strategies and our ability to successfully execute these plans and strategies, including those in connection with our mergers and acquisitions and capital expenditures; (ii) our plans for network expansion, including those in connection with the build-out of our mobile services and network infrastructure; (iii) our competitive position, including our ability to upgrade and expand existing networks and increase network efficiency, to improve existing services and offer new services, to develop new technological applications and to leverage our position as an integrated telecommunications operator and expand into new services and markets; (iv) our future business condition, including our future financial results, cash flows, financing plans and dividends; (v) the future growth of market demand of, and opportunities for, our new and existing products and services; and (vi) future regulatory and other developments in the PRC telecommunications industry.

The words anticipate , believe , could , estimate , intend , may , seek , will and similar expressions, as they r intended to identify certain of these forward-looking statements. We do not intend to update any of these forward-looking statements and are under no obligation to do so.

The forward-looking statements contained in this annual report are, by their nature, subject to significant risks and uncertainties. In addition, these forward-looking statements reflect our current views with respect to future events and are not a guarantee of our future performance. Actual results may differ materially from those expressed or implied in the forward-looking statements as a result of a number of factors, including, without limitation:

- our ability to effectively sustain our growth and to achieve or enhance profitability;

- changes in the regulatory regime and policies for the PRC telecommunications industry, including without limitation, changes in the regulatory and tariff policies of the State Council of the PRC, or the State Council, the Ministry of Industry and Information Technology, or the MIIT, the State-owned Assets Supervision and Administration Commission, or the SASAC, and other relevant government authorities of the PRC;

- changes in the PRC telecommunications industry resulting from the issuance of licenses for telecommunications services by the central government of the PRC;

- changes in telecommunications and related technologies and applications based on such technologies, including testing and monetization of future generations of mobile technologies;

- the level of demand for telecommunications services, in particular, the fourth generation mobile telecommunications, or 4G, services;

competitive forces from more liberalized markets and our ability to retain market share in the face of competition from existing telecommunications companies and potential new market entrants;

effects of restructuring and integration (if any) in the PRC telecommunications industry and any cooperation among the PRC telecommunications operators;

the availability, terms and deployment of capital and the impact of regulatory and competitive developments on capital outlays;

changes in the assumptions upon which we have prepared our projected financial information and capital expenditure plans;

costs and benefits from our investment in and arrangements with the China Tower Corporation Limited, or the Tower Company (formerly known as China Communications Facilities Services Corporation Limited);

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results and effects of any investigation by the relevant PRC regulatory authorities overseeing State-owned enterprises and their directors, officers and employees; and

changes in the political, economic, legal, tax and social conditions in China, including the PRC Government s policies and initiatives with respect to foreign exchange policies, foreign investment activities and policies, entry by foreign companies into the Chinese telecommunications market and structural changes in the PRC telecommunications industry.

Please also see D. Risk Factors under Item 3.

Certain Definitions and Interpretations

As used in this annual report, references to we , us , our , the Company , our company and Unicom are to China (Hong Kong) Limited (formerly known as China Unicom Limited). Unless the context otherwise requires, these references include all of our subsidiaries. In respect of any time prior to our incorporation, references to we , us , our and Unicom are to the telecommunications businesses in which our predecessors were engaged and which were subsequently assumed by us. All references to Unicom Group are to China United Network Communications Group Company Limited (formerly known as China United Telecommunications Corporation), our indirect controlling shareholder. Unless the context otherwise requires, these references include all of Unicom Group s subsidiaries, including us and our subsidiaries.

All references to China Netcom are to China Netcom Group Corporation (Hong Kong) Limited, which merged with us in October 2008, and, as the context may require, its subsidiaries. References to Netcom Group mean China Network Communications Group Corporation, which merged with, and was absorbed by, Unicom Group in January 2009 and, as the context may require, its subsidiaries, other than us and our subsidiaries.

As used in this annual report:

references to China or PRC mean the People s Republic of China, excluding, for purposes of this annual report, Hong Kong, Macau and Taiwan, and references to the central government or the PRC Government mean the central government of the PRC. Certain statistical information set forth in this annual report on Form 20-F relating to China is taken or derived from various publicly available government publications that have not been prepared or independently verified by us, and such statistical information may not be consistent with other statistical information from other sources within or outside China;

references to our fixed-line northern service region mean the 10 municipalities, provinces and region where we operate fixed-line services in northern China, consisting of Beijing and Tianjin Municipalities, and Hebei, Henan, Shandong, Liaoning, Heilongjiang, Jilin, and Shanxi Provinces, and the Inner Mongolia Autonomous Region;

references to Hong Kong Stock Exchange or HKSE mean The Stock Exchange of Hong Kong Limited, and references to NYSE or New York Stock Exchange mean The New York Stock Exchange, Inc.; and

references to Renminbi or RMB are to the currency of the PRC, references to U.S. dollars or US$ ar
to the currency of the United States of America, references to HK dollars or HK$ are to the currency of
the Hong Kong Special Administrative Region of the PRC and references to Euro are to the currency
of the eurozone (19 of the 28 member states of the European Union).

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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

The following tables present selected historical financial data of our company as of and for the years ended December 31, 2013, 2014, 2015, 2016 and 2017. Except for amounts presented in U.S. dollars, the selected historical consolidated income statement data (other than ADS data) for the years ended December 31, 2015, 2016 and 2017 and the consolidated statement of financial position data as of December 31, 2016 and 2017 set forth below should be read in conjunction with, and are qualified in their entirety by reference to, our audited consolidated financial statements, including the related notes, included elsewhere in this annual report on Form 20-F. The selected historical consolidated income statement data (other than ADS data) for the years ended December 31, 2013 and 2014 and the consolidated statement of financial position data as of December 31, 2013, 2014 and 2015 set forth below should be read in conjunction with and are qualified in their entirety by reference to our audited consolidated financial statements that are included in our previous annual reports on Form 20-F. Our consolidated financial statements as of and for the years ended December 31, 2013, 2014, 2015, 2016 and 2017 have been prepared and presented in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board.

In October 2015, we, through our wholly own subsidiaries, China United Network Communications Corporation Limited, or CUCL, and Unicom New Horizon Telecommunications Company Limited, or Unicom New Horizon, completed the disposal of certain of our telecommunications towers and related assets to the Tower Company. See A. History and Development of the Company Establishment of the Tower Company and the Disposal of Telecommunications Towers under Item 4. As we own 28.1% of the share capital of the Tower Company, we recognized at the completion 71.9% of the gains on such disposal, with the remaining amount of such gain amortized over the remaining useful life of the transferred assets.

As our business continues to evolve, we have been engaged in further integration of our mobile services, fixed-line services and other services, including offering more bundled service packages across mobile and fixed-line services. As such, in 2017, we began presenting the breakdown of service revenue on an integrated basis as revenue from voice usage and monthly fees, broadband and mobile data services, data and Internet application services, other value-added services, interconnection fees, leased lines and associated services and other services. The relevant presentation for our service revenue in 2013, 2014, 2015 and 2016 has therefore been reclassified to conform with current year s presentation.

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	As of or for the year ended December 31,					
	2013	**2014**	**2015**	**2016**	**2017**	**2017**
	RMB	**RMB**	**RMB**	**RMB**	**RMB**	**US$(1)**
	(in millions, except for per share data)					
onsolidated Income Statement Data:						
evenue						
otal service revenue(2)	237,519	243,242	232,976	238,033	249,015	38,273
oice usage and monthly fees	86,324	76,486	57,030	47,500	39,154	6,018
roadband and mobile data services	81,913	95,679	105,634	118,209	137,133	21,077
ata and Internet application services	9,835	10,195	12,936	17,782	20,074	3,085
her value-added services	29,111	31,314	27,411	24,187	22,793	3,503
terconnection fees	17,781	16,376	15,514	14,748	14,233	2,188
eased lines and associated services	10,482	11,078	11,484	11,618	12,519	1,924
her services	2,073	2,114	2,967	3,989	3,109	478
les of telecommunications products(2)	57,519	41,439	44,073	36,164	25,814	3,967
otal revenue	**295,038**	**284,681**	**277,049**	**274,197**	**274,829**	**42,240**
otal costs, expenses and others	**(281,324)**	**(268,750)**	**(263,014)**	**(273,413)**	**(272,236)**	**(41,842**
come before income tax	**13,714**	**15,931**	**14,035**	**784**	**2,593**	**398**
come tax expenses	(3,306)	(3,876)	(3,473)	(154)	(743)	(114
et income	**10,408**	**12,055**	**10,562**	**630**	**1,850**	**284**
arnings per share for income attributable to equity areholders during the year						
asic earnings per share(3)	0.44	0.51	0.44	0.03	0.07	0.01
iluted earnings per share(3)	0.43	0.49	0.44	0.03	0.07	0.01
asic earnings per ADS(4)	4.40	5.05	4.41	0.26	0.74	0.11
iluted earnings per ADS(4)	4.31	4.95	4.41	0.26	0.74	0.11
umber of shares outstanding for basic earnings per share(3)	23,658	23,852	23,947	23,947	24,567	24,567
umber of shares outstanding for diluted earnings per share(3)	24,656	24,795	23,947	23,947	24,567	24,567
umber of ADS outstanding for basic earnings per ADS(4)	2,366	2,385	2,395	2,395	2,457	2,457
umber of ADS outstanding for diluted earnings per ADS(4)	2,466	2,480	2,395	2,395	2,457	2,457

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	As of or for the year ended December 31,					
	2013 RMB	**2014 RMB**	**2015 RMB**	**2016 RMB**	**2017 RMB**	**2017 US$[1]**
	(in millions, except for per share data)					
Consolidated Statement of Financial Position Data:						
Cash and cash equivalents and short-term bank deposits and restricted deposits	21,560	25,364	21,957	25,387	38,362	5,896
Property, plant and equipment	431,625	438,321	454,631	451,115	416,596	64,030
Interest in associates		3,037	31,997	32,248	33,233	5,108
Inventories and consumables	5,536	4,378	3,946	2,431	2,239	344
Accounts receivable	14,842	14,671	14,957	13,622	13,964	2,146
Prepayments and other current assets	9,664	10,029	10,864	14,023	13,801	2,121
Financial assets at fair value through other comprehensive income	6,497	5,902	4,852	4,326	4,286	659
Total assets	**529,171**	**545,072**	**610,346**	**614,154**	**571,983**	**87,913**
Accounts payable and accrued liabilities	102,212	120,371	167,396	143,224	125,260	19,252
Short-term bank loans	94,422	91,503	83,852	76,994	22,500	3,458
Commercial papers	35,000	9,979	19,945	35,958	8,991	1,382
Current portion of long-term bank loans	48	45	84	161	410	63
Current portion of other obligations	2,672	2,698	2,797	3,141	2,987	459
Current portion of corporate bonds				2,000		
Current portion of promissory notes			2,499	18,976	17,960	2,761
Long-term bank loans	481	420	1,748	4,495	3,473	534
Promissory notes		21,460	36,928	17,906		
Corporate bonds	2,000	2,000	2,000	17,970	17,981	2,764
Taxes payable	2,634	1,466	3,163	732	1,121	172
Total liabilities	**310,272**	**317,531**	**379,130**	**386,472**	**267,636**	**41,136**
Equity attributable to equity shareholders of the Company	218,899	227,541	231,216	227,407	304,050	46,731
Share capital[5]	2,328	179,101	179,102	179,102	254,056	39,048
Non-controlling interests				275	297	46
Total equity	218,899	227,541	231,216	227,682	304,347	46,777

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	As of or for the year ended December 31,					
	2013	**2014**	**2015**	**2016**	**2017**	**2017**
	RMB	**RMB**	**RMB**	**RMB**	**RMB**	**US$(1)**
	(in millions, except for per share data)					
Other Financial Data:						
Net cash inflow from operating activities	78,482	88,094	84,301	74,593	85,054	13,072
Net cash outflow from investing activities	(77,110)	(75,319)	(91,354)	(95,749)	(47,336)	(7,275)
Net cash inflow/(outflow) from financing activities	1,926	(8,973)	3,427	22,877	(28,414)	(4,367)
Net increase/(decrease) in cash and cash equivalents	**3,298**	**3,802**	**(3,626)**	**1,721**	**9,304**	**1,430**
Dividend declared per share	**0.16**	**0.20**	**0.17**		0.052	0.008

(1) The translation of RMB into U.S. dollars has been made at the rate of RMB6.5063 to US$1.00, representing the exchange rate as set forth in the H.10 statistical release of the Federal Reserve Board on December 29, 2017. The translations are solely for the convenience of the reader.

(2) Revenue from sales of products associated with the ICT business, which was previously recorded as part of the fixed-line service revenue, has been reclassified as revenue from sales of telecommunications products to better reflect the commercial nature of the transactions. The related figures for the years ended December 31, 2013, 2014, 2015 and 2016 have been reclassified on the same basis.

(3) See Note 14 to our consolidated financial statements included elsewhere in this annual report on Form 20-F on how basic and diluted earnings per share are calculated under IFRS.

(4) Earnings per ADS is calculated by multiplying earnings per share by 10, which is the number of shares represented by each ADS.

(5) The significant increase in our share capital in 2014 is primarily caused by the conversion of the amounts standing to the credit of the share premium account and the capital redemption reserve into our share capital due to the implementation of the no-par value regime under the Hong Kong Companies Ordinance (Cap. 622), which became effective on March 3, 2014. See Note 28 to our consolidated financial statements included elsewhere in our annual report on Form 20-F for the fiscal year ended December 31, 2015.

Exchange Rate Information

We publish our consolidated financial statements in Renminbi. Solely for the convenience of the reader, this annual report on Form 20-F contains translations of certain Renminbi and Hong Kong dollar amounts into U.S. dollars at specific rates. The exchange rate refers to the exchange rate as set forth in the H.10 statistical release of the Federal Reserve Board, or the daily exchange rate. Unless otherwise indicated, conversions of Renminbi or Hong Kong dollars into U.S. dollars in this annual report are based on the exchange rate on December 29, 2017 (RMB6.5063 to US$1.00 and HK$7.8128 to US$1.00). These translations should not be construed as representations that the Renminbi or Hong Kong dollar amounts could actually be converted into U.S. dollars at such rates or at all.

The daily exchange rates were RMB6.2725 = US$1.00 and HK$7.8499 = US$1.00, respectively, on April 13, 2018. The following table sets forth the high and low daily exchange rates between Renminbi and U.S. dollars and between Hong Kong dollars and U.S. dollars for each month during the previous six months:

Exchange Rate

	RMB per US$1.00		HK$ per US$1.00	
	High	**Low**	**High**	**Low**
October 2017	6.6533	6.5712	7.8106	7.7996
November 2017	6.6385	6.5967	7.8118	7.7955
December 2017	6.6210	6.5063	7.8228	7.8050
January 2018	6.5263	6.2841	7.8230	7.8161
February 2018	6.3741	6.2649	7.8267	7.8183
March 2018	6.3565	6.2685	7.8486	7.8275
April 2018 (up to April 13, 2018)	6.3045	6.2655	7.8499	7.8482

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The following table sets forth the average exchange rates between Renminbi and U.S. dollars and between Hong Kong dollars and U.S. dollars for each of 2013, 2014, 2015, 2016 and 2017, calculated by averaging the daily exchange rate on the last day of each month during the relevant years.

Average Exchange Rate

	RMB per US$1.00	HK$ per US$1.00
2013	6.1412	7.7565
2014	6.1704	7.7554
2015	6.2869	7.7519
2016	6.6549	7.7618
2017	6.7350	7.7950

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

Risks Relating to Our Business

We face intense competition from other telecommunications operators, including China Mobile and China Telecom, and other companies that provide telecommunications or related services, which may materially and adversely affect our financial condition, results of operations and growth prospects.

The telecommunications industry in China has been evolving. We, along with China Mobile Communications Corporation, or China Mobile, and China Telecommunications Corporation, or China Telecom, are the three full-service telecommunications service providers that operate both fixed-line and mobile telecommunications networks in China. See A. History and Development of the Company Restructurings of the Telecommunications Industry under Item 4. We face intense competition in virtually all aspects of our services, including mobile services, fixed-line voice services, broadband services and data communications services, from China Mobile and China Telecom and expect that this competition will further intensify. In particular, we compete with China Mobile and China Telecom in mobile services. For fixed-line services, we are a leading fixed-line operator in northern China, while China Telecom has a dominant market position in southern China and the MIIT granted to China Mobile the approval for China Mobile to authorize China Mobile Limited to operate the fixed-line telecommunications business in December 2013. In addition, the PRC Government from time to time introduces new policies that may intensify competition among the three telecommunications operators, such as the policies that allow mobile subscribers to switch to the networks of another telecommunications operator with their existing numbers in certain areas in China and the removal by the State Council of the MIIT s approval requirement on the tariff standard of telecommunications services.

We also face increasing competition from other service providers, such as cable television companies and Internet service providers, which compete against our broadband access, voice and messaging services and other services by offering telecommunications or related services. Such competition may further intensify due to recent policies of the PRC Government. In the recent years, the PRC Government has been implementing policies regarding the convergence of television broadcast, telecommunications and Internet access networks, and has introduced a series of policies that encourage privately-owned enterprises to enter the telecommunications industry. For example, in May 2016, the MIIT granted to China Radio and Television Network Co. Ltd. the approval to operate fixed-line broadband business, which has since then intensified and may continue to intensify the competition in this sector, and could have a material adverse effect on our business. In addition, in May 2013, the MIIT issued the pilot program for mobile telecommunications resale business that permit privately-owned enterprises to purchase mobile services from telecommunications operators and provide mobile services to end-customers after repackaging and rebranding. The initial trial period of the pilot program ended on December 31, 2015, but the telecommunications resale business will continue to be governed by the rules of the pilot program before the MIIT issues any further rules. Since December 2013, the MIIT has approved 42 companies to operate such business. See Business Overview Mobile Telecommunications Resale Business under Item 4.

Intensive competition from China Mobile and China Telecom, as well as other companies that provide telecommunications or related services, could lead to slower subscriber growth, lower usage or traffic volume of our telecommunications services, continued price pressure, higher customer acquisition and retention costs and higher labor costs, which may materially and adversely affect our financial condition, results of operations and growth prospects.

Our net income and ARPU of mobile billing subscribers fluctuated in recent years and may decline in the future.

Our net income decreased by 94.0% from RMB10.56 billion in 2015 to RMB0.63 billion in 2016. The significant decrease in 2016 was primarily because (i) we had a one-off net gain in an amount of RMB9.25 billion (before tax) on disposal of telecommunications towers and related assets to the Tower Company in 2015, (ii) our network, operation and support expenses increased by RMB8.86 billion, or 20.9%, from 2015 to 2016, and (iii) our selling and marketing expenses increased by RMB2.68 billion, or 8.4%, from 2015 to 2016. The significant decrease was partially offset by the increase in our total service revenue by RMB5.06 billion, or 2.2%, from 2015 to 2016. See Operating and Financial Review and Prospects Operating Results Year Ended December 31, 2016 Compared to Year Ended December 31, 2015 under Item 5. Some of these factors, such as increases in network, operation and support expenses and selling and marketing expenses may continue in the future, which could continue to have a material adverse effect on our net income in future years. In addition, our average revenue per subscriber per month, or ARPU, of mobile billing subscribers decreased by 3.1% from 2014 to 2015. Although our net income increased by 193.7% from RMB0.63 billion in 2016 to RMB1.85 billion in 2017, and our ARPU of mobile billing subscribers increased by 3.5% from RMB46.4 in 2016 to RMB48.0 in 2017, we cannot guarantee that we will be able to maintain or enhance our profit or increase ARPU of mobile billing subscribers in the future, and failure to do so could have a material adverse effect on our financial condition and results of operations.

The successful development of our mobile services is subject to market demand, consumer acceptance, technological challenges, competition on service fees, terminal subsidies and other marketing expenses, and other uncertainties, and expected benefits from investments in our mobile networks.

Our principal telecommunications services are mobile services, of which 4G services are a critical part. We commercially launched our 4G services in March 2014. We will continue to make investments in our 4G networks in the future, to expand our network coverage and improve our network quality. We may experience various difficulties in the development of our 4G services and other mobile services, including software, network, handset and other technical issues. We cannot assure you that we will be able to do so in a timely fashion or that we will not encounter other difficulties. Moreover, with respect to our mobile business, in particular our 4G services, we cannot assure you that:

- we will be able to gain access to sufficient resources at commercially reasonable terms and conditions for expansion of our mobile networks;

our mobile services will be more popular among potential subscribers than those of our competitors; and

our mobile services will generate an acceptable or commercially viable rate of return.

Any failure or delay in expanding and upgrading our mobile networks, any increase in the associated costs (including the costs and expenses that may be incurred as a result of the changes of our marketing and sales policies) could hinder the recovery of our significant capital investment in mobile services, respectively, which could in turn have a material adverse effect on our financial condition, results of operations and growth prospects. For example, from 2016 to 2017, our network, operation and support expenses increased by RMB3.34 billion, or 6.5%, and, as a percentage of total revenue, increased from 18.7% to 19.8%, primarily due to the increase in operating lease and other service charges payable to the Tower Company with respect to the telecommunications towers and related assets we lease from the Tower Company. If such expenses continue to increase without corresponding increase in the relevant service revenue, our profitability would be adversely affected.

Our business relies on the lease arrangements with the Tower Company as to telecommunications towers and related assets, and we may not be able to achieve the expected benefits from the establishment of the Tower Company and such lease arrangements.

In July 2014, we, China Mobile and China Telecom, the three major telecommunications operators in China, jointly established the Tower Company, which engages primarily in the construction, maintenance and operation of telecommunications towers and other ancillary facilities in China, as well as the provision of maintenance services of base station equipment. In October 2015, the Tower Company acquired all telecommunications towers and related assets from us, China Mobile and China Telecom. In July 2016 and January 2018, we, through our wholly owned subsidiary, CUCL, and the Tower Company entered into a commercial pricing agreement, or the Pricing Agreement, and the supplementary agreement to such Pricing Agreement, or the Supplementary Agreement, respectively, in relation to the leasing of the telecommunications towers and related assets acquired and newly constructed by the Tower Company. See A. History and Development of the Company Establishment of the Tower Company and the Disposal of Telecommunications Towers under Item 4.

The main purpose for us to participate in the establishment of the Tower Company and lease telecommunications towers and related assets from the Tower Company is to enhance our telecommunications network coverage and capacity, realize long-term investment returns through the equity investment in the Tower Company and reduce capital expenditure as we ceased to construct telecommunications towers on our own. However, there is no assurance that these benefits will be achieved in the near future, or at all. Our network, operation and support expenses increased by RMB8.86 billion, or 20.9%, from RMB42.31 billion in 2015 to RMB51.17 billion in 2016, and further increased by RMB3.34 billion, or 6.5%, to RMB54.51 billion in 2017. As a percentage of total revenue, such expenses increased from 15.3% in 2015 to 18.7% in 2016, and further increased to 19.8% in 2017. The increase was largely as a result of the increase in operating lease and other service charges payable to the Tower Company, which may be larger than the depreciation and amortization expenses and maintenance costs we would have incurred if we own and operate our own telecommunications towers and related assets. In addition, the Pricing Agreement, as supplemented and amended from time to time, provides for a pricing adjustment mechanism, which could result in a significant adjustment of the fees charged to us by the Tower Company in the future if there is any significant fluctuation in steel price, inflation and condition of the real estate market. Furthermore, since it is expected that, in principle, none of us, China Mobile or China Telecom will construct any telecommunications towers in the future, our business will rely on the lease arrangements with the Tower Company. Although we could renegotiate with the Tower Company on the lease fees based on the then current economic condition and benefit-cost analysis upon the expiry of the initial five-year lease term, we cannot assure you that such negotiation would result in the terms of the new lease commercially favorable to us. Moreover, as we do not control the Tower Company, the Tower Company may not act in the best interest of us. As such, we cannot assure you that our investment in the Tower Company, our sale of telecommunications towers and related assets and our lease of such assets from the Tower Company will achieve the anticipated results in the near future as expected, or at all.

Further, during 2016 and 2017, the SEC issued comment letters relating to the Company s previously filed annual reports on Form 20-F for the fiscal years ended December 31, 2015 and 2016. The comment letters inquired mainly about the background, execution process, and accounting treatment in relation to the Company s disposal and lease of telecommunications towers and related assets with the Tower Company. The Company responded to these comment letters and was notified by the SEC in its letter dated October 20, 2017 that it has completed its review of such previously filed annual reports of the Company. The SEC did not in its October 2017 letter require us to make any amendment to those previously filed annual reports. However, there is no assurance that the SEC will not issue comment letters on our disclosure relating to these and future transactions with the Tower Company.

The industry trends of mobile service substitution and mobile service migration from older generations to new generations may continue to have a material adverse effect on our older generations mobile services and fixed-line voice services, which may adversely affect our financial condition, results of operations and growth prospects.

As the technology of mobile services evolves, the trend of mobile service migration from older generations to new generations would generally have an adverse effect on our older generations services, including a growth slowdown or a decrease in the number of subscribers and usage. In particular, our 2G services and 3G services, have been adversely affected by the trend of migration to 4G services, which resulted in a decrease in our subscribers and revenue from our non-4G mobile services in 2017. Although such trend of migration would increase our 4G service subscribers and revenue, we cannot guarantee that such increase can always fully offset the negative impact. Likewise, we, consistent with the industry trend, have experienced a decline in our fixed-line voice services for years, which is expected to continue due to the trend of mobile service substitution for fixed-line services.

Furthermore, our voice services have also been adversely affected by the trend of mobile service migration from voice services to non-voice services. In particular, primarily due to the increasing popularity of Over-the-Top services and products, such as instant messaging application, voice-over-Internet-protocol, or VoIP, services, and video-chat software, we have experienced the trend of our mobile subscribers substituting voice services for non-voice services, such as mobile data services, which, among other factors, resulted in a decline in our revenue from voice services. Although increasing popularity of Over-the-Top services and products, among other factors, has contributed to the increase in the usage of mobile data and, thus, has a positive effect on our revenue from non-voice services, it may not be able to fully offset the negative impact on our voice services.

We have been taking various measures to attract our older generations mobile service subscribers to migrate to our 4G networks and those of our voice services to migrate to our non-voice services. Such measures include improvement of our products and services, acceleration of the construction and enhancement of coverage of our 4G networks, offering bundled services that integrate fixed-line and mobile services as well as strengthening our data traffic operation capability to encourage data usage. If these efforts are not successful, our financial condition, results of operations and growth prospects could be adversely affected.

Competition from foreign-invested operators may further increase the competition for employees, exacerbate price competition and increase our operating expenses, thereby adversely affecting our financial condition, results of operations and growth prospects.

As a result of China s accession to the World Trade Organization, or WTO, in December 2001 and the adoption of the Regulations on the Administration of Foreign-Invested Telecommunications Enterprises in January 2002, which implement China s commitments to the WTO, the PRC Government has agreed to gradually liberalize the various segments and regions of the telecommunications market in China to foreign investors. Currently, foreign investors are permitted to own up to 49% of joint ventures that offer basic telecommunications services without any geographic restrictions in China and up to 50% of joint ventures that offer value-added telecommunications services without any geographic restrictions in China. More foreign-invested operators may enter China s telecommunications market as a result of this liberalization. They may have greater financial, managerial and technical resources and more expertise in network management and sales and marketing than we do.

Increased competition from foreign-invested operators into the PRC telecommunications market may further increase the competition for skilled and experienced employees, exacerbate price competition and increase our customer acquisition costs and other operating expenses, and thereby adversely affect our financial condition, results of operations and growth prospects.

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Failure to respond to technological and industry developments in a timely and effective manner or failure to continually optimize, expand and upgrade our networks and infrastructure could materially and adversely affect our competitive position and hinder our growth.

The telecommunications industry in China and elsewhere in the world has been experiencing rapid and significant changes in the diversity and sophistication of the technologies and services offered. Such changes may render our existing services or technologies inadequate or obsolete. We cannot assure you that we will be able to respond to technological and industry developments in a timely and cost-effective manner, or at all. Our inability to respond successfully to technological or industry developments may adversely affect our financial condition, results of operations and growth prospects. Furthermore, if the new technologies adopted by us do not perform as expected, or if we are unable to effectively deliver new services based on these technologies in a commercially viable manner, our revenue growth may decline and our competitive position may be adversely affected.

For example, the fifth generation mobile telecommunications, or 5G, technology and services are key components of our business strategy to compete in the mobile services market of China. In connection with 5G technology and services, we have been engaged in formulating technical standards, testing technology and network as well as planning towards commercialization. However, the successful development of 5G technology and services may be adversely affected by factors that are beyond our control, such as the timing of obtaining 5G license and the frequency bands allocated to 5G services. In addition, there is no assurance that we will be able to roll out 5G services in a timely and cost-effective manner, or at all. Failure to respond to these uncertainties could disadvantage us from competing successfully in the mobile services market of China, and materially and adversely affect our revenue growth.

In addition, the growth of our business depends on whether we are able to continue to optimize the capacity, expand the coverage and improve the quality of, and upgrade our existing networks and infrastructure in a timely and effective manner. Our ability to expand and upgrade our networks and infrastructure is subject to a number of uncertainties, including our ability to achieve the following on a timely basis and on acceptable terms:

- manage technology migration in an effective manner, including effectively promoting the evolution of our network towards software-defined networking and network function virtualization, or SDN and NFV;

- obtain adequate financing;

- obtain relevant government licenses, permits and approvals;

- obtain adequate network equipment and software;

- retain experienced management and technical personnel;

- obtain sufficient spectrum frequencies, network numbers and other telecommunications resources controlled by the PRC Government;

- gain access to the sites for network construction or upgrade; and

- enter into interconnection and other arrangements with other operators.

If we are not able to timely and effectively overcome the uncertainties and difficulties we may encounter in expanding and upgrading our networks and infrastructure, our competitive position, financial condition, results of operations and growth prospects may be materially and adversely affected.

Because we rely on arrangements with other telecommunications operators, changes to the terms or availability of these arrangements may result in disruptions to our services and operations and may result in customer dissatisfaction and materially and adversely affect our financial condition, results of operations and growth prospects.

Our ability to provide telecommunications services depends upon arrangements with other telecommunications operators. In particular, interconnection is necessary to complete all calls between our subscribers and subscribers of other telecommunications operators. We, either through ourselves or through Unicom Group, have established interconnection and transmission line leasing arrangements with other telecommunications operators, including our parent company, as required to conduct our current business. Any disruption to our interconnection with the networks of those operators or other international telecommunications operators with which we interconnect may affect our operations, service quality and customer satisfaction, thus adversely affecting our business. Furthermore, we are generally not entitled to collect indirect or consequential damages resulting from disruptions in the networks with which we are interconnected. Any disruption in existing interconnection arrangements and leased line arrangements or any significant change of their terms, as a result of natural events or accidents or for regulatory, technical, competitive or other reasons, may lead to temporary service interruptions and increased costs that can seriously jeopardize our operations and adversely affect our financial condition, results of operations and growth prospects. Difficulties in executing alternative arrangements with other operators on a timely basis and on acceptable terms, including the inability to promptly establish additional interconnection links or increase interconnection bandwidths as required, could also materially and adversely affect our financial condition, results of operations and growth prospects.

Interruptions to our networks and operating systems or to those with which we interconnect, including those caused by natural disaster and service maintenance and upgrades, may disrupt our services and operations and may result in customer dissatisfaction and materially and adversely affect our financial condition, results of operations and growth prospects.

Our network infrastructure and the networks with which we interconnect are vulnerable to potential damages or interruptions from floods, wind, storms, fires, power loss, severed cables, acts of terrorism and similar events. The occurrence of a natural disaster or other unanticipated problems at our facilities or any other failure of our networks or systems, or the networks to which we are interconnected, may result in consequential interruptions in services across our telecommunications infrastructure. In 2017, certain areas of China suffered from natural disasters including typhoons, floods, mountain torrents, mudslides and landslides, and these natural disasters caused extensive damage to our network equipment, including our base stations and optical fiber networks, in the affected areas. As a result, we experienced service stoppage and other disruptions in our operations in those areas and also sustained economic losses. Any future natural disasters may, among other things, significantly disrupt our ability to adequately staff our business, and may generally disrupt our services and operations. Moreover, our networks and systems and the networks with which we interconnect also require regular maintenance and upgrades. Such maintenance and upgrades may cause service disruptions. Network or system failures, as well as abrupt high traffic volumes, may also affect the quality of our services and cause temporary service interruptions. Any such future occurrence may result in customer dissatisfaction and materially and adversely affect our financial condition, results of operations and growth prospects.

If we are unable to fund our capital expenditure and debt service requirements, our financial condition, results of operations and growth prospects will be materially and adversely affected.

We transferred our then-owned telecommunications towers and related assets to the Tower Company in October 2015, and since then have ceased to construct, maintain or operate telecommunications towers and we expect that our capital expenditure will decrease significantly as a result. However, we continue to have capital expenditure requirements for our mobile networks, broadband and data networks, telecommunications infrastructure and transmission networks, and debt service requirements necessary to implement our business strategies. We incurred capital expenditure of RMB42.13 billion in 2017. To the extent that these capital expenditures exceed our cash resources, we will be required to seek additional debt or equity financing. We cannot assure you that we will be able to obtain future financing on a timely basis and/or on acceptable terms. Even if we obtain such financing, our financing cost may increase significantly as a result of additional financing or higher interest rate. See Liquidity and Capital Resources under Item 5. Our failure to do so may adversely affect our financial condition, results of operations and growth prospects. Our ability to obtain acceptable financing at any time may depend on a number of factors, including, among others:

- our financial condition and results of operations;
- our creditworthiness and relationship with lenders;

changes in credit policies, other government or banking policies that may affect credit markets in China;

conditions of the economy and the telecommunications industry in China;

conditions in relevant financial markets in China and elsewhere in the world; and

our ability to obtain any required government approvals for our financings.

Adjustments in our charges for telecommunications services and products may have a material adverse effect on our financial condition and results of operations.

From time to time, we adjust our charges for telecommunications services and products by taking into account various factors, including the market conditions and policies of the PRC Government, and such adjustments may have a material adverse effect on our revenue and profitability. For example, in May 2015, the PRC government introduced a policy of increasing network speed and reducing tariffs. Since May 2015, in order to expand our customer base as well as to comply with the relevant policies, we have, in addition to continuing increasing our network speed, offered discounts to our tariff plans. In October 2015, we launched a mobile data carry-over programs, which allow subscribers of our data plans with pre-determined monthly data limit to carry over their unused data to the following month with no extra charge. Furthermore, in light of the governmental policy of achieving coordinated development of Beijing Municipality, Tianjin Municipality and Hebei Province issued in April 2015 by the PRC Government, we cancelled the long-distance and roaming tariffs for voice services within the tariff zones of Beijing Municipality, Tianjin Municipality and Hebei Province so that our customers are only charged with local usage tariff for our voice services provided within the tariff zones. In March 2017, we announced that we plan to substantially reduce Internet private line access tariff for small and medium enterprises customers and international long-distance call tariff. Additionally, in response to the PRC Government s speed upgrade and tariff reduction policy, we ceased charging mobile handset subscribers domestic long-distance and roaming fee since September 2017, which, among other factors, contributed to the decrease in our voice usage and monthly fees by 17.6% from RMB47.50 billion in 2016 to RMB39.15 billion in 2017. Moreover, in the Government Work Report made in the 13th National People s Congress of the People s Republic of China on March 5, 2018, the State Council published certain guidance relating to this policy. See B. Business Overview Regulatory and Related Matters Tariff Setting under Item 4. To the extent we adjust our tariff in response to the guidance to further implement the speed upgrade and tariff reduction policy, our results of operations would be adversely affected.

Additionally, we also engage in the pilot program for mobile telecommunications resale business, in which privately-owned enterprises purchase mobile services from China Mobile, China Telecom or us at wholesale price and resell to end-customers after repackaging and rebranding. In January 2016, the MIIT issued the Guidance on the Wholesale Price Adjustments of Mobile Telecommunications Resale Business ( ), pursuant to w that the wholesale price for resale of mobile telecommunications services should be lower than the per unit price (or package price) for similar businesses of the mobile networks operators. Pursuant to such guidance, we have adjusted our wholesale price for resale of mobile telecommunications services from time to time, which had and may continue to have an adverse effect on our revenue and profitability from such services.

These adjustments in our charges for telecommunications services and products that have been or will be made by us have resulted in or will have an adverse effect on our operating revenue and profitability. Any future governmental policies in China or market conditions that require us to further reduce our charges for telecommunications services and products could materially and adversely affect our financial condition and results of operations.

We face risks associated with our Internet-related services.

We have been proactively exploring and developing certain innovative and Internet-related services, including mobile Internet, digital services and big data services. We face a number of risks in providing these services.

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Our network and systems and those of our suppliers, vendors and other service providers may be vulnerable to cyber-attacks, such as unauthorized access, computer viruses and other disruptive problems. As a telecommunications operator, we are considered a critical information infrastructure operator under the relevant PRC law and therefore are subject to the regulations designed to protect critical information infrastructure. For example, under the Cybersecurity Law of the PRC, or the Cybersecurity Law, we are required to perform a security assessment when transferring personal information and important data overseas if such personal information and important data are collected from the operation in China. We also devote significant resources to network security, data security and other security measures to protect our systems and data. To ensure the adequacy and effectiveness of our cybersecurity policies and procedures, we review and assess these policies and procedures regularly, and we review and assess the security and integrity of the components of our network annually or bi-annually, depending on how critical such components are. However, we cannot assure you that the security measures, policies and procedures we have implemented will not be circumvented or otherwise can fully protect the integrity of our network, including our mobile network. The inability to operate our networks and systems or those of our suppliers, vendors and other service providers as a result of cyber-attacks, even for a limited period of time, may result in significant expenses to us and/or a loss of market share to other telecommunications operators. Unauthorized access could jeopardize the security of confidential information stored in our customers computer systems and mobile phone systems and may subject us to litigation, liabilities for information loss and/or reputational damage. Eliminating computer viruses and other security problems may also require interruptions, delays or suspension of our services, reduce our customer satisfaction and cause us to incur costs.

As of April 13, 2018, we have not been subject to any material cyber-attacks or incidents, individually or in the aggregate, that had or would expected to have a material adverse effect on our business and operations, nor had we been involved in any legal proceedings or regulatory investigations related thereto. However, there is no assurance that we will not experience them in the future. Additionally, as it is currently difficult to maintain sufficient insurance coverage relating to cybersecurity risks and incidents at commercially reasonable rates and terms, if we fall victim to any material cyber-attacks or involve in any legal proceedings or regulatory investigations relating to cybersecurity incidents, we may be subject to significant financial losses and legal liabilities, which could materially and adversely affect our results of operations, financial condition, prospects and reputation.

Furthermore, personal privacy, information security, and data protection are increasingly significant issues in China. The regulatory framework governing the collection, processing, storage and use of business information and personal data is rapidly evolving. For example, the Cybersecurity Law came into force on June 1, 2017, which sets forth the general framework regulating network products, equipment and services, as well as the operation and maintenance of information networks, the protection of personal data, and the supervision and administration of cybersecurity in China. The new regulatory requirements could increase our cost of compliance and associated risk. Any failure or perceived failure to comply with applicable privacy, security, or data protection laws or regulations may adversely affect our business.

In addition, because we provide connections to the Internet and host websites for customers and develop Internet content and applications, we may be perceived as being associated with the content carried over our network or displayed on websites that we host. We cannot and do not screen all of such content and may face litigations due to a perceived association with such content. These types of litigations have been brought against other providers of online services in the past. Regardless of the merits of the litigations, they can be costly to defend, divert management resources and attention, and may damage our reputation.

We are exposed to reputational and legal risks associated with telecommunications fraud carried out on our network.

Telecommunications fraud, in which a person defrauds another by means of telecommunications technologies including SMS, telephone, and Internet, exposes us to reputational and legal risks. If telecommunications fraud is committed on our network, we may be held liable for our failure to fully comply with PRC regulatory requirements to prevent telecommunications fraud. In September 2016, the Supreme People s Court, the Supreme People s Procuratorate, the Ministry of Public Security, the MIIT, the People s Bank of China and the China Banking Regulatory Commission jointly issued the Notice on the Prevention and Combating of Telecommunications Network Fraud, and, in November 2016, the MIIT issued the Practice Opinions on Further Prevention and Combating Telecommunications Information Fraud, both of which require telecommunications operators to strictly require customers to register under their real names when applying for telecommunications services, which requires us to fully and promptly comply with the requirements on real-name registration. We have implemented various measures to strengthen our management and control over sales and distribution channels, including carrying out the real-name registration system for our customers in accordance with the requirements of government authorities. However, telecommunications fraud may still result in claims being brought against us and may damage our reputation and could have an adverse effect on our business and results of operations.

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Our ultimate controlling shareholder, Unicom Group, can exert influence on us and cause us to make decisions that may not always be in the best interests of us or our other shareholders and may fail to provide services and facilities that we rely on to operate our business.

Unicom Group indirectly controlled an aggregate of approximately 79.9% of our issued share capital as of April 13, 2018 and all of our four executive directors also concurrently served as directors or executive officers of Unicom Group as of the same date. As our ultimate controlling shareholder, subject to our articles of association and applicable laws and regulations, Unicom Group is effectively able to control our management, policies and business by controlling the composition of our board of directors and, in turn, indirectly controlling the selection of our senior management, determining the timing and amount of our dividend payments, approving significant corporate transactions, including mergers and acquisitions, and approving our annual budgets. The interests of Unicom Group as our ultimate controlling shareholder may conflict with our interests or the interests of our other shareholders. As a result, Unicom Group may cause us to enter into transactions or take (or fail to take) other actions or make decisions that may not be in our or our other shareholders best interests.

In addition, our operations depend on a number of services and facilities provided by Unicom Group. For example, Unicom Group provides us with international gateway services, interconnection services, sales agency and collection services and provision of premises. See B. Related Party Transactions under Item 7. The interests of Unicom Group as provider of these services and facilities may conflict with our interests. Failure by Unicom Group to fulfill its obligations under any of these arrangements may have a material adverse effect on our business operations. We currently have limited alternative sources of supply for these services and facilities and, as a result, may have limited ability to negotiate with Unicom Group regarding the terms for providing these services and facilities. Changes in the availability, pricing or quality of these services or facilities may have a material adverse effect on our business and profitability.

The previous internal reorganization of Unicom Group for the A Share offering created a two-step voting mechanism that requires the approval of the minority shareholders of both our Company and China United Network Communications Limited (formerly known as China United Telecommunications Corporation Limited), or the A Share Company, for significant related party transactions between us and Unicom Group.

In October 2002, Unicom Group completed an internal reorganization of its shareholding in our company and the initial public offering in China of its then newly established subsidiary, the A Share Company. As part of this restructuring, a portion of Unicom Group s indirect shareholding in our company was transferred to the A Share Company, whose business is limited to indirectly holding the equity interest of our company without any other direct business operations. A voting mechanism was established to allow public shareholders of the A Share Company to indirectly participate in our shareholders meetings and a two-step voting mechanism was established for the approval of related party transactions. As a result, any significant related party transaction between us or our subsidiaries and Unicom Group or its other subsidiaries will require the separate approval of the independent minority shareholders of both our company and the A Share Company. Related party transactions approved by our independent minority shareholders nevertheless cannot proceed if they are not approved by the independent minority shareholders of the A Share Company. This adds another necessary step of approval process for those transactions. See A. History and Development of the Company Two-Step Voting Arrangements under Item 4.

The benefits that we expect to enjoy relating to the mixed ownership reform of our ultimate controlling shareholder, Unicom Group, are subject to substantial uncertainty.

As part of the PRC government s efforts to reform state-owned enterprises and increase their competitiveness, our ultimate controlling shareholder, Unicom Group, participate in a pilot program on mixed ownership reform of state-owned enterprises, and implemented a plan to diversify its shareholders base, or the Mixed Ownership Reform Plan, by bringing in certain strategic investors, including certain large Internet companies, into the A Share Company, our controlling shareholder. See A. History and Development of the Company Our Relationship with Unicom Group and A. History and Development of the Company The Mixed Ownership Reform under Item 4. The main purpose of the Mixed Ownership Reform Plan is to improve the corporate governance, incentive system and management efficiency of the A Share Company, and create synergies through cooperation with strategic investors. However, as there is substantial uncertainty with respect to our cooperation with strategic investors and the improvement in our incentive system, we cannot assure you that these benefits will be achieved as expected.

Investor confidence and the market prices of our shares and ADSs may be materially and adversely impacted if we are or our independent registered public accounting firm is unable to conclude that our internal control over financial reporting is effective in future years as required by Section 404 of the Sarbanes-Oxley Act of 2002.

We are a public company in the United States that is subject to the Sarbanes-Oxley Act of 2002. Pursuant to the requirements of Section 404 of the Sarbanes-Oxley Act of 2002, we include in this annual report a report of management on our internal control over financial reporting and an attestation report of our independent registered public accounting firm on the effectiveness of our internal control over financial reporting.

Our management conducted an assessment of the effectiveness of our internal control over financial reporting and concluded that our internal control over financial reporting as of December 31, 2017 was effective. The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by our independent registered public accounting firm, as stated in its report. However, we cannot assure you that, in the future, our management will continue to conclude that our internal control over financial reporting is effective. Even if our management concludes that our internal control over financial reporting is effective for future periods, our independent registered public accounting firm may disagree. If our independent registered public accounting firm is not satisfied with our internal control over financial reporting or the level at which our controls are documented, designed, operated, reviewed or evaluated, or if the independent registered public accounting firm interprets the relevant requirements, rules or regulations differently from us, then it may issue an adverse opinion. Any of these possible outcomes in the future could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our consolidated financial statements, which could materially and adversely affect the market prices of our shares and ADSs.

Moreover, internal control over financial reporting may not prevent or detect misstatements because of its inherent limitations, including the possibility of human error, the circumvention or overriding of controls, or fraud. Therefore, even effective internal control over financial reporting can provide only reasonable assurance with respect to the preparation and fair presentation of financial statements. If we fail to maintain the adequacy of our internal control over financial reporting, including through a failure to implement required new or improved controls, or if we experience difficulties in their implementation, our business and operating results could be harmed, we could fail to meet our reporting obligations and there could be a material adverse effect on the market prices of our shares and ADSs.

Certain misconduct or alleged misconduct by our executive officers or employees may adversely impact the Company, including potentially by damaging our reputation, creating litigation risk, and adversely impacting the

trading price of our ordinary shares and ADSs.

We are aware that certain management personnel of the Company and/or our subsidiaries engaged in or are alleged to have engaged in unlawful conduct, including acceptance of bribes. In response to management misconduct, we have taken and will continue to take various measures, including enhancing our employees compliance awareness and taking steps to confirm that our risk management and internal control procedures are robust. However, we cannot be certain that these measures will effectively detect or prevent future employee misconduct. If these measures prove ineffective in detecting or preventing future employee misconduct, among other things our reputation could be harmed, our operations could be disrupted and the trading price of our ordinary shares and ADSs could be adversely impacted.

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Our success depends on the continued services of our senior management team and other qualified employees.

Our continued success and growth depends on our ability to identify, hire, train and retain suitably skilled and qualified employees, including management personnel, with relevant professional skills. The services of our directors and members of senior management are essential to our success and future growth. If there is a loss of a significant number of our directors and senior management, and we are unable to find suitable replacements in a timely manner, our business could be materially and adversely affected. As we have to compete for a limited supply of qualified employees, such as managerial, sales, administration, research and development and operating personnel with adequate skills and experience, in China, we may not be able to successfully attract, assimilate or retain all of the personnel we need. We may also need to offer superior compensation and other benefits to attract and retain key personnel and therefore cannot assure you that we will have the resources to fully achieve our staffing need. In addition, if any director or any member of our senior management team or any of our other key personnel were to join a competitor or carry on a competing business, we may lose customers and key professionals and staff members. Due to the intense competition for management and other personnel and qualified employees in the telecommunications industry in mainland China, any failure to recruit and retain the necessary management personnel and other qualified employee could have a material adverse effect on our business and prospects.

Risks Relating to the Telecommunications Industry in China

Government regulation of the telecommunications industry in China may affect our ability to respond to market conditions or competition, and may have a material adverse effect on our financial condition, results of operations and growth prospects.

As a telecommunications operator in China, we are subject to regulation by, and under the supervision of, the MIIT, which is the primary regulator of the telecommunications industry in China. The MIIT is responsible for formulating policies and regulations for the telecommunications industry, granting telecommunications licenses, allocating frequency spectrum and numbers, formulating interconnection and settlement arrangements between telecommunications operators, and enforcing industry regulations. Other PRC Governmental authorities also regulate capital investment and foreign investment in the telecommunications industry. See B. Business Overview Regulatory and Related Matters under Item 4. The regulatory framework within which we operate may constrain our ability to implement our business strategies and limit our ability to respond to market conditions or to changes in our cost structure. Moreover, we operate our businesses pursuant to approvals granted by the State Council and under licenses granted by the MIIT. If these approvals or licenses were revoked or suspended, our business and operations would be materially and adversely affected. In addition, we are subject to various regulatory requirements as to a wide range of matters relating to our business operations, including service quality and real-name registration for telecommunications service subscribers and other actions, and failure to comply with such requirements may subject us to mandatory penalties or other punitive measures, any of which could have a material adverse effect on our financial condition, results of operations and growth prospects. Furthermore, we cannot assure you that we will not experience any adverse effect on our business during the course of our compliance with regulatory requirements in the PRC telecommunications industry. Similarly, the PRC regulators may promulgate and implement new regulations, rules and policies on the telecommunications industry from time to time, and we cannot guarantee that any such new regulations, rules or policies will not have a material adverse effect on our financial condition, results of operations and growth prospects.

Potential changes in laws, regulations and policies relating to the PRC telecommunications industry or any future industry restructuring may materially and adversely affect our financial condition, results of operations and growth prospects.

The PRC Government continues to regulate many aspects of the telecommunications industry in China. Potential changes in laws, regulations and policies and their implementation could lead to significant changes in the overall industry environment and may have a material adverse effect on our financial condition, results of operations and growth prospects. The PRC Government has been adjusting and improving its regulatory oversight of the telecommunications industry, including further deregulating telecommunications tariffs.

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For example, in December 2016, the amended Regulations of People s Republic of China on the Management of Radio Operation came into effect, which provides that permission for using certain radio frequency bands may be obtained through bidding processes or auctions. As such, competition for radio frequencies could become more intensive in the future, and as a result we may not be able to obtain all desirable radio frequencies at commercially acceptable terms, or at all, which may have a material adverse effect on our results of operations and growth prospects.

Relevant departments of the PRC government, under the direction of the State Council, are currently preparing a telecommunications law to provide a uniform regulatory framework for the telecommunications industry in China. As of the date of this annual report, the telecommunications law has not yet been officially promulgated by the PRC Government. The promulgation of the telecommunications law and other new telecommunications regulations or rules, or future changes thereto, such as enforcement of existing regulations and policies, may materially and adversely affect our financial condition, results of operations and growth prospects.

Issues may also arise regarding the interpretation and enforcement of China s WTO commitments regarding telecommunications services. Any future regulatory changes, such as those relating to the issuance of additional telecommunications licenses, mobile telecommunications resale business, interconnection and settlement arrangements, changes in technical and service standards, universal service obligations, spectrum allocation and number allocation and portability, may have a material adverse effect on our business and operations.

The PRC telecommunications industry has experienced certain restructuring in recent years and may be subject to further restructuring. Such further industry restructuring may materially affect the operations of all telecommunications operators in China, including us. Accordingly, we cannot predict the scope and effect of any further restructuring on our financial condition, results of operations and growth prospects.

The PRC Government may require us, along with other telecommunications service providers in China, to provide universal services with specified obligations, and we may not be compensated adequately for providing such services.

Under the Telecommunications Regulations promulgated by the State Council, telecommunications service providers in China are required to fulfill universal service obligations in accordance with relevant regulations to be promulgated by the PRC Government authorities, and the MIIT has the authority to delineate the scope of universal service obligations. The MIIT, together with the finance department and pricing authorities of the State Council, are also responsible for formulating administrative rules relating to the establishment of a universal service fund and compensation schemes for universal services. For instance, in December 2015, the Ministry of Finance, or MOF, and the MIIT jointly issued the rules regarding the pilot program for universal services to be implemented certain cities across the PRC. Since then, the MIIT has designated additional cities and villages as participants of the pilot program for universal services in public notice from time to time. Pursuant to the pilot program for universal services, we undertook broadband construction projects in 16,134 villages from 2016 to 2017, out of which broadband construction projects in 3,557 villages were undertaken in 2017. See B. Business Overview Regulatory and Related Matters Universal Services under Item 4.

We cannot predict whether the PRC Government will specifically require us to undertake universal service obligations in the future. To the extent we are required to do so, it is currently uncertain whether we will be adequately or timely compensated by the PRC Government or by the universal service fund. We cannot assure you that we will be able to realize an adequate return on investments for expanding networks to, and providing telecommunications services in, less economically developed areas due to potentially higher capital expenditure requirements, lower usage by customers and lack of flexibility in setting our tariffs. We also cannot predict whether we will be required to make a contribution to the universal service fund. Any of these events may adversely affect our financial condition and results of operations.

Actual or perceived health risks associated with the use of mobile devices could impair our ability to retain and attract customers of our mobile services, reduce mobile service usage or result in litigation.

Concerns have been expressed in some countries that the electromagnetic signals emitted by wireless telephone handsets and base stations may pose health risks at exposure levels below existing guideline levels, and interfere with the operation of electronic equipment. In addition, mobile operators have been subject to lawsuits alleging various health consequences as a result of mobile handset usage or proximity to base stations or seeking protective or remedial measures. While we are not aware that such health risks have been substantiated, there can be no assurance that the actual, or perceived, risks associated with the transmission of electromagnetic signals will not impair our ability to retain customers and attract new customers, reduce mobile service usage or result in litigation.

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Risks Relating to Doing Business in China

Our operations may be materially and adversely affected by changes in China s economic, political and social conditions.

Substantially all of our business operations are conducted in China and substantially all of our revenue is derived from our operations in China. Accordingly, our business, financial condition, results of operations and prospects may be adversely affected by changes in China s economic, political and social conditions. The PRC economy differs from the economies of most developed countries in many respects, including with respect to the extent of government involvement, level of development, growth rate, and control of foreign exchange and allocation of resources. While the PRC economy has experienced significant growth in the past three decades, growth has been uneven across different regions and among various economic sectors. The PRC Government has implemented various measures to encourage economic development and guide the allocation of resources. Some of these measures benefit the overall PRC economy, but may also have an adverse effect on us. For example, our financial condition and results of operations may be materially and adversely affected by government control over outbound investments.

The PRC economy has experienced a slowdown for the past few years. The GDP growth rate of China decreased from 11.4% in 2007 to 6.9% in 2017. It is uncertain whether China s economic growth will return to the previous level of growth or it will encounter deterioration. In light of the slowdown of China s economic growth, our subscribers usage of our services may decrease and we may experience increased difficulties in retaining existing subscribers or acquiring new subscribers, which could materially and adversely affect our business, as well as our financial condition and results of operations.

If the PRC Government revises the current regulations that allow a foreign-invested enterprise to pay foreign exchange in current account transactions, our operating subsidiary s ability to satisfy its foreign exchange obligations and to pay dividends to us in foreign currencies may be restricted.

The ability of our major operating subsidiary, CUCL, to satisfy its foreign exchange obligations and to pay dividends to us depends on existing and future foreign exchange regulations in China. The Renminbi is currently convertible by foreign-invested enterprises in China to settle transactions under the current account, which include trade- and service-related foreign exchange transactions and payments of dividends. The Renminbi currently cannot be freely converted without regulatory approval for transactions under the capital account, which includes outbound foreign investment and payments on foreign loans. CUCL, which holds substantially all of our assets and through which we conduct substantially all of our business, is a foreign-invested enterprise in China. However, there is no assurance that in the future the relevant PRC government authorities will not impose any limitation on the ability of foreign-invested enterprises to purchase foreign exchange to satisfy their foreign exchange obligations or to pay dividends. In that event, CUCL s ability to satisfy its foreign exchange obligations and to pay dividends to us in foreign currencies may be restricted and the interests of our shareholders may, in turn, be affected.

Fluctuations in the value of the Renminbi could adversely affect the prices of our shares and ADSs as well as our profitability.

Substantially all of our revenue and costs and expenses are denominated in Renminbi, while a portion of our borrowings, equipment purchases and other capital expenditures are denominated in foreign currencies. On July 21, 2005, the PRC Government changed its decade-old policy to permit Renminbi to fluctuate within a narrow and managed band against a basket of certain foreign currencies determined by the People s Bank of China, or the PBOC. On May 19, 2007, the PBOC announced a policy to further expand the maximum daily floating range of RMB trading prices against the U.S. dollar in the inter-bank spot foreign exchange market. With the increased floating range of the

Renminbi s value against foreign currencies, the Renminbi may appreciate or depreciate significantly in value against the U.S. dollar or other foreign currencies in the long term, depending on the fluctuation of the basket of currencies against which it is currently valued, or it may be permitted to enter into a full float. Increased fluctuations of the Renminbi could adversely affect the value in foreign currency terms of cash flow generated from our operations or any dividends payable on our shares and ADSs, and therefore the price of our shares and ADSs. Any future Renminbi devaluations could also increase our equipment importation costs or lead to significant fluctuations in the exposure of our foreign-currency-denominated liabilities, thereby adversely affecting our profitability.

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Uncertainties in the PRC legal system could limit the legal protections available to us and to foreign investors and materially and adversely affect our financial condition, results of operations and growth prospects.

Our wholly owned operating subsidiary, CUCL, is organized under the laws of PRC and is generally subject to laws and regulations applicable to foreign-invested enterprises in China. The Chinese legal system is a civil law system based on written statutes. Unlike common law systems, it is a system in which decided legal cases may be cited for reference but have limited precedential value. Since 1979, the PRC Government has promulgated laws and regulations dealing with economic matters such as foreign investment, corporate organization and governance, commerce, property, taxation and trade. However, because these laws and regulations are relatively new, and because of the relatively limited volume of published cases and their non-binding nature, interpretation and/or enforcement of these laws and regulations involves uncertainties, which may limit the remedies available to you as an investor and to us in the event of any claims or disputes with third parties. In addition, any litigation in China may be protracted and result in costs and diversion of resources and management attention. Therefore, the protection provided by the PRC legal system may not be the same as the legal protection available to investors in the United States or elsewhere. Furthermore, various uncertainties involved in the rulemaking, interpretation and enforcement process of the laws, regulations and rules in China that are related to our business operations, in particular, those in respect of telecommunications and enterprise income tax, may also materially and adversely affect our financial condition, results of operations and growth prospects.

You may experience difficulties in effecting service of legal process and enforcing foreign court judgments against us and our management in China.

Most of our current operations are conducted in China and most of our assets are located in China. In addition, four out of nine of our current directors and all of our current executive officers reside within China, and substantially all of the assets of these persons are located within China. As a result, it may not be possible to effect service of process within the United States or elsewhere outside China upon these directors or executive officers, including with respect to matters arising under U.S. federal securities laws or applicable state securities laws. Moreover, our PRC counsel has advised us that China does not have treaties with the United States or many other countries providing for the reciprocal recognition and enforcement of court judgments. Our Hong Kong counsel has also advised us that Hong Kong has no arrangement for the reciprocal enforcement of judgments with the United States. As a result, recognition and enforcement in China of judgments of a court of the United States or any other jurisdiction, including judgments against us or our directors, executive officers, underwriters or experts, may be difficult or impossible.

Natural disasters and health hazards in China may severely disrupt our business and operations and may severely restrict the level of economic activities in affected areas, which in turn may have a material adverse effect on our financial condition and results of operations.

Natural disasters such as earthquakes, snowstorms and floods may result in significant and extensive damage to our base stations and network equipment. Moreover, certain countries and regions, including China, have encountered incidents of bird flu, or avian flu, as well as severe acute respiratory syndrome, or SARS, and the outbreak of influenza A (H1N1) in the past. In 2017, certain areas of China suffered from natural disasters including typhoons, floods, mountain torrents, mudslides and landslides, and these natural disasters caused extensive damage to our network equipment, including our base stations and optical fiber networks, in the affected areas. We are unable to predict the effect, if any, that any other future natural disasters and health hazards may have on our business. Any future natural disasters and health hazards may, among other things, significantly disrupt our ability to adequately staff our business, and may generally disrupt our operations. Furthermore, natural disasters and health hazards may severely restrict the level of economic activities in affected areas, which may in turn materially and adversely affect our business and prospects. As a result, any natural disasters or health hazards in China may have a material adverse effect on our financial condition and results of operations.

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Our investors do not have the benefit to rely on the Public Company Accounting Oversight Board inspection of our independent registered public accounting firm.

As a company registered with the U.S. Securities and Exchange Commission, or the SEC, and traded publicly in the United States, our independent registered public accounting firm is required by the laws of the United States to be registered with the Public Company Accounting Oversight Board, or the PCAOB, and undergo regular inspections by the PCAOB to assess its compliance with the laws of the United States and professional standards. The PCAOB, however, is currently unable to inspect a registered public accounting firm s audit work relating to a company s operations in China where the documentation of such audit work is located in China. Accordingly, our independent registered public accounting firm s audit of our operations in China is not subject to the PCAOB inspection.

The PCAOB has conducted inspections of independent registered public accounting firms outside of China and has at times identified deficiencies in the audit procedures and quality control procedures of those accounting firms. Such deficiencies may be addressed in those accounting firms future inspection process to improve their audit quality. Due to the lack of PCAOB inspections of audit work undertaken in China, our investors do not have the benefit of the regular evaluation by PCAOB of the audit works, audit procedures and quality control procedures of our independent registered public accounting firm.

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

On January 22, 2014, Judge Cameron Elliot, an SEC administrative law judge, issued an initial decision suspending the Chinese member firms of the Big Four accounting firms, including our independent registered public accounting firm, from, among other things, practicing before the SEC for six months. In February 2014, the initial decision was appealed. While under appeal and in February 2015, the Chinese member firms of Big Four accounting firms reached a settlement with the SEC. As part of the settlement, each of the Chinese member firms of Big Four accounting firms agreed to settlement terms that include a censure; undertakings to make a payment to the SEC; procedures and undertakings as to future requests for documents by the SEC; and possible additional proceedings and remedies should those undertakings not be adhered to.

If the settlement terms are not adhered to, Chinese member firms of Big Four accounting firms may be suspended from practicing before the SEC which could in turn delay the timely filing of our financial statements with the SEC. In addition, it could be difficult for us to timely identify and engage another registered public accounting firm to audit and issue an opinion on our financial statements. A delinquency in our filings with the SEC may result in NYSE initiating delisting procedures, which could adversely harm our reputation and have other material adverse effects on our overall growth and prospect.

Risk Relating to our ADSs

Holders of our ADSs will not have the same voting rights as the holders of our shares and may not receive voting materials in time to be able to exercise their right to vote.

Except as described in this annual report and in the deposit agreement, holders of our ADSs will not be able to exercise voting rights attaching to the shares represented by our ADSs on an individual basis. Holders of our ADSs will receive proxy materials with respect to matters to be voted on at a meeting of shareholders through the depositary and may only exercise voting rights by appointing the depositary or its nominee as their representative to exercise the voting rights attaching to the shares represented by the ADSs. Consequently, if the materials to be forwarded to holders of ADSs by the depositary are delayed or if the depositary sets deadlines by which holders of ADSs must give their instructions regarding how to vote that fall too soon after mailing of the proxy materials, the holders of our ADSs may not receive voting materials in time to instruct the depositary to vote. Thus, it is possible that such holders, or persons who hold their ADSs through brokers, dealers or other third parties, may not have the opportunity to exercise a right to vote.

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Item 4. Information on the Company

A. History and Development of the Company

We were incorporated under the laws of Hong Kong on February 8, 2000 under the predecessor of the Companies Ordinance as a company limited by shares under the name China Unicom Limited . In connection with the telecommunications industry restructuring initiated by the MIIT, the National Development and Reform Commission, or the NDRC, and the MOF, in 2008 as discussed below, we merged with China Netcom and changed our name to China Unicom (Hong Kong) Limited with effect from October 15, 2008. Following our merger with China Netcom, we became an operator providing a full range of telecommunications services, including mobile and fixed-line services, in China.

Our registered office and principal executive offices are located at 75th Floor, The Center, 99 Queen s Road Central, Hong Kong (telephone number: 852-2126-2018).

Restructurings of the Telecommunications Industry

In May 2008, the MIIT, the NDRC and the MOF issued a joint announcement relating to the further reform of the PRC telecommunications industry. According to the joint announcement, the principal objectives of such further reform included, among others: (i) supporting the formation of three telecommunications service providers of comparable scale and standing, each with nationwide network resources, full-service capabilities and competitive strength, in order to help optimize the allocation of telecommunications resources and foster market competition; (ii) promoting homegrown innovation by telecommunications service providers; and (iii) enhancing the service capabilities and quality of, and the regulatory framework governing, the telecommunications industry. To achieve these objectives, the three ministries encouraged the following restructuring transactions: (a) the acquisition by China Telecom of the CDMA network (including both assets and subscriber base) then owned by Unicom Group; (b) the merger between China Unicom and China Netcom; (c) the transfer of the basic telecommunications service business operated by China Satellite into China Telecom; and (d) the consolidation of China Tietong into China Mobile. The detailed implementation plans relating to these restructuring transactions were subsequently formulated by the relevant parties and, as a result, China Mobile, China Telecom and we became the current three major telecommunications operators in China, each providing a full range of telecommunications services nationwide.

Sale of CDMA Business, Merger with China Netcom and Related Transactions

Disposal of CDMA Business and Related Transactions

In October 2008, we, through CUCL, disposed of our CDMA business and certain other assets to China Telecom, which included (i) the entire CDMA business owned and operated by CUCL, together with the assets of CUCL that are relevant to the CDMA operations and the rights and liabilities of CUCL relating to its CDMA subscribers, (ii) the entire equity interest in China Unicom (Macau) Company Limited, our wholly owned subsidiary, and (iii) all of the 99.5% equity interest in Unicom Huasheng Telecommunications Technology Company Limited, a limited liability company incorporated under the laws of the PRC, held by CUCL. The consideration for the disposal was RMB43.8 billion in cash. In addition, in connection with the disposal, Unicom Group and Unicom New Horizon also disposed of their CDMA network to China Telecom at a consideration of RMB66.2 billion in October 2008.

Merger with China Netcom and Related Transactions

On October 15, 2008, following the approval of the merger by our shareholders and the shareholders of China Netcom at shareholders meetings held on September 16, 2008 and September 17, 2008, respectively, and the satisfaction of all other conditions, the merger between China Unicom and China Netcom by way of a scheme of arrangement of China Netcom. As a result, China Netcom became our wholly owned subsidiary and the listings of China Netcom s ordinary shares and ADSs on the HKSE and the NYSE, respectively, were withdrawn, and our name changed from China Unicom Limited to China Unicom (Hong Kong) Limited on October 15, 2008. Our stock trading code on the HKSE and our ticker symbol on the NYSE remain unchanged.

China Netcom was incorporated in Hong Kong on October 22, 1999, under the predecessor of the Companies Ordinance as a company limited by shares under the name Target Strong Limited. The company changed its name to China Netcom (Hong Kong) Corporation Limited on December 9, 1999, to China Netcom Corporation (Hong Kong) Limited on August 4, 2000, and to China Netcom Group Corporation (Hong Kong) Limited on July 23, 2004 (the last name change in anticipation of its IPO in 2004).

As part of our integration with China Netcom, our wholly owned subsidiary, CUCL, merged with China Netcom (Group) Company Limited, or CNC China, a wholly owned subsidiary of China Netcom, in January 2009, and upon that merger becoming effective, CUCL assumed all the rights and obligations of CNC China, and all the assets, liabilities and business of CNC China were vested in CUCL. In addition, in January 2009, Unicom Group, our parent company, merged with and absorbed Netcom Group, the parent company of China Netcom. Upon completion of the merger between Unicom Group and Netcom Group, Unicom Group assumed all the rights and obligations of Netcom Group, and all the assets, liabilities and business of Netcom Group have vested in Unicom Group.

Our Relationship with Unicom Group

Our ultimate controlling shareholder is Unicom Group, a company incorporated under the laws of the PRC and majority-owned by the PRC Government. Unicom Group was established in accordance with the State Council s approval to introduce orderly competition in the telecommunications industry in 1994.

Unicom Group transferred certain of its telecommunications assets, rights and liabilities to CUCL (which became our wholly owned subsidiary in China) in April 2000 in preparation for our initial public offering, or IPO. In June 2000, we successfully completed our IPO. Our ordinary shares are listed on the HKSE and our ADSs, each representing 10 of our ordinary shares, are listed on the NYSE.

Unicom Group holds the licenses required for our telecommunications businesses and we derive our rights to operate our businesses from our status as a subsidiary of Unicom Group. Unicom Group undertook to hold and maintain all licenses received from the MIIT in connection with our businesses solely for our benefit during the term of such licenses and at no cost to us. In addition, Unicom Group undertook to take all actions necessary to obtain and maintain for our benefit such governmental licenses or approvals as we shall require to continue to operate our businesses. Unicom Group also agreed not to engage in any business which competes with our businesses other than the then-existing competing businesses of Unicom Group and to grant us a right of first refusal in relation to any government authorization, license or permit, or other business opportunity to develop any new telecommunications technology, product or service. Finally, Unicom Group also gave us an undertaking not to seek an overseas listing for any of its businesses or the businesses of its subsidiaries in which we have engaged or may engage in the future, except through us.

Set forth below is our shareholding structure as of April 13, 2018.

(1) The shares of the A Share Company held by strategic investors represented the shares acquired by the strategic investors introduced by the mixed ownership reform from non-public share issuance and transfer of existing shares.

Two-Step Voting Arrangements

As a result of a series of internal restructurings of Unicom Group s shareholding in us following our IPO, China Unicom (BVI) Limited, or Unicom BVI, became our direct controlling shareholder, which in turn is directly controlled by the A Share Company and indirectly controlled by the Unicom Group. The A Share Company s business is limited to indirectly holding the equity interest in Unicom without any other direct business operations. The A Share Company was listed on the Shanghai Stock Exchange in 2002. In order to allow public shareholders of the A Share Company to indirectly participate in our shareholders meeting, a voting mechanism was designed in accordance with the articles of association of Unicom BVI and the A Share Company. Under this voting mechanism, before Unicom BVI votes on certain proposals at our shareholders meeting, the A Share Company must first convene a shareholders meeting to consider the same proposals in order to direct Unicom BVI to vote the shares in our company indirectly held by the A Share Company through Unicom BVI. Unicom Group can similarly direct the voting in respect of its direct equity interest in Unicom BVI.

The voting mechanism described above, however, will not apply to the approval process for any related party transaction between us or our subsidiaries and Unicom Group or its subsidiaries, on which Unicom BVI will not be permitted to vote under the Rules Governing the Listing of Securities on HKSE, or the HKSE Listing Rules. Those related party transactions would require the separate approvals of the public shareholders of each of our company and the A Share Company. We and the A Share Company therefore created the two-step voting arrangements, pursuant to which each related party transaction between us or our subsidiaries and Unicom Group or its subsidiaries will consist of an initial agreement and a further agreement. The initial agreement would be entered into by Unicom Group or its subsidiaries (excluding the A Share Company and its subsidiaries) on the one hand and the A Share Company or Unicom BVI on the other hand. The initial agreement would contain the following terms:

- the closing of the initial agreement would be subject to (i) the successful transfer of all rights and obligations of the A Share Company or Unicom BVI under the initial agreement to us or our subsidiaries, and (ii) the approval of the further agreement by our independent shareholders; and

Unicom Group or its subsidiaries (excluding the A Share Company and its subsidiaries) would agree and acknowledge that all rights and obligations under the initial agreement can be transferred to us or our subsidiaries without any further consent requirements.

The initial agreement will constitute a related party transaction of the A Share Company and, if certain thresholds are met, will require the approval of the public or independent shareholders of the A Share Company under the rules of the Shanghai Stock Exchange. The further agreement would be entered into by the A Share Company or Unicom BVI, on the one hand, and us or our subsidiaries, on the other hand, and will provide for the transfer of all rights and obligations of the A Share Company or Unicom BVI under the initial agreement to us or our subsidiaries. The further agreement will constitute a related party transaction of our company and, if certain thresholds are met, will require the approval of our public or independent shareholders under the HKSE Listing Rules. We expect, to the extent the nature of a particular related party transaction allows, the two-step voting arrangements to apply as described above. However, when we or our subsidiaries are the providers, rather than recipients, of certain services, the two-step voting arrangements will need to be adjusted so that the process as described above is effectively reversed, such that the initial agreement is entered into by us or our subsidiaries rather than Unicom Group or its subsidiaries (excluding the A Share Company and its subsidiaries) with the A Share Company or Unicom BVI. Accordingly, Unicom Group or its subsidiaries (excluding the A Share Company and its subsidiaries), rather than us or our subsidiaries, will be a party to the further agreement. The arrangements (including the conditions) will apply correspondingly. This two-step structure will be applied in all related party transactions between us or our subsidiaries and Unicom Group or its subsidiaries and will effectively require the separate approvals of the public or independent shareholders of each of Unicom and the A Share Company for such related party transactions.

Establishment of the Tower Company and the Disposal of Telecommunications Towers

In July 2014, we, through our wholly owned subsidiary, CUCL, a subsidiary of China Mobile and a subsidiary of China Telecom jointly established the Tower Company. We subscribed for 3.01 billion shares of the Tower Company at RMB1.00 per share, representing 30.1% of the registered capital of the Tower Company, and the remaining 40.0% and 29.9% of the registered capital of the Tower Company were subscribed for by China Mobile and China Telecom, respectively, at the same price. The Tower Company primarily engages in the construction, maintenance and operation of telecommunications towers. It will also be engaged in the construction, maintenance and operation of ancillary facilities including base station control rooms, power supplies, air conditioning and interior distribution systems, as well as the provision of maintenance services of base station equipment.

In October 2015, we, through our wholly owned subsidiaries, CUCL and Unicom New Horizon, entered into a transfer agreement with (i) China Mobile Communication Company Limited, a subsidiary of China Mobile, and its 31 subsidiaries, (ii) China Telecom Corporation Limited, a subsidiary of China Telecom, (iii) China Reform Holdings Corporation Limited, a wholly State-owned company, and (iv) the Tower Company, pursuant to which we, China Mobile and China Telecom sold certain telecommunications towers and related assets to the Tower Company, the Tower Company would issue and allot shares in the Tower Company and/or pay certain cash as consideration for such transfers, and China Reform Holdings Corporation Limited agreed to subscribe for new shares in the Tower Company in cash. As of April 13, 2017, we, through CUCL, owned approximately 28.1% equity interest in the Tower Company, while China Mobile, China Telecom and China Reform Holdings Corporation Limited owned approximately 38.0%, 27.9% and 6.0% equity interest in the Tower Company, respectively.

In July 2016, we, through our wholly owned subsidiary, CUCL, and the Tower Company entered into the Pricing Agreement under which we lease telecommunications towers and related assets from the Tower Company for an initial term of five years. In January 2018, pursuant to the Pricing Agreement and after arm-length negotiations and discussions, we, through our wholly owned subsidiary, CUCL and the Tower Company entered into the Supplementary Agreement, which adjusted certain terms and provisions in the Pricing Agreement and annex thereto in relation to the leasing of the tower products. See B. Related Party Transactions under Item 7 for major items of the Pricing Agreement and the Supplementary Agreement, including pricing for the lease.

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Establishment of China Unicom Finance Company Limited

On December 6, 2013, CUCL and Unicom Group entered into a capital contribution agreement regarding the establishment of China Unicom Finance Company Limited, or the Finance Company. Pursuant to the capital contribution agreement, CUCL and Unicom Group invested RMB2,730 million and RMB270 million, representing 91% and 9% of the total registered capital of the Finance Company, respectively. The Finance Company was established as a cash management platform of Unicom Group, its subsidiaries and other associated entities, purporting to improve the efficiency of cash flow allocation, lower finance cost and enhance financial risk management, see B. Related Party Transactions Establishment of the Finance Company and Provision of Financial Services under Item 7.

The Mixed Ownership Reform

As part of the PRC government s efforts to reform state-owned enterprises and increase their competitiveness, our ultimate controlling shareholder, Unicom Group, participated in a pilot program on mixed ownership reform of state-owned enterprises, and implemented a plan to diversify the shareholders base of A Share Company, our controlling shareholder, by bringing in certain strategic investors, including certain large Internet companies in China. In October 2017, the A Share Company made a non-public share issuance of 9,037,354,292 ordinary shares to the strategic investors, raising capital of RMB61,725.13 million. Subsequently in November 2017, the Unicom Group transferred 1,899,764,201 of its ordinary shares of the A Share Company to China Structural Reform Fund Corporation Limited for a total consideration of RMB12,975.39 million. In April 2018, the A Share Company made an issuance of 793,861,000 restrictive ordinary shares to its employees pursuant to its restrictive incentive shares scheme, or the employee restrictive incentive shares, which bear selling restrictions within 60 months, at the price of RMB3.79 per share. The total number of the employee restrictive incentive shares represented 2.6% of the A Share Company s outstanding shares immediately after the completion of such issuance. Upon completion of these transactions, the shareholding of the Unicom Group in the A Share Company decreased to 36.7%, and the strategic investors, including China Structural Reform Fund Corporation Limited, held 35.2% of outstanding ordinary shares of the A Share Company in total.

Furthermore, as part of the Mixed Ownership Reform Plan, the A Share Company appointed representatives from the certain strategic investors to serve as directors. In February 2018, senior executive officers of Baidu, Tencent, Alibaba, JD.com and China Life Insurance were appointed as directors of the A Share Company. A more diversified board of directors is expected to improve the corporate governance of the A Shares Company, which is part of the main purpose of the Mixed Ownership Reform Plan. However, as there is substantial uncertainty with respect to our cooperation with strategic investors and the improvement in our incentive system, we cannot assure you that these benefits will be achieved as expected. See D. Risk Factors The benefits that we expect to enjoy relating to the mixed ownership reform of our ultimate controlling shareholder, Unicom Group, are subject to substantial uncertainty under Item 3.

In connection with the Mixed Ownership Reform Plan, the A Share Company and Unicom Group, mainly using the funds from the mixed Ownership Reform Plan to make capital contributions into Unicom BVI, our direct controlling shareholder. Upon completion of such capital contribution, Unicom BVI entered into the Share Subscription Agreement with us on August 22, 2017, pursuant to which Unicom BVI agreed to subscribe for a maximum of 6,651,043,262 newly issued shares of us, or the Subscription Shares, at the subscription price of HK$13.24 per share, or the Subscription. In November 2017, after all conditions precedent to the subscription have been satisfied, we have completed the allotment and issuance of the Subscription Shares, as a result of which an aggregate of 6,651,043,262 new shares have been issued for cash consideration of HK$13.24 per share to Unicom BVI and the gross proceeds of the Subscription amounted to approximately HK$88,059.81 million. See B. Related Party Transactions The Share Subscription by Unicom BVI in Relation to the Mixed Ownership Reform Plan under Item 7 for information concerning the Subscription. We intend to use the proceeds from the Subscription to upgrade our 4G network capabilities, develop technology and launch trial programs in relation to 5G network, develop innovative businesses and repay bank loans.

Capital Expenditures and Divestitures

See Liquidity and Capital Resources Capital Expenditures under Item 5 for information concerning our principal capital expenditures for the previous three years and those planned for 2018. We currently do not have any significant divestiture in progress.

B. Business Overview

General

We are an integrated telecommunications operator in China providing a wide range of telecommunications services and telecommunications products to our customers worldwide. Our telecommunications services include mobile voice, data and value-added, fixed-line voice and value-added, fixed-line broadband, data communications and other telecommunications services. We, China Mobile and China Telecom are the three major telecommunications operators in China.

In 2017, our total revenue was RMB274.83 billion, of which our total service revenue increased by 4.6% from RMB238.03 billion in 2016 to RMB249.02 billion in 2017 and our total sales of telecommunications products decreased by 28.6% from RMB36.16 billion in 2016 to RMB25.81 billion in 2017. The number of mobile billing subscribers increased by 7.7% from 263.82 million in 2016 to 284.16 million in 2017, of which our 4G subscribers increased by 67.3% from 104.55 million to 174.88 million.

Telecommunications Services

Our telecommunications services primarily include mobile services, fixed-line services, bundled services and data and Internet application services. We charge voice usage and monthly fees for our mobile voice services and fixed-line voice service. Our service revenue from voice usage and monthly fees decreased by 16.7% from RMB57.03 billion in 2015 to RMB47.50 billion in 2016, and further decreased by 17.6% to RMB39.15 billion in 2017. As a percentage of total revenue, such service revenue decreased from 20.6% in 2015 to 17.3% in 2016, and further decreased to 14.2% in 2017. Our service revenue from other telecommunications services, including mobile non-voice services, fixed-line broadband access services, data communication services, data and Internet application services, fixed-line value-added services, fixed-line other services and bundling services, increased by 8.3% from RMB175.95 billion in 2015 to RMB190.53 billion in 2016, and further increased by 10.1% to RMB209.86 billion in 2017. As a percentage of total revenue, such service revenue increased from 63.5% in 2015 to 69.5% in 2016, and further increased to 76.4% in 2017.

Mobile Services

Our mobile services consist of GSM, 3G and 4G services. In recent years, we have focused on 4G services. Our 4G services adopt two major variants of 4G LTE technologies, being the Time Division LTE technology, or TD-LTE, and the Frequency-Division LTE technology, or LTE-FDD. Our mobile services primarily consist of mobile voice services and mobile non-voice services. Our mobile voice services enable our subscribers to make and receive phone calls, including local calls, domestic long-distance calls, international long-distance calls, intra-provincial roaming, inter-provincial roaming and international roaming, with a mobile handset at any point within the coverage area of our mobile telecommunications networks. Our mobile non-voice services primarily include mobile data, mobile reading, mobile music, WO App Store , SMS, Cool Ringtone (a personalized ring-back tone service) and other wireless information services.

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The following table sets forth selected historical information for our mobile operations and our subscriber base for the periods indicated.

	As of or for the year ended December 31,		
	2015	2016	2017
Number of mobile billing subscribers (in thousands)(1)	252,317	263,822	284,163
Estimated market share of mobile billing subscribers(1)(2)	19.8%	19.9%	20.0%
Mobile billing subscribers ARPU (in RMB)(1)(3)	46.3	46.4	48.0
Number of 4G subscribers (in thousands)(1)	44,156	104,551	174,876
4G subscribers ARPU (in RMB) (1)(4)	N.A.(6)	76.4	63.4
4G subscribers DOU (in megabytes)(1)(5)	N.A.(6)	1,521	4,522

(1) Mobile billing subscribers are referred generally to subscribers who have revenue contribution in the December of the relevant years. 4G subscribers are referred generally to subscribers who possess 4G handsets, use our 4G networks and have revenue contribution in the December of the relevant years. Since January 2016, we have been reviewing and analyzing our mobile billing subscribers data and 4G subscribers data as we believe such data provides more meaningful information to measure our performance in accordance with our operating strategy. The number of mobile billing subscribers and 4G subscribers as of December 31, 2015 has been generated for our management s review of the trend of performance.

(2) Market share in a given area is determined by dividing the number of our mobile billing subscribers in the area by the total number of our mobile billing subscribers and mobile subscribers of our major competitors in the area. The number of mobile subscribers of our major competitors is publicly disclosed by the mobile operators.

(3) We calculate mobile billing subscribers ARPU by dividing the annual average revenue per mobile billing subscriber by 12. Annual average revenue per mobile billing subscriber is calculated by dividing the amount of revenue from mobile services for the relevant year by the average number of mobile billing subscribers for the year, which is the average of the 12 monthly average mobile billing subscribers during the year. For a particular month, monthly average mobile billing subscribers is the average of the number of mobile billing subscribers as of the end of the preceding month and the end of that month.

(4) We calculate 4G subscribers ARPU by dividing the annual average revenue per 4G subscriber by 12. Annual average revenue per 4G subscriber is calculated by dividing the amount of revenue from 4G services for the relevant year by the average number of 4G subscribers for the year, which is the average of the 12 monthly average 4G subscribers during the year. For a particular month, monthly average 4G subscribers is the average of the number of 4G subscribers as of the end of the preceding month and the end of that month.

(5) We calculate average data usage per 4G user per month, or 4G subscribers DOU, by dividing the annual average data usage per 4G subscriber by 12. Annual data usage per 4G subscriber is calculated by dividing the total data usage under our 4G services for the relevant year by the average number of 4G subscribers for the year, which is the average of the 12 monthly average 4G subscribers during the year. For a particular month, monthly average 4G subscribers is the average of the number of 4G subscribers as of the end of the preceding month and the end of that month.

(6) Since the development of our 4G services was in a relatively preliminary stage in 2015, we considered it not cost-effective to generate accurate data relating to our 4G services.

Mobile Billing Subscribers

Our total number of mobile billing subscribers increased by 7.7% from 263.82 million as of December 31, 2016 to 284.16 million as of December 31, 2017. Mobile billing subscribers are referred generally to subscribers who have revenue contribution in the December of the relevant years. The increase in the total number of mobile billing subscribers was primarily due to the substantial increase in the number of our 4G subscribers. The ARPU of our mobile billing subscribers increased from RMB46.4 in 2016 to RMB48.0 in 2017. The increase in our ARPU was mainly due to the proportion of 4G subscribers to total mobile billing subscribers increased by 21.9 percentage points year-on-year to 61.5%, partially offset by the negative effect of implementation of the PRC Government s policy of increasing network speed and reducing tariffs.

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4G Subscribers

The total number of our 4G subscribers increased from 104.55 million as of December 31, 2016 to 174.88 million as of December 31, 2017. 4G subscribers are referred generally to subscribers who possess 4G handsets, use our 4G networks and have revenue contribution in the December of the relevant years. The increase in our total number of 4G subscribers was primarily due to (i) our marketing initiatives to effectively reach customers through new marketing channels, for example, we offer data promotion or other packages to users of Internet companies by cooperating with such Internet Companies under 2I2C model, and we offer group service packages to the employees of enterprises, governments and other organizations by cooperating with them under 2B2C model, and (ii) our offering of innovative products tailored to customers potential demand, such as our Ice-cream Package that targets high-end customers by offering unlimited domestic usage of mobile data and mobile voice under certain prescribed terms.

Fixed-Line Services

We are a leading fixed-line broadband and communications operator in northern China. We offer a wide range of fixed-line services nationwide in China, including (i) fixed-line broadband access services, (ii) data communications services, (iii) fixed-line voice services, (iv) fixed-line voice value-added services, and (v) fixed-line other services.

Fixed-Line Broadband Access Services

Fixed-line broadband access services are one of our emphases as part of our strategy to focus on high growth services and also the foundation for the development of our mobile network and services. The growth in fixed-line broadband access services has been driven by the increasing affordability and rising use of personal computers and other Internet access devices, gradual recognition by businesses of the importance of information and the proliferation of content and applications, such as online games and video-on-demand. We are a leading provider of fixed-line broadband access services in our fixed-line northern service region and we seek to maintain this leading position by capitalizing on our extensive fixed-line network, large customer base, experienced sales force, established brand and strategy of multi-service bundling.

In 2017, we focused on Mass Connection, High-bandwidth, Big Integration and Big Video and launched Fiber Broadband+ , a new broadband service brand, and continued to upgrade our fiber-optic transmission network and improved access speed. We also promoted sub-division and contract out (mini CEO s initiative), in order to stimulate front-line vibrancy and thus promoting business development. As of December 31, 2017, our fixed-line broadband subscribers increased by 1.7% to 76.54 million, of which subscribers with 100Mbps-and-above bandwidth accounted for 39% of all fixed-line broadband subscribers, representing an increase of 31 percentage points from the end of 2016. Our fixed-line broadband access ARPU decreased by 6.3% from RMB49.4 in 2016 to RMB46.3 in 2017 primarily due to intensifying competition, in particular, competition as a result of our competitor s aggressive marketing strategies involving low tariff and bundle sales of products. As of December 31, 2015, 2016 and 2017, we had approximately 72,330,000, 75,236,000 and 76,539,000 fixed-line broadband subscribers, respectively.

Data Communications Services

We are a leading provider of data communications services in our fixed-line northern service region. We offer data products, such as those based on digital data networks, or DDN, frame relay, asynchronous transfer mode, or ATM, and Internet protocol-virtual private network, or IP-VPN. We also offer leased line products, including domestic and international leased circuits. Our customers for these services include government entities, large financial institutions and other domestic and multinational businesses, Internet service providers and other telecommunications operators. In 2017, we continued to offer full-scale data communications services to international operators and domestic and international corporate customers. We have also improved our capabilities to offer cross-border data communications and integrated information services.

Fixed-Line Voice Services

Our fixed-line voice services primarily consist of local voice, domestic long-distance, international long-distance and interconnection services. In 2017, as domestic mobile operators launched service packages at competitive pricing, we lowered our mobile roaming tariffs. Also, the migration of voice usage from fixed-line to mobile continued. The number of our fixed-line local access subscribers was 73.86 million, 66.65 million and 60.00 million as of December 31, 2015, 2016 and 2017, respectively. The decrease in recent years was primarily due to a decrease in the number of our fixed-line telephone service subscribers.

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Fixed-Line Voice Value-Added Services

We offer a wide range of voice value-added services on our fixed-line network. Our fixed-line voice value-added services generate additional usage on our network and increase our ARPU for fixed-line services. Our main fixed-line voice value-added services include Personalized Ring and caller-identification services. Personalized Ring services enable our fixed-line subscribers to personalize the ring-back tone for incoming calls.

Fixed-Line Other Services

Our fixed-line other services primarily include installation of fixed-line equipment services, Internet hosting services, telecommunications equipment and real property leasing services and other services.

Bundled Services

We offer bundled services that integrate mobiles services and fixed-line services in one service package. Such service packages generally include 4G services, fixed-line broadband access services, fixed-line voice services and certain other value-added services. Under our bundled service brands, such as WO Family and Ice-cream Package Bundled , we offer different combination of mobile services and fixed-line services to attract customers with different demands. Our offering of bundled services, among other things, contributes to the increase in our 4G subscribers and fixed-line broadband subscribers.

Data and Internet Application Services

We offer data and Internet application services, such as Internet data center, or IDC, cloud computing, big data, Internet-of-things, information technology services and other innovative services. In 2017, we actively leveraged our advantages in network and informatization, which led to substantial growth in our IDC and cloud computing services. As of December 31, 2017, we had approximately 349 IDC nationwide, 138,000 racks supporting our IDC services, and 81T IDC bandwidth, and, additionally, the resource pool of our WO platform consists of 38 public resource pool and 41 private cloud resource pool, with storage capacity of 22.7PB, Internet capacity of 1050G and computing capacity of 812,000 cores. In 2016 and 2017, revenue from data and Internet application services was RMB17.78 billion and RMB20.07 billion, respectively.

Sales of Telecommunications Products

Our sales of telecommunications products primarily comprise sales of mobile handsets, fixed-line terminals and accessories. Revenue from our sales of telecommunications products decreased by 17.9% from RMB44.07 billion in 2015 to RMB36.16 billion in 2016, and further decreased by 28.6% to RMB25.81 billion in 2017, which accounted for 15.9%, 13.2% and 9.4% of our total revenue in 2015, 2016 and 2017, respectively.

Interconnection and Roaming Arrangements

Interconnection

Interconnection refers to the arrangements that permit the connection of our telecommunications networks with other networks. Our mobile and fixed-line networks interconnect with Unicom Group s networks. Under current arrangements, settlement between Unicom Group and us is based on an internal settlement standard that takes into account either the internal costs of the relevant networks or the government standard applicable between third-party operators, whichever is the more favorable to us.

We charge interconnection fees for terminating or transiting calls that originate from other domestic telecommunications operators networks and pay interconnection fees to other operators for calls originating from our networks that are terminated on their networks. We earn and pay such fees in respect of mobile calls, local and domestic and international long-distance calls and Internet services. We are required to pay the interconnection fees regardless of our ability or inability to collect the tariff from our subscribers. Interconnection charges are accrued on a monthly basis based on the actual call volume and applicable tariff rates.

All interconnection and settlement arrangements among domestic telecommunications operators in China are governed by the Telecommunications Regulations and the rules on interconnection arrangements and settlement promulgated by the MIIT. Some of the agreements pursuant to which we interconnect with other domestic operators were entered into by Unicom Group. We have entered into an agreement with Unicom Group pursuant to which we have agreed with Unicom Group that the costs and benefits arising under these agreements, as they relate to our operations, will be incurred to our account.

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For additional information about our domestic and international interconnection arrangements, see B. Business Overview Regulatory and Related Matters under Item 4 and B. Related Party Transactions under Item 7.

Roaming

We provide roaming services, which allow our subscribers to access our mobile services while they are physically outside of their registered service area or in the coverage areas of other mobile networks in other countries and regions with which we have roaming arrangements. As of March 31, 2018, we had roaming arrangements for (i) GSM international voice and SMS services with 607 operators in 252 countries and regions, (ii) GPRS international inbound data services with 533 operators in 214 countries and regions and for GPRS international outbound data services with 484 operators in 219 countries and regions, (iii) 3G services with 434 WCDMA operators in 174 countries and regions, and (iv) 4G international inbound data services with 226 operators in 121 countries and regions and for 4G international outbound data services with 214 operators in 138 countries and regions.

A mobile subscriber using roaming services is charged at our roaming usage rate for both incoming and outgoing calls, plus applicable long-distance tariffs. Starting from September 1, 2017, we have ceased charging mobile handset subscribers for domestic long-distance tariffs and roaming fee. With respect to international roaming, we settle roaming charges with international operators in accordance with roaming agreements between Unicom Group and each of the international operators.

Networks

We operate an advanced network system to support our integrated operations. The backbone of the system is a nationwide fiber-optic transmission network, which serves as the common platform for our mobile, fixed-line voice, broadband and data services. We generally utilize a centralized network planning and equipment selection process, which ensures uniform nationwide design and network compatibility. After our merger with China Netcom in October 2008, we have actively integrated our network resources to improve our network quality and capacity.

Mobile Networks

Our mobile network generally consists of:

- base station sites, which are physical locations, each equipped with a base station that houses transmitters, receivers and other equipment used to communicate through radio channels with subscribers mobile handsets within the range of a cell;

- base station controllers, which connect to, and control, the base stations;

- mobile switching centers, which control the base station controllers and the routing of telephone calls; and

- a transmission network, which links the mobile switching centers, base station controllers, base stations and the public switched telephone network.

We have deployed GSM, WCDMA and LTE mobile networks. Our GSM mobile network mainly operates at 900 MHz, 1800 MHz and 2100MHz frequency bands for FDD network and 2300-2320 MHz and 2655-2675 MHz frequency bands for TDD network. In 2016, Unicom Group was granted the approval to refarm all frequency bands for FDD network to deploy LTE network. Unicom Group currently owns 2x61 MHz of spectrum in the frequency bands for FDD network, of which Unicom Group has deployed UMTS network and GSM network using 2x6 MHz of spectrum in the 900 MHz frequency band, LTE network and GSM network using 2x30 MHz of spectrum in 1800 MHz and LTE network and UMTS network using 2x25 MHz of spectrum in 2100 MHz frequency band. In addition, Unicom Group has achieved converged network of TD-LTE network and FDD-LTE network by deploying TDD-LTE network using 2300-2320 MHz of spectrum which is limited to indoor network and 2655-2675 MHz of spectrum.

Unicom Group authorized our wholly owned subsidiary, CUCL, to operate the 4G services. We have devoted significant resources in developing and improving our 4G networks to enhance our customer experience and continued to expand our network coverage. As of December 31, 2017, our 4G network base stations reached 852,000 with an increase of 116,000 base stations compared to December 31, 2016, and our other mobile service base stations reached 1,336,000.

Fixed-Line Networks

We operate fixed-line networks which provide extensive coverage in China. These networks are technologically advanced and conducive to the introduction of the next generation fixed-line network and mobile technologies. These networks support a wide range of end-to-end fixed-line telecommunications services and enable customized products to be delivered to meet a variety of telecommunications needs in real-time .

Our fixed-line networks consist of fixed-line telephone networks, broadband Internet and data networks, transmission networks, value-added service platforms, IT support systems and related infrastructures. Our transmission networks consist primarily of fiber-optic based networks, which cover our major service regions, supplemented by satellite transmission and digital microwave links.

We have integrated our resources to optimize and improve the transport capabilities of our IP networks and improved our long-distance soft-switch network capability. In addition, by adding seven national Internet backbone nodes, we further increased our Internet bandwidth, and our broadband network capacity was substantially enhanced. By the end of 2017, the number of fixed-line broadband access ports increased from 189.00 million to 200.0 million, up by 5.8% from the end of 2016, of which the number of access ports with FTTX accounted for 98.8% of total broadband access ports. Our international Internet outbound bandwidth reached 2.46T, our submarine cable capacity reached 16.2T, and our international land cable capacity reached 10.6T.

Marketing, Sales and Distribution

Our marketing strategy is to establish our image as a full-service telecommunications service provider and utilize our comprehensive service platform and nationwide sales and distribution network. We implemented our marketing and sales strategy by cooperating with Internet companies under 2I2C model as well as by cooperating with strategic investors brought in pursuant to the Mixed Ownership Reform Plan. We sought to enhance our brand value and brand recognition by providing quality services, such as high-speed broadband access services, bundled services as well as video-based services, and distribute our services through a variety of distribution channels, consisting of (i) self-owned channels, including proprietary sales outlets and direct sales forces targeting retail and corporate customers, (ii) social channels, including cooperative sales outlets, exclusive sales outlets and agency sales outlets, and (iii) online channels, including self-owned and third-party channels online e-stores. In 2017, we have actively engaged in Online-to-Offline operations that integrate our online channels and offline channels, including the self-owned channels and the social channels. We also increased the operation efficiency of our offline channels by disengaging certain sales outlets and stores with low efficiency and low contribution, optimizing the location of sales outlets and stores and controlling the number of sales outlets and stores. Moreover, we continued offering innovative products. For example, we offer data promotion or other packages to users of Internet companies under 2I2C model, we offer group service package to the employees of enterprises, governments and other organizations under 2B2C model, and we offer Ice-cream Package that includes unlimited domestic usage of mobile data and mobile voice under certain prescribed terms to target high-end customers. In recent years, we have conducted and organized events that help build our image as premium network provider, to further enhance WO brand value and value of our corporate brand, China Unicom .

Customer Services

We provide customer services through our nationwide sales outlets, hotline number 10010 , online sales outlets, SMSs, handset online stores, self-service service platforms, official micro-blog, WeChat and other channels. Our customer services typically include inquiries, service initiation and termination, and response to reports of mechanical malfunction as well as customer complaints and suggestions. We provide customer services to our customers travelling outside of China via a dedicated international roaming service hotline number 18618610010 24 hours per day, seven days per week. We implement relevant procedures to ensure that our customer services are provided in a timely manner. For instance, to the extent that we are unable to address certain of our customer s inquiries via our customer hotline, we will make commitments to our customers that we will provide response to their inquiries within a specified timeframe.

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We proactively develop and improve our Internet-based customer services. We also continue to improve our customer service system and operations, customer retention and customer service quality. We launch various initiatives to enhance our customer experience by customer service follow-up calls and regular greetings to customers.

We are dedicated to improve customers perception of our services. We have adopted an NPS (net promoter score) evaluation system to provide all-rounded monitoring of each of our operating segments and levels, so that we can further understand the need of our clients, adjust to cater to our clients needs and improve our professionalism in all respects. In addition, we sought to improve customers perception of our services by focusing on the key issues that affect our customer perception and business support. Pursuant to such initiative, we collected such key issues on a rolling basis, set up improvement goals in a quantitative manner and allocate the responsibility for improvement to appropriate personnel. This issue-oriented initiative drove our internal department to further optimize our work process, which resulted in a significant improvement in our customer perception and business support.

Information Systems

We have established multiple information technology support systems in our headquarters as well as in each province, autonomous region and municipality and comprehensive information systems in each province, autonomous region and municipality to support our business and management. For business support, we have established core systems composed of a customer relationship management system, a comprehensive billing and accounting system and an e-commerce system to support our business operations. We also upgraded our IT framework and established an API opening platform, to facilitate cooperation with our business partners. In addition, we enhanced our independent research capability. For example, we independently developed 37% of our core business support system. Furthermore, we have established integrated systems, such as integrated business support system for corporate group customers, integrated channels management system, integrated account settlement system and integrated partnership management system to achieve integrated and centralized management of our businesses and enhance our sales and service capabilities through electronic channels. For our management support, we focused on the construction and optimization of a comprehensive enterprise resource planning system to optimize our work process and resource allocations, improve our customer perception and enhance our operational efficiency, which supported our mini CEO initiative. For our internal data service capabilities, we have established an integrated data analysis system, launched the construction of a large data platform and compiled all data relating to our operation and business support, to support our appraisal management and operational analysis with data. For the application of new technologies, we have launched the construction of our centralized private cloud and tried to enhance the performance of the systems with new technologies to lower the overall cost of information technology.

Research and Development

We focus on technology innovation in coordination with our various business departments in order to provide technical support for our business development. Our research and development activities are focused primarily on fixed-line and mobile technologies and their further development, cloud computing, big data, Internet of things, intelligent channels, SDN and NFV, network and information safety, data center, next generation Internet technologies and businesses, operational planning and development of value-added services. In addition, part of our research and development requirements is fulfilled by our ultimate controlling shareholder, Unicom Group, in return for a service fee. See B. Related Party Transactions under Item 7 below. In addition, we participate in the national research project on 5G, closely follow the development of 5G technology and standards, and proactively carry out 5G technology related researches and experiments. We also participated in certain international organizations for telecommunications operators, such as the 3rd Generation Partnership Project and the International Telecommunication Union, in which we organized and led a number of research and development projects for formulating 5G technical standards. We have also initiated research and development program on the migration of advanced 4G services with higher network speed as compared to 4G services, or the 4.5G services, to the 5G services. For example, we initiated research and development programs for application of 5G technology in innovative fields, such as high-dissolution videos, augmented reality and virtual reality, Internet of cars and drones. And, we would begin the field test and monetization of 5G services when market conditions are favorable.

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Competition

As a result of the telecommunications industry restructuring in 2008, the Chinese telecommunications market now has three key providers of basic telecommunications services China Telecom, China Mobile and us in addition to thousands of value-added service providers and other companies that provide telecommunications or related services. We compete with China Mobile and China Telecom in virtually all aspects of our services, including mobile services, fixed-line voice services, broadband services and data communications services. In May 2016, the MIIT granted to China Radio and Television Network Co. Ltd. the approval to operate fixed-line broadband business. We may also compete with China Radio and Television Network Co. Ltd. in fixed-line broadband business. As Unicom Group, China Mobile and China Telecom were granted the license to operate TD-LTE mobile services by the PRC Government in December 2013, Unicom Group and China Telecom were granted the license to operate LTE-FDD mobile services in February 2015 and China Mobile was granted the license to operate LTE-FDD mobile services in April 2018, we face intensive competition in the 4G services. In addition, the PRC Government recently published a series of regulations to encourage privately-owned enterprises to enter PRC telecommunications industry, including the pilot program to permit companies engaged in the resale of mobile communications services to acquire mobile communications services from China Mobile, China Telecom or us and repackaging and rebranding such services for resale to end-users. The initial trial period of the pilot program ended on December 31, 2015, but the telecommunications resale business will continue to be governed by the rules of the pilot program before the MIIT issues any further rules. The MIIT also issued the price guidance for such resale business requiring that the wholesale price for resale of mobile telecommunications services should be lower than the per unit price (or package price) for similar businesses of the mobile networks operators, and we may face competition from these privately-owned enterprises. We also face increasing competition from other service providers, such as cable television companies and Internet service providers, which compete against our broadband access, voice and messaging services and other services by offering telecommunications or related services. See D. Risk Factors Risks Relating to Our Business We face intense competition from other telecommunications operators, including China Mobile and China Telecom, and other companies that provide telecommunications or related services, which may materially and adversely affect our financial condition, results of operations and growth prospects and D. Risk Factors Risks Relating to Our Business Competition from foreign-invested operators may further increase the competition for employees, exacerbate price competition and increase our operating expenses, thereby adversely affecting our financial condition, results of operations and growth prospects under Item 3, respectively.

The Tower Company

See D. Risk Factors Our business relies on the lease arrangements with the Tower Company as to telecommunications towers and related assets, and we may not be able to achieve the expected benefits from the establishment of the Tower Company and such lease arrangements under Item 3 and A. History and Development of the Company Establishment of the Tower Company and the Disposal of Telecommunications Towers under Item 4 for information regarding the Tower Company and arrangement regarding telecommunications towers and related assets.

Strategic Alliances with Telefónica

We entered into and maintained a strategic alliance with Telefónica, S.A., or Telefónica, since January 2009. Telefónica and we agreed to share business experience and strengthen cooperation in the areas of mobile communications, broadband applications, international business, marketing and sales and telecommunications services to corporate clients, to strengthen the business of each party and achieve synergies by cooperation. Additionally, we and Telefónica made mutual investment in each other, and held ordinary shares of the other party. Subsequently, Telefónica completed a series of sales of ordinary shares in the capital of our company. Also, since September 2015, Wang Xiaochu, our Executive Director, Chairman and Chief Executive Officer, has served as a director on the board of directors of Telefónica as our designated representative. As of the date of this annual report, Telefónica held less than 5% ordinary shares in the capital of our company. In December 2015, we and Telefónica established a joint venture company, Smart Steps Digital Technology Co., Ltd., or Smart Steps, to engage in big data application services in China.

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Strategic Cooperation with China Telecom

In January 2016, we entered into a strategic cooperation agreement with China Telecom in relation to resource-sharing and joint investments. Under the strategic cooperation, we agreed to share certain telecommunications facilities such as mobile networks and transmission networks with each other, jointly carry out certain network maintenance services and certain marketing initiatives, as well as seek and explore opportunities in joint investments in innovative and emerging business areas. Our strategic cooperation is expected to enhance our service qualities and operating efficiency, and thus improving our customer experience and contributing to our market recognition.

Trademarks

We conduct our businesses under the Unicom name and logo. Unicom Group is the registered proprietor in China of the Unicom trademark in English and the trademark bearing the Unicom logo. Unicom Group is also the registered proprietor of the trademark of the word Unicom in Chinese ( ). Unicom Group has granted us the right to use these trademarks on a royalty-free basis with periodic renewals, and licensed us any trademark that it registers in China in the future which incorporates the word Unicom.

Risk Management and Internal Control

We employ risk management and internal control systems to monitor and facilitate the accomplishment of the our business objectives, safeguard the our assets against loss and misappropriation, respond to natural disasters and other disruptive events, such as cyber-attacks, maintain proper accounting records for the provision of reliable financial information, ensure the our compliance with applicable laws, rules and regulations. Our board of directors is responsible for overseeing the risk management and internal control systems, and reviews the effectiveness of the risk management and internal control systems on an annual basis. However, our risk management and internal control systems are designed to manage rather than eliminate the risk of failure to achieve business objectives, and can only provide reasonable and not absolute assurance against material misstatement or loss.

In addition, we also maintain insurance with respect to our facilities, equipment and inventories, which covers, subject to some limitations, various risks, including fire, typhoons, earthquakes and other risks generally up to the respective policy limit for their replacement values and lost profits due to business interruption. However, there is no assurance that insurance will fully cover any losses and our emergency response plans will be effective in preventing or reducing losses in the future. See D. Risk Factors Interruptions to our networks and operating systems or to those with which we interconnect, including those caused by natural disaster and service maintenance and upgrades, may disrupt our services and operations and may result in customer dissatisfaction and materially and adversely affect our financial condition, results of operations and growth prospects under Item 3.

Regulatory and Related Matters

The telecommunications industry in China is subject to a high degree of government regulation. The primary regulatory authority of the Chinese telecommunications industry is the MIIT, established in 2008 as a new ministry under the PRC State Council and the successor of the former Ministry of Information Industry. The NDRC, the Ministry of Commerce and other governmental authorities also maintain regulatory responsibilities over certain aspects of the Chinese telecommunications industry.

The MIIT, under the supervision of the State Council, is responsible for, among other things:

formulating and enforcing industry policies and regulations, as well as technical standards;

granting telecommunications service licenses;

supervising the operations and quality of services of telecommunications service providers;

allocating and administering telecommunications resources such as spectrum and number resources;

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formulating interconnection and settlement policies between telecommunications networks; and

maintaining fair and orderly market competition among service providers.

The MIIT has established a Telecommunications Administration in each province, autonomous region and municipality in China to oversee the implementation of the MIIT s policies and regulations and exercising regulatory authority delegated by the MIIT within that province, autonomous region or municipality.

Relevant departments of the PRC government, under the direction of the State Council, are in the process of drafting a telecommunications law that, once adopted by the National People s Congress of the PRC, will become the basic telecommunications statute and provide the principal legal framework for telecommunications regulations in China. It is currently uncertain when the law will be adopted and become effective. See D. Risk Factors Risks Relating to the Telecommunications Industry in China Potential changes in laws, regulations and policies relating to the PRC telecommunications industry or any future industry restructuring may materially and adversely affect our financial condition, results of operations and growth prospects under Item 3.

Cybersecurity

We are subject to the Cybersecurity Law, which came into effect on June 1, 2017. The Cybersecurity Law sets forth the general framework regulating network products, equipment, and services, as well as the operation and maintenance of information networks, protection of personal information, and supervision and administration of cybersecurity in Mainland China. According to the Cybersecurity Law, the Cyberspace Administration of China, or the CAC, has a central role in planning, coordination, supervision, and management of network security measures while the MIIT, the national public safety bureau, and other relevant authorities are in charge of network security protection, supervision and management within the scope of their respective responsibilities. Pursuant to the Cybersecurity Law, we are required to perform a security assessment when transferring personal information and important data overseas if such personal information and important data are collected from the operation in China. Such requirements, among other things, could increase our compliance costs. While several related regulations, including the Measures for the Security Review of Network Products and Services (Provisional) and the Internet News Information Service Management Regulations, published by the CAC came into effect on the same day as the Cybersecurity Law, the implementation of the Cybersecurity Law is still at an early stage. The PRC government may amend the relevant regulations or promulgate new regulations to clarify and further implement the Cybersecurity Law. Although we expect that the Cybersecurity Law will have a positive effect on the overall development of the telecommunications industry and enhance information protection in Mainland China, we currently cannot predict the scope of any specific requirements that may be imposed on us and their implications for our operations under the Cybersecurity Law and relevant regulations.

In addition, the Measures for the Security Review of Network Products and Services (Provisional) became effective on June 1, 2017. According to Measures for the Security Review of Network Products and Services (Provisional), the procurement of network products and services must go through a cybersecurity review if such procurement is made for network and information systems that involve national security concern. Relevant government authorities responsible for the protection of critical information infrastructure facilities will decide on whether such procurement of network products and services would threat national security. Since we are one of the leading telecommunications service providers in China, our products and service may be supplied to network and information systems that involve national security concern. As such, we may be requested to provide information for such cybersecurity review. Since the implementation of the Measures for the Security Review of Network Products and Services (Provisional) is still at an early stage, we currently cannot estimate their impact on and implications for our operation.

We have employed risk management and internal control systems to safeguard us against cyber-attacks and to comply with laws and regulations related to cybersecurity. As of April 13, 2018, we have not been subject to any material cyber-attacks or incidents, individually or in the aggregate, that had or would expected to have a material adverse effect on our business and operations, nor had we been involved in any legal proceedings or regulatory investigations related thereto. However, as the regulatory landscape of cybersecurity is subject to substantial uncertainty, we cannot assure you that we will always be in compliance with laws and regulations related to cybersecurity or we will not be held liable for cyber-attacks that committed against us. See D. Risk Factors We face risks associated with our Internet-related services under Item 3.

Anti-Unfair Competition Law

On January 1, 2018, the amended Anti-Unfair Competition Law of the People s Republic of China came into effect. It revised and expanded the scope of unfair competitive acts which include, among others, a network operator s interference with and destruction of products or services provided by other operators. It also strengthened the protection of trade secrets and enhanced supervision over and penalties on unfair competitive acts. Given that the implementation of the amended Anti-Unfair Competition Law of the People s Republic of China is at an early stage and there is uncertainty with respect to its interpretations and enforcement, we are unable to determine its impact on our business.

Telecommunications Regulations

On September 25, 2000, the State Council promulgated the Telecommunications Regulations of the People s Republic of China, which came into effect on the same date. All telecommunications activities and related activities within China are subject to the Telecommunications Regulations, which were amended in accordance with the Decision of the State Council on Amending Certain Administrative Regulations on February 6, 2016.

According to the PRC Government, its administration and regulation of the Chinese telecommunications industry is based on the principles of the separation of governmental regulation from enterprise management, the elimination of monopolistic behavior, the encouragement of competition and the promotion of the development of the Chinese telecommunications industry, while also taking into account the principles of openness, equality and fairness. The Telecommunications Regulations regulate all major aspects of the telecommunications industry, including licensing, interconnection, tariffs, resources, services, security, facility construction and access to networks.

Licensing

The PRC Government licenses telecommunications businesses in accordance with their classification. Telecommunications businesses are currently classified into two broad categories of basic services and value-added services. An appendix to the Telecommunications Regulations divides each of the two categories into further sub-categories. On December 28, 2015, the MIIT promulgated the Telecommunications Service Catalogue (2015 edition), or the 2015 Catalogue, which took effect on March 1, 2016. According to the 2015 Catalogue:

- basic telecommunications services are classified into Category I basic telecommunications services and Category II basic telecommunications services.

  - Category I basic telecommunications services include fixed-line telecommunications services (including fixed-line local, domestic long-distance and international long-distance telecommunications services and services related to maintaining international telecommunications facilities), cellular mobile telecommunications services (including 2G digital cellular mobile telecommunications services, 3G digital cellular mobile telecommunications services and LTE/4G digital cellular mobile telecommunications services), Category I satellite telecommunications services (including satellite mobile telecommunications and satellite fixed-line telecommunications services), Category I data communications services (including Internet international data telecommunications, Internet domestic long-distance data telecommunications, Internet local data telecommunications and International data communications services) and IP telephone services (including domestic and international IP telephone services).

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Category II basic telecommunications services include trunking telecommunications services (including digital trunking telecommunications services), wireless paging services, Category II satellite telecommunications services (including lease and sales of satellite transponders and very-small-aperture-terminal, or VSAT, telecommunications services), Category II data telecommunications services (including fixed-line domestic data transmission services), services related to network access facilities (including services related to wireless network access facilities and cable network access facilities, and network services from customer premises), services related to maintaining domestic telecommunications facilities and network hosting services.

value-added telecommunications services are classified into Category I value-added telecommunications services and Category II value-added telecommunications services.

Category I value-added telecommunications services include IDC, CDN, domestic Internet virtual private network and Internet access services.

Category II value-added telecommunications services include on-line data processing and interchange, domestic multi-party telecommunications, store-and-forward, call center (including domestic and offshore call centers), information and coding and protocol conversion (including domain name system) services.

On March 1, 2009, the MIIT promulgated the Measures on the Administration of Telecommunications Business Licenses, which took effect on April 10, 2009 and superseded the previous measures promulgated by the former Ministry of Information Industry on December 26, 2001.

The measures govern the application for, approval of and regulation of telecommunications business licenses in China. The operation of any basic telecommunications business is subject to the MIIT s approval and grant of License for Operation of Basic Telecommunications Businesses. The operation of any value-added business in two or more provinces, autonomous regions or municipalities is subject to the MIIT s approval and grant of License for Inter-Provincial Operation of Value-Added Telecommunications Businesses. The operation of value-added businesses within a single province, autonomous region or municipality is subject to the approval of the telecommunications authority of the relevant province, autonomous region or municipality in China and the grant of the License for Operation of Value-Added Telecommunications Businesses. The measures, among other things, lowered the minimum amount of registered capital required for an applicant to enter the basic telecommunications business in China.

After the PRC s accession to the WTO, on December 11, 2001, the State Council promulgated the Administrative Regulations on Telecommunications Companies with Foreign Investments, which took effect on January 1, 2002, and were amended in accordance with the Decision of the State Council on Amending Certain Administrative Regulations on February 6, 2016. Those commitments include the gradual reduction of restrictions on foreign ownership in telecommunications enterprises in China and the step-by-step opening-up of the Chinese telecommunications market to foreign enterprises. In recent years, China gradually lifted restrictions for foreign investors in telecommunications enterprises in China and fulfilled its commitment to open up the Chinese telecommunications market. However, the following restrictions on investments in mobile, value-added telecommunications and fixed-line services remain:

for fixed-line services, there is no longer any geographic restriction and foreign ownership may be no more than 49%;

for mobile voice and data services, there is no longer any geographic restriction and foreign ownership may be no more than 49%; and

for value-added telecommunications services, there is no longer any geographic restriction and foreign ownership may be no more than 50%.

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Spectrum and Network Number Resources

The MIIT is responsible for the management of the wireless radio frequency spectrum and the allocation of frequencies within the spectrum. The frequency assigned to a telecommunications operator may not be leased or transferred without the MIIT s approval. In June 2017, the NDRC and the MOF jointly announced new frequency usage fees: (i) for the nationwide frequency bands, an annual rate of RMB16 million per MHz is charged for frequency bands below 960MHz, an annual rate of RMB14 million per MHz is charged for frequency bands between 960MHz and 2,300MHz, and an annual rate of RMB8 million per MHz is charged for frequency bands above 2,300MHz; (ii) for the frequency bands used in each province, an annual rate of RMB1.6 million per MHz is charged for frequency bands below 960MHz, an annual rate of RMB1.4 million per MHz is charged for frequency bands between 960MHz and 2,300MHz, and an annual rate of RMB0.8 million per MHz is charged for frequency bands above 2,300MHz; (iii) for the frequency bands used in each city, an annual rate of RMB160,000 per MHz is charged for frequency bands below 960MHz, an annual rate of RMB140,000 per MHz is charged for frequency bands between 960MHz and 2,300MHz, and an annual rate of RMB80,000 per MHz is charged for frequency bands above 2,300MHz.

The MIIT is also responsible for the administration of China s telecommunications network number resources. The telecommunications network number resources are owned by the State, which shall charge fees for the use of such resources. Application for the use of number resources by any telecommunications operator is subject to the approval of the MIIT or the relevant provincial telecommunications authority and the payment of certain usage fees. The measures also provide for the procedures for the application, usage and record-keeping for the telecommunications operators use of number resources.

Tariff Setting

Prior to January 2014, the levels and categories of telecommunications tariffs were subject to regulation by various government authorities, including the MIIT, the NDRC, and, at the local level, the relevant provincial Telecommunications Administration Bureaus and price regulatory authorities.

In January 2014, the State Council announced the removal of the MIIT s approval requirement on the tariff standard of telecommunications services. In addition, pursuant to the amendments to the Telecommunications Regulations dated August 15, 2014, the telecommunications tariffs shall be set by the telecommunications operators based on costs and market conditions.

In May 2015, the PRC government introduced the PRC Government s policy of increasing network speed and reducing tariff. In response to such policy, we have since then offered discounts to our tariff plans. In addition, in October 2015, we launched our mobile data carry-over programs, which allow subscribers of our data plans with pre-determined monthly data limit to carry over their unused data to the following month with no extra charge. Furthermore, in light of the national policy of achieving coordinated development of Beijing Municipality, Tianjin Municipality and Hebei Province issued in April 2015 by the PRC Government, we cancelled the long-distance and roaming tariffs for voice services within the tariff zones of Beijing Municipality, Tianjin Municipality and Hebei Province so that our customers are only charged with local usage tariff for our voice services provided within the tariff zones. On March 6, 2017, we announced that we plan to substantially reduce Internet private line access tariff for small and medium enterprises customers and international long-distance call tariff. In addition, in September 2017, we ceased charging mobile handset subscribers domestic long-distance and roaming fee. In March 2018, the PRC Government published certain guidance relating to network speed upgrade and tariff reduction in the Government Work Report made in the 13th National People s Congress of the People s Republic of China, and set specific goals, including but not limited to (i) stepping up network speed upgrade and tariff reduction measures, (ii) achieving full coverage of high-speed broadband in cities and towns, (iii) expanding the coverage of free Internet access in public venues, (iv) substantially reducing the tariffs of household broadband, corporate broadband and private line services, and (v) cancelling data roaming fee while mobile data tariff shall decrease by at least 30% in the year of 2018. As we may have to devote substantial resources, incur significant expenses and make strategic decisions on or adjustment of operation strategies in order to meet with these requirements, our compliance with the speed upgrade and tariff reduction policy may have an adverse effect on our financial condition, results of operations and growth prospects.

Mobile Services

Generally, the categories of tariffs we charge our mobile subscribers include, among others, basic monthly fees and local usage charges, roaming charges, long-distance-call charges and charges for value-added services.

Intensifying competition in our mobile service areas has resulted in tariff discounts and service promotions offered by us and our main competitors from time to time, which may reduce the effective tariffs. These discounts and promotions have taken many forms, including promotional tariff rates, free call minutes, reduced roaming charges, off-peak discounts or discounts for high-usage subscribers and package service plans with fixed monthly fees.

We have introduced a number of package service plans. Under these plans, subscribers typically pay a fixed monthly fee for a specified number of call minutes. The plans vary at the levels of fixed monthly fee, number of specified call minutes and tariff rates for call minutes in excess of the specified call minutes. The terms of these plans also vary depending on the local markets.

Fixed-Line Voice Services

For our local voice services, we charge an installation and testing fee that varies depending on whether the subscriber is a residential or a business customer, a fixed monthly fee, local call usage fees based on call duration and fees for certain value-added services. For our domestic long-distance services, our revenue consist of charges based on the duration, time of day and day of the week a call is placed. For our international, Hong Kong, Macau and Taiwan long distance wireline services, we charge usage fees based on call duration and call destination.

Data Services

Our data services consist of DDN services and frame relay services. We charge monthly fees for DDN services and frame relay services, which vary based on bandwidth and whether it is intra-district, inter-district or long-distance.

Leased Line Services

We charge monthly fees for subscribers to our leased line services based on guidance tariffs set by the PRC Government, which vary based on bandwidth and whether the leased line is local or long-distance. Leased line tariffs have generally decreased in recent years.

Interconnection Arrangements

In October 2003, the former Ministry of Information Industry issued Measures on Settlement of Interconnection between Public Telecommunications Networks and Sharing of Relaying Fees, which superseded the Measures on the Settlement of Call Charges between Telecommunications Networks issued by the former Ministry of Information Industry in 2001. These regulations contain specific provisions regarding, among other things, revenue-sharing methods and settlement mechanisms and interconnection agreements among telecommunications service providers. Since November 2005, the former Ministry of Information Industry (or the MIIT after March 2008) has issued a number of administrative measures to adjust the settlement arrangement standards with respect to interconnection fees for certain network interconnections between telecommunications operators. In accordance with various administrative measures, Unicom Group or we, as the case may be, have entered into agreements on interconnection with other telecommunications operators, including China Telecom and China Mobile.

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The following table sets forth selected interconnection revenue-sharing and settlement arrangements for local calls:

Operator from Whose Network Calls Are Originated	Operator at Whose Network Calls Are Terminated	Current Main Settlement Arrangement
Mobile operator	Local fixed-line operator	(1) Mobile operator collects the usage fees from its subscribers;
		(2) Mobile operator pays RMB0.06 per minute to local fixed-line operator. For calls originated from 157 or 188 prefix phone numbers (TD users) during the period from January 1, 2010 to December 31, 2010, mobile operator (China Mobile) pays RMB0.012 per minute to fixed-line operator. From January 1, 2011, for calls originated from 157 or 188 prefix phone numbers (TD users), mobile operator (China Mobile) continues to pay RMB0.012 per minute to fixed-line operator.
Local fixed-line operator	Mobile operator	(1) Local fixed-line operator collects the usage charge from its subscribers;
		(2) No revenue-sharing or settlement prior to June 1, 2010. Local fixed-line operator pays RMB0.001 per minute to mobile operator after June 1, 2010.
Mobile operator A	Mobile operator B	(1) Mobile operator A collects the cellular usage charge from its subscribers;
		(2) Mobile operator A pays RMB0.06 per minute to mobile operator B. For calls originated from a mobile user of China Telecom or Unicom to a mobile user of China Mobile (not including 157 or 188 prefix phone numbers (TD users)) during the period from January 1, 2014, Mobile operator A (China Telecom or Unicom) pays RMB0.04 per minute to mobile operator B (China

		Mobile). For calls originated from 157 or 188 prefix phone numbers (TD users) during the period from January 1, 2010, mobile operator A (China Mobile) pays RMB0.012 per minute to mobile operator B (China Telecom or Unicom).
Local fixed-line operator A	Local fixed-line operator B	(1) Operator A collects the usage fees from its subscribers;
		(2) In the case of intra-district calls, operator A pays operator B 50% of the intra-district usage fees;
		(3) (i) In the case of local inter-district calls from operator A using operator B s local inter-district trunk circuit, operator A collects the usage charge from its subscribers and pays RMB0.06 per minute to operator B; (ii) In the case of local inter-district calls from operator A not using operator B s local inter-district trunk circuit, operator A collects the usage charge from its subscribers and pays operator B 50% of the intra-district usage fees.

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The following table sets forth selected current major main interconnection revenue-sharing and settlement arrangements for domestic long-distance calls:

Operator at Whose Network Calls Are Originated	Operator at Whose Network Calls Are Terminated	Current Main Settlement Arrangement
Local fixed-line or mobile operator A (through the long-distance network of operator A)	Local fixed-line or mobile operator B	For calls originated from a mobile user of China Telecom or Unicom to a mobile user of China Mobile (not including 157 or 188 prefix phone numbers (TD users)) during the period from January 1, 2014, Mobile operator A (China Telecom or Unicom) pays RMB0.04 per minute to mobile operator B (China Mobile). Other than the above, operator A pays RMB0.06 per minute to operator B.
Fixed-line or mobile operator A	Domestic long-distance calls made without using the carrier identity code of operator B (through the long-distance network of operator B)	(1) Operator A collects the tariff from the subscribers; (2) If Operator A is a fixed-line operator, operator A retains RMB0.06 per minute; if operator A is a mobile operator, operator A retains local usage fee and RMB0.06 per minute; and (3) Operator A pays operator B the rest of the domestic long-distance tariff. Note: Domestic long-distance calls shall be charged at the domestic long-distance call tariff of operator B.
Local fixed-line or mobile operator A	Domestic long-distance calls made by using the carrier identity code of operator B (through the long-distance network of operator B)	(1) Operator B collects the tariff from the subscribers; and (2) Operator B pays operator A RMB0.06 per minute.

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The following table sets forth selected current main interconnection revenue-sharing and settlement arrangements for public switched telephone network international long-distance calls, including calls originated from and terminated in Hong Kong, Macau and Taiwan:

Operator at Whose Network Calls Are Originated	Operator at Whose Network Calls Are Terminated	Current Main Settlement Arrangement
Local fixed-line or mobile operator A	International long-distance calls (including to Hong Kong, Macau and Taiwan) made without using the carrier identity code of operator B and directed by operator A from the originating network to operator B.	(1) Operator A collects the tariff from the subscribers; (2) If operator A is a fixed-line operator, operator A retains no more than RMB0.54 per minute with the remaining paid to operator B; and (3) If operator A is a mobile operator, operator A retains local usage fees and no more than RMB0.54 per minute with the remaining paid to operator B. Note: International long-distance calls shall be charged at the international long-distance call tariff of operator B.
Local fixed-line or mobile operator A	International long-distance calls made by using the carrier identity code of operator B and through the domestic and international long-distance networks of operator B.	(1) Operator B collects the tariff from the subscribers; and (2) Operator B pays operator A RMB0.06 per minute.

The following table sets forth selected current main interconnection revenue-sharing and settlement arrangements for VoIP long-distance calls:

Operator from Whose Network Calls Are Originated	Operator at Whose Network Calls Are Terminated	Current Main Settlement Arrangement
Fixed-line or mobile operator A	Fixed-line or mobile operator B through the VoIP network of operator	(1) Operator A collects local usage fees;

C	(2) Operator C collects the VoIP long-distance usage fees from its subscribers;
	(3) Operator C pays RMB0.06 per minute to operator B on the terminating end;
	(4) No settlement between operator C and operator A on the originating end.

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The following table sets forth selected current main interconnection revenue-sharing and settlement arrangements for SMS:

Network from Which SMS Originated	Network at Which SMS Terminated	Current Main Settlement Arrangement
Fixed-line or mobile operator A	Fixed-line or mobile operator B	(1) Operator A collects the tariff from its subscribers;
		(2) Operator A pays RMB0.01 (RMB0.03 during the period from January 1, 2010 to December 31, 2013; RMB0.05 prior to January 1, 2010) per SMS to Operator B

The following table sets forth selected current main interconnection revenue-sharing and settlement arrangements for MMS:

Network from Which MMS Originated	Network at Which MMS Terminated	Current Main Settlement Arrangement
Mobile operator A	Mobile operator B	(1) Operator A collects the tariff from its subscribers;
		(2) Operator A pays RMB0.05 (RMB0.10 during the period from January 1, 2010 to December 31, 2013; RMB0.15 prior to January 1, 2010) per MMS to Operator B

Technical Standards

The MIIT is responsible for promulgating the technical standards for China s telecommunications industry and establishing the technical requirements and testing parameters for telecommunications equipment (including network and end-user equipment). The MIIT is also responsible for designating qualified institutes to test telecommunications equipment, which would grant network access licenses (or product standard certificates) for the equipment that has successfully passed the relevant tests. Only telecommunications equipment for which a network access license (or a product standard certificate) has been granted may be sold and used in China.

Most of the standards used in the Chinese telecommunications industry are generally based on the standards issued by nine international organizations for telecommunications standards, including International Telecommunications Union, 3rd Generation Partnership Project, Groupe Speciale Mobile Association and Global Certification Forum, and six open source platforms including Open Network Operating System and OpenDaylight, with more specific requirements made in light of China s particular telecommunications industry. On the basis of the technical standards used in China s telecommunications industry, we may formulate our own technical standards based on our own needs and issue additional requirements for telecommunications equipment in order to meet our operational needs. All telecommunications equipment purchased by China s telecommunications operators must have been granted a network access license issued by the MIIT and must meet the standards set forth by the relevant operators.

Quality of Services

Under the Telecommunications Regulations, the MIIT and the relevant provincial telecommunications administrations are responsible for supervising and monitoring the quality of services provided by telecommunications operators in China. Under the Telecommunications Regulations, customers of telecommunications operators have the right to submit their complaints to the MIIT and the relevant provincial telecommunications administrations or other relevant government authorities. In addition, the MIIT, together with other governmental authorities, has taken measures to prompt telecommunications operators to screen indecent contents carried through their networks.

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Universal Services

Telecommunications service providers in China are required to fulfill universal service obligations in accordance with relevant regulations to be promulgated by the PRC Government, and the MIIT has the authority to delineate the scope of its universal service obligations. The MIIT may also select universal service providers through a tendering process. The MIIT, together with the finance and pricing authorities, is also responsible for formulating administrative rules relating to the establishment of a universal service fund and compensation schemes for universal services. Under the Telecommunications Regulations, all PRC telecommunications operators shall provide universal services, and we expect to perform our duties thereunder accordingly. In December 2015, the MOF and the MIIT jointly issued the rules regarding the pilot program for universal services to be implemented in certain cities across the PRC. Since then, the MIIT has designated additional cities and villages as participants of the pilot program for universal services in public notice from time to time. Pursuant to the pilot program for universal services, we undertook broadband construction projects in 16,134 villages from 2016 to 2017, out of which broadband construction projects in 3,557 villages were undertaken in 2017.

The MIIT has required major Chinese telecommunications service providers, including Unicom Group and former Netcom Group, to participate in a project to provide telecommunications services in tens of thousands of remote villages in certain designated provinces in China as transitional measures prior to the formalization of a universal service obligation framework. In participating in this project, Unicom Group has undertaken the universal service obligation to extend telecommunications service coverage to all administrative-level villages primarily through its fixed-line and mobile broadband networks. Currently, with our assistance, Unicom Group is further extending telecommunications service coverage to natural villages in remote areas in China as designated by the MIIT. We have been assisting Unicom Group in providing mobile telecommunications services to these remote villages and are responsible for the operation and maintenance of the relevant network facilities in our service areas. See D. Risk Factors Risks Relating to the Telecommunications Industry in China The PRC Government may require us, along with other telecommunications service providers in China, to provide universal services with specified obligations, and we may not be compensated adequately for providing such services under Item 3.

Sharing of Telecommunications Infrastructure.

In May 2017, the MIIT and the SASAC jointly issued the 2017 Implementation Opinions on Promoting the Joint Construction and Sharing of Telecommunications Infrastructure, or the Opinions. The Opinions require that the supporting facilities for base stations, such as the telecommunications towers, and the indoor distribution systems for public transportation and buildings, shall generally be planned, constructed and delivered by the Tower Company, except that certain facilities may be constructed by a telecommunications operator if serving only such operators demand. The Opinions also set forth the sharing requirements in the construction of FTTH infrastructure. In newly-built residential areas, commercial areas and campus, FTTH construction must strictly observe the applicable national and local standards. Telecommunication operators are prohibited from entering into any exclusivity arrangement with real estate developers or property management companies. In the upgrading of FTTH for existing residential areas, commercial areas and campus, telecommunication operators and relevant stakeholders must cooperate with each other to comply with the joint construction and sharing requirements. Moreover, with respect to transmission facilities, sharing and joint construction of transmission poles and pipeline is mandatory whenever conditions so allow. It is expected that the sharing of telecommunications infrastructure would enable us to expand our service coverage at lower cost, and thus enhance our service quality and operating efficiency.

Convergence Policy of Telecom, Broadcasting and Internet Networks

In January 2010, the PRC Government announced its decision to accelerate the advancement of convergence of television broadcast, telecommunications and Internet access networks to realize interconnection and resource-sharing among the three networks and further develop the provision of voice, data, television and other services. In 2015, the PRC Government promulgated the Notice on Issuance of the Plan to Promote Convergence of Telecom, Broadcasting and Internet Networks by the General Office of the State Council, and started to fully implement such policy across-the-board. The PRC Government may amend relevant policies or promulgate new regulations corresponding to the implementation of the three-network convergence policy in the future.

Mobile Telecommunications Resale Business

In May 2013, the MIIT issued the pilot program for mobile telecommunications resale business that permit privately-owned enterprises to purchase mobile services from telecommunications operators and provide mobile services to end-customers after repackaging and rebranding. Although the initial trial period of the pilot program ended on December 31, 2015, the mobile services leasing and repackaging will continue to be governed by the rules of the pilot program until the MIIT issues any further rule. On January 6, 2016, the MIIT issued the Guidance on the Wholesale Price Adjustments of Mobile Telecommunications Resale Business ( ), pursuant to w that the wholesale price for resale of mobile telecommunications services should be lower than the per unit price (or package price) for similar businesses of the mobile networks operators. We have been promoting the sustainable development of the resale business through cooperation to achieve win-win results. As of December 31, 2017, 31 companies purchased mobile services covering approximately 45 million end customers from us, accounting for approximately 73% of the total market share as of the same date in terms of the number of end customers.

VAT Applicable to the Telecommunications Services

The PRC Government implemented value-added tax, or VAT, to replace business tax relating to the telecommunications services in China on June 1, 2014. Effective as of May 1, 2016, VAT became applicable to all the other industries in China. Furthermore, as of May 1, 2018, the rate of VAT applicable to our basic telecommunications services would be reduced from 11% to 10%, and the rate of VAT applicable to our sales of telecommunications products would be reduced from 17% to 16%.

Output VAT is excluded from operating revenue while input VAT, which is incurred as a result of our receipt of services and purchases of telecommunications equipment and materials, is excluded from operating expenses or the original cost of equipment purchased and can be netted against the output VAT, arriving at the net amount of VAT recoverable or payable. Such net amount of VAT is recorded in the line item of prepayments and other current assets and taxes payable, respectively, on the face of consolidated statements of financial position. As a result of application of VAT to all other industries in China, more of capital expenditures and operating expenses became entitled to input VAT credits, which offset our VAT output tax obligations. As the implementation of VAT to replace business tax was expanded to other industries nationwide in 2016, we were able to reduce operating costs by claiming input VAT credits. In addition, we have claimed input VAT credits on our capital expenditures for purchasing certain assets, which resulted in a lower depreciation.

Others

As a company with substantially all of our operations in China, we, along with our ultimate controlling shareholder, Unicom Group, are subject to various regulations of the PRC Government in addition to those regulating telecommunications industry. PRC regulatory authorities, such as the State Bureau of Taxation, National Audit Office and SAIC, exercise extensive oversight over various aspects of our businesses and conduct various regular inspections, examinations and/or audits on us and Unicom Group. As required by the relevant PRC laws and regulations, Unicom Group, as one of the key State-owned enterprises under the direct supervision of the SASAC, is also subject to routine audits by the National Audit Office, or the NAO as well as other PRC regulatory authorities.

In addition, the SASAC has an indirect influence over us as our ultimate controlling shareholder, Unicom Group, is under the direct supervision of the SASAC. In particular, the SASAC may designate certain nominees and request Unicom Group to propose the appointment of such nominees as our directors and senior management. The SASAC may also request Unicom Group to remove our directors and senior management in accordance with relevant procedures provided by applicable law and our articles of association.

Disclosure of Iranian Activities under Section 13(r) of the Securities Exchange Act of 1934

Section 219 of the Iran Threat Reduction and Syria Human Rights Act of 2012 added Section 13(r) to the Exchange Act of 1934, as amended. Section 13(r) requires an issuer to disclose in its annual or quarterly reports, as applicable, whether it or any of its affiliates knowingly engaged in certain activities, transactions or dealings relating to Iran or with designated natural persons or entities involved in terrorism or the proliferation of weapons of mass destruction. Disclosure is required even where the activities, transactions or dealings are conducted outside the U.S. by non-U.S. affiliates in compliance with applicable law, and whether or not the activities are sanctionable under U.S. law.

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As of the date of this report, we are not aware of any activity, transaction or dealing by us or any of our affiliates in 2017 that requires disclosure in this under Section 13(r) of the Exchange Act of 1934, as amended, except as set forth below.

Our ultimate controlling shareholder, Unicom Group, is a party to the international roaming agreements with Mobile Company of Iran, or MCI, and MTN Irancell, or MTN, respectively. We have been informed by Unicom Group that, in 2017, the estimated gross revenue Unicom Group generated from such inbound international roaming traffic with MCI and MTN was approximately RMB367,534 and RMB6,003, respectively, and the estimated total amount paid by Unicom Group to MCI and MTN for the outbound international roaming traffic was approximately RMB64,290 and approximately RMB356,908, respectively. Unicom Group does not customarily allocate net profit on a country-by-country or activity-by-activity basis, and therefore it is not possible to determine accurately the precise net profits attributable to such transactions with MCI and MTN. Unicom Group estimates that the net profits attributable to the transactions with MCI and MTN were negligible relevant to its overall net profits. We understand that Unicom Group intends to continue these activities in the future.

C. *Organizational Structure*

We are incorporated in Hong Kong and as of April 13, 2018, we were (i) 53.5% owned by Unicom BVI, which was 17.9% owned by Unicom Group and 82.1% owned by the A Share Company, which in turn was 36.7% owned by Unicom Group, (ii) 26.4% owned by Unicom Group BVI, which in turn was 100% owned by Unicom Group, and (iii) 20.1% owned by public shareholders. See A. History and Development of the Company above. Set forth below are details of our significant subsidiaries.

Name of Subsidiary	Place of Incorporation	Ownership Interest
China United Network Communications Corporation Limited	China	100%
Unicom Vsens Telecommunications Company Limited	China	100%
Unicom New Horizon Telecommunications Company Limited	China	100%
China Unicom (Hong Kong) Operations Limited	Hong Kong	100%
China Unicom (Americas) Operations Limited	United States	100%
China Unicom (Singapore) Operations Pte. Ltd.	Singapore	100%
China Unicom (Europe) Operations Limited	United Kingdom	100%
China Unicom (Japan) Operations Corporation	Japan	100%
China Unicom (MYA) Operations Company Limited	The Republic of the Union of Myanmar	100%
China Unicom (Australia) Operations Pty Limited	Australia	100%
China Unicom Global Limited	Hong Kong	100%
China Unicom (Russia) Operations Limited Liability Company	Russia	100%
China Unicom (Brazil) Telecommunications Company Limited	Brazil	100%
China Unicom Finance Company Limited	China	91%
China Unicom Big Data Company Limited	China	100%
	China	100%

China Unicom (Guangdong Branch) Internet Industry Limited		
China Unicom (Zhejiang) Industry Internet Company Limited	China	100%
China Unicom (ShanDong) Industrial Internet Company Limited	China	100%

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D. Properties

Our principal executive offices are located in Hong Kong. We also maintain executive offices in Beijing. We own and lease a large number of offices, retail outlets, equipment rooms and base stations throughout China. In some cases, we have not entered into formal lease agreements with the lessors or the lessors may not possess requisite title certificates. We believe that it is unlikely that we would be denied our right to use a large number of these properties at any given time.

Item 4A. Unresolved Staff Comments

Not Applicable.

Item 5. Operating and Financial Review and Prospects

You should read the following discussion and analysis in conjunction with the selected financial data set forth in Item 3 and our consolidated financial statements, together with the related notes, included elsewhere in this annual report on Form 20-F.

Overview

We are an integrated telecommunications operator in China providing voice usage, broadband and mobile data services, data and Internet application services, other value-added services, leased lines and associated services and telecommunications products to our customers. In recent years, we have continued to extend the coverage of all of our services nationwide. We, China Mobile and China Telecom are the three major telecommunications operators in China.

The table below sets forth revenue from our major services and their respective percentage of our total revenue in 2015, 2016 and 2017.

	For the Year Ended December 31,					
	2015		2016		2017	
	RMB in millions	% of Total	RMB in millions	% of Total	RMB in millions	% of Total
Total revenue	277,049	100.0	274,197	100.0	274,829	100.0
Total service revenue(1)	232,976	84.1	238,033	86.8	249,015	90.6
Voice usage and monthly fees	57,030	20.6	47,500	17.3	39,154	14.2
Broadband and mobile data services	105,634	38.1	118,209	43.1	137,133	49.9
Data and Internet application services	12,936	4.7	17,782	6.5	20,074	7.3
Other value-added services	27,411	9.9	24,187	8.8	22,793	8.3
Interconnection fees	15,514	5.6	14,748	5.4	14,233	5.2

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	For the Year Ended December 31,					
	2015		2016		2017	
	RMB in millions	% of Total	RMB in millions	% of Total	RMB in millions	% of Total
Leased lines and associated services	11,484	4.1	11,618	4.2	12,519	4.6
Other services	2,967	1.1	3,989	1.5	3,109	1.1
Sales of telecommunications products(2)	44,073	15.9	36,164	13.2	25,814	9.4

(1) As our business continues to evolve, we have been engaged in further integration of our mobile services, fixed-line services and other services, including offering more bundled service packages across mobile and fixed-line services. As such, in 2017, we began presenting the breakdown of service revenue as revenue from voice usage and monthly fees, broadband and mobile data services, data and Internet application services, other value-added services, interconnection fees, leased lines and associated services and other services. The relevant presentation for our service revenue in 2015 and 2016 has therefore been reclassified to conform with current year s presentation.

(2) Revenue from sales of products associated with the ICT business, which was previously recorded as part of the fixed-line service revenue, has been reclassified as revenue from sales of telecommunications products to better reflect the commercial nature of the transactions. The related figures for the years ended December 31, 2015 and 2016 have been reclassified on the same basis.

Our service revenue primarily consists of the following:

revenue from voice usage and monthly fees for our mobile and fixed-line voice services, which are recognized when we render the services to our customers;

revenue from broadband and mobile data services, which are recognized when the services are provided to customers;

revenue from data and Internet application services mainly representing revenue from the provision of data storage and application, information communications technology and other Internet-related service, which are recognized when services are rendered;

revenue from other value-added services revenue mainly representing revenue from the provision of short message, cool ringtone, Personalized Ring , caller number display and secretarial services, which are recognized when services are rendered;

revenue from interconnection fees representing revenue received or receivable from other domestic and foreign telecommunications operators for the use of the Group s telecommunications network, which are recognized when service is rendered;

revenue from leased lines and associated services representing income from offering lines and customer-end equipment to customers for usage and related services, which are recognized on a straight-line basis over the lease and service period;

revenue from other services representing revenue from broadband installation services, subscriber points reward program, real property leasing services and certain other miscellaneous services; and

revenue from sales of telecommunications products mainly representing revenue from sale of mobile handsets, fixed-line terminals and accessories, which are recognized when title has been passed to the buyers.

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The following table sets forth our major costs and expenses items and income before income tax, both in terms of amount and as a percentage of total revenue in 2015, 2016 and 2017.

	For the Year Ended December 31,					
	2015		2016		2017	
	RMB in millions	% of Total	RMB in millions	% of Total	RMB in millions	% of Total
Total revenue	277,049	100.0	274,197	100.0	274,829	100.0
Costs, expenses and others	263,014	94.9	273,413	99.7	272,236	99.1
Interconnection charges	13,093	4.7	12,739	4.6	12,617	4.6
Depreciation and amortization	76,738	27.7	76,805	28.0	77,492	28.2
Network, operation and support expenses	42,308	15.3	51,167	18.7	54,507	19.8
Employee benefit expenses	35,140	12.7	36,907	13.5	42,471	15.5
Selling and marketing	31,965	11.5	34,646	12.6	34,086	12.4
General, administrative and other expenses[(1)]	20,962	7.6	19,939	7.3	23,080	8.4
Cost of telecommunications products sold[(1)]	46,079	16.6	39,301	14.3	26,643	9.7
Finance costs, net of interest income	6,496	2.3	3,857	1.4	4,087	1.5
Other income-net	(9,767)	(3.5)	(1,948)	(0.7)	(2,747)	(1.0)

(1) Revenue from sales of products associated with the ICT business, which was previously recorded as part of the fixed-line service revenue, has been reclassified as revenue from sales of telecommunications products to better reflect the commercial nature of the transactions. Correspondingly, certain cost of sales of products associated with the ICT business, which was previously recorded as part of the general, administrative and other expenses, has been reclassified as part of the cost of telecommunications product sold. The related figures for the years ended December 31, 2015 and 2016 have been reclassified on the same basis.

Our major costs and expenses include the following:

- interconnection expenses, representing amounts paid to other operators for calls from our networks to their networks and for calls made by our subscribers roaming in their networks;

- depreciation and amortization expenses, mainly relating to our property, plant and equipment and other assets;

- network, operation and support expenses, primarily including repairs and maintenance, power and water charges, operating lease charges for network, premises, equipment and facilities, operating lease and other service charges to Tower Company and others;

employee benefit expenses, primarily including salaries and wages, contributions to defined contribution pension schemes, contributions to medical insurance, contributions to housing fund and other benefits;

selling and marketing expenses, primarily including commission and other service expenses, advertising and promotion expenses, Internet access terminal maintenance expenses and customer retention costs;

general, administrative and other expenses, primarily including impairment losses for doubtful debts and write-down of inventories, auditors remuneration, property management fee, office and administrative expenses, transportation expense, miscellaneous taxes and fees, service technical support expenses, repairs and maintenance expenses, loss on disposal of property, plant and equipment and others;

cost of telecommunications products sold, primarily including costs of handsets and other telecommunication products and others; and

finance costs, net of interest income, primarily including interest expenses, net of interest income.

Critical Accounting Policies

The preparation of our financial statements and this annual report on Form 20-F requires us to make estimates and judgments that affect the reported and disclosed amounts of assets and liabilities, including contingent assets and liabilities, as of the relevant dates and revenue and expenses for the relevant periods. We have identified below the areas involving a higher degree of judgment or complexity, or areas where assumptions are significant to the accounting policies and estimates, as critical to our business operations and an understanding of our results of operations and financial position. The impact and any associated risks related to these policies on our business operations are discussed throughout this Item 5 where such policies affect our reported and expected financial results. For a discussion of the application of these and other accounting policies, see Note 2 and Note 4 to our consolidated financial statements included elsewhere in this annual report on Form 20-F. There can be no assurance that actual results will not differ from those estimates and assumptions.

Significant Accounting Policies

Revenue Recognition

Revenue comprises the fair value of the consideration received or receivable for the services and sales of goods or telecommunications products in the ordinary course of our business activities.

We recognize revenue when the amount of revenue can be reliably measured, it is probable that future economic benefits will flow to the entity and specific criteria have been met for each of our activities as described below. We base our estimates on historical results, taking into consideration the type of customer, the type of transaction and the specifics of each arrangement.

Sales of services and goods

Voice usage and monthly fees are recognized when the services are rendered;

Revenue from the provision of broadband and mobile data services are recognized when the services are provided to customers;

Data and Internet application service revenue, which mainly represent revenue from the provision of data storage and application, information communications technology and other Internet-related service, are recognized when services are rendered;

Other value-added services revenue, which mainly represents revenue from the provision of services such as short message, cool ringtone, Personalized Ring , caller number display and secretarial services, are recognized when services are rendered;

Interconnection fees represent revenue received or receivables from other domestic and foreign telecommunications operators for the use of our telecommunications network, are recognized when the services are rendered;

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Revenue from leased lines and associated services, which mainly represents income from offering lines and customer-end equipment to customers for usage and related services are recognized on a straight-line basis over the respective lease and service period;

Standalone sales of telecommunications products, which mainly represent handsets and accessories, are recognized when titles have been passed to the buyers; and

Preferential packages to the customers which include the bundled sale of mobile handsets and provision of services. The total contract consideration of such preferential packages is allocated to service revenue and sales of handsets based on their relative fair values. Revenue relating to the sale of the handset is recognized when the title is passed to the customer whereas service revenue is recognized based upon the actual usage of the telecommunications services. The cost of the mobile handset is expensed immediately to the statement of income upon revenue recognition.

Dividend income

Dividend income is recognized when the right to receive payment is established.

Deferred Revenue, Advances from Customers and Subscriber Points Reward Program

Deferred revenue

Deferred revenue mainly represents upfront non-refundable fees, including installation fees of fixed-line services, which are deferred and recognized over the expected customer service period. Deferred revenue expected to be recognized in one year or less is classified as current liabilities. If not, they are presented as non-current liabilities.

Advances from customers

Advances from customers are mainly amounts paid by customers for prepaid cards, other calling cards and prepaid service fees, which cover future telecommunications services. Advances from customers are stated at the amount of proceeds received less the amount already recognized as revenue upon the rendering of services.

Subscriber points reward program

The fair value of providing telecommunications services and the subscriber points reward is allocated based on their relative fair values. The allocated portion of fair value for the subscriber points reward is recorded as deferred revenue when the rewards are granted and recognized as revenue when the points are redeemed or expired.

Critical Accounting Estimates and Judgments

Depreciation on Property, Plant and Equipment

Depreciation on our property, plant and equipment is calculated using the straight-line method to allocate cost up to residual values over the estimated useful lives of the assets. We review the useful lives and residual values periodically to ensure that the method and rates of depreciation are consistent with the expected pattern of realization of economic benefits from property, plant and equipment. We estimate the useful lives of property, plant and equipment based on historical experience, taking into account anticipated technological changes. If there are significant changes from previously estimated useful lives, the amount of depreciation expenses may change.

Impairment of Non-Financial Assets

We test whether non-financial assets have suffered from any impairment, in accordance with the accounting policy stated in Note 2.12 to the audited consolidated financial statements contained elsewhere in this annual report on Form 20-F. The recoverable amount of an asset is the higher of its fair value less costs to sell and its value in use. Management estimates value in use based on estimated discounted pre-tax future cash flows of the cash generating unit at the lowest level to which the asset belongs. If there is any significant change in management s assumptions, including discount rates or growth rates in the future cash flow projection, the estimated recoverable amounts of the non-financial assets and our results would be significantly affected. Such impairment losses are recognized in the statement of income. Accordingly, there will be an impact to the future results if there is a significant change in the recoverable amounts of the non-financial assets.

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No significant impairment loss on property, plant and equipment was recognized for the years ended December 31, 2015, 2016 and 2017.

Allowance for Doubtful Debts

Management estimates an allowance for doubtful debts resulting from the inability of the customers to make the required payments. Management bases its estimates on the aging of the accounts receivable balance, customer credit-worthiness, and historical write-off experience. If the financial condition of the customers were to deteriorate, additional allowance may be required.

Income Tax and Deferred Taxation

We estimate our income tax provision and deferred taxation in accordance with the prevailing tax rules and regulations, taking into account any special approvals obtained from relevant tax authorities and any preferential tax treatment to which we are entitled in each location or jurisdiction in which we operate. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. We recognize liabilities for anticipated tax audit issues based on estimates of whether additional taxes will be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such