

Management's Discussion and Analysis

Business Review

The following table sets out the key operating data for 2015, 2016 and 2017:

	Unit	2015	2016	2017	2017 change over 2016
Mobile subscribers	Million	197.90	215.00	249.96	16.3%
of which: 4G users	Million	58.46	121.87	182.04	49.4%
Mobile voice usage	Billion minutes	667.5	720.6	769.2	6.7%
Handset data traffic	kTB	554.7	1,277.0	3,597.0	181.7%
4G users DOU	MB/month/user	751	1,029	2,012	95.5%
Wireline broadband subscribers	Million	113.06	123.12	133.53	8.5%
of which: Fibre-to-the-Home (FTTH) subscribers	Million	70.99	105.99	126.17	19.0%
e-Surfing HD subscribers	Million	40.38	61.33	85.76	39.8%
Internet of Things connected devices	Million	0.98	14.19	44.30	212.2%
"BestPay" average monthly active users	Million	3.51	16.21	33.00	103.6%
Access lines in service	Million	134.32	126.86	121.80	-4.0%
Wireline local voice usage	Billion pulses	110.9	93.4	75.1	-19.6%



World Internet Conference

World
Internet
Conference





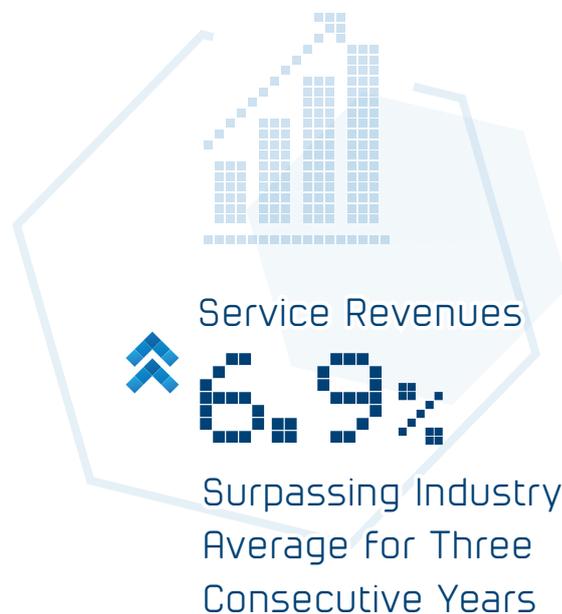
Management's Discussion and Analysis Business Review

In 2017, with accelerated promotion of network intelligentisation, service ecologicalisation and operation intellectualisation, the Company focused on the scale development of the five ecospheres, and achieved sound revenue growth momentum, continuous optimisation of business structure, sustained subscriber scale expansion and remarkably strengthened comprehensive capabilities.

Key Operating Performance in 2017

1. Healthy growth in operating revenues with continuous optimisation in business structure

In 2017, the Company's operating revenues increased by 3.9% year-on-year to RMB366.2 billion. Service revenues increased by 6.9% year-on-year to RMB331.0 billion. Revenue structure was further optimised, with emerging businesses accounting for 46% of service revenues, up 6.4 percentage points year-on-year. Of which, handset Internet access revenue and New ICT Application revenue increased by 33% and 20% respectively year-on-year, forming major drivers of revenue growth.



Implementation of Speed Upgrade and Tariff Reduction cum promotion of "6-mode" handset ceremony

Management's Discussion and Analysis

Business Review

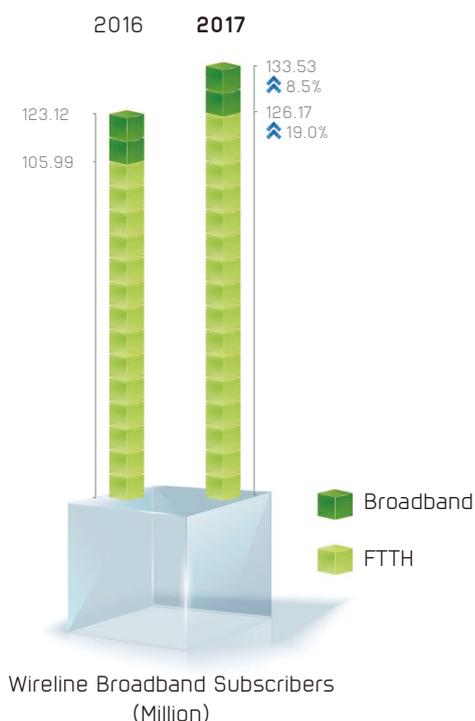
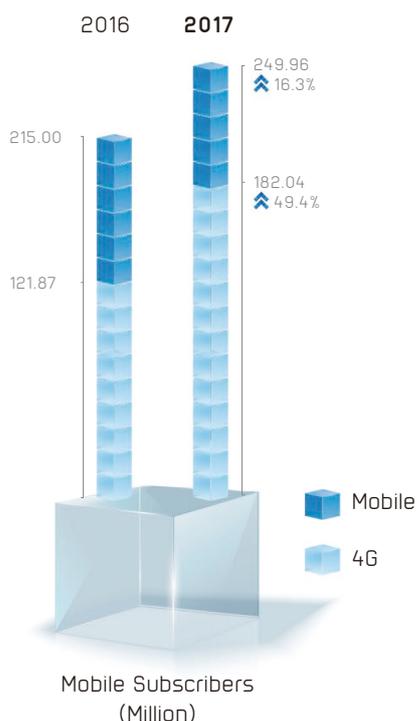
2. Strong growth momentum for mobile services with scale hitting six-year high

Mobile subscribers reached 250 million in 2017, with a net addition of 34.96 million. Its market share reached 17.6%, representing an increase of 1.4 percentage points over the end of last year. Of which, 4G users reached 182 million, with a net addition of 60.17 million.

With 4G development entering into the phase of scale expansion and value realisation in 2017, the Company kept abreast of the market trend and grasped the opportunities arising from handset upgrade, demand for multiple SIM cards and explosive growth of data traffic ignited by Internet applications, to actively create new development models and leverage flexible combination of



initiatives including multi-business convergence, “multi-mode” handsets and BestPay red packet, etc., striving to accelerate scale expansion. Thereby, net addition of mobile subscribers doubled year-on-year. Actively leveraging on data price elasticity, the Company launched large data traffic packages and Internet card products to raise both volume consumption and value of data, achieving growth of both data traffic and revenue. As a result, handset data traffic and handset Internet access revenue recorded



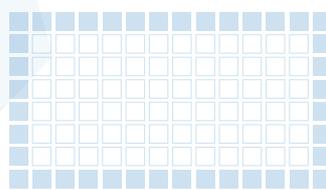


Management's Discussion and Analysis Business Review

year-on-year increases of 182% and 33%, respectively. The Company accelerated the popularisation of, and acquired international standard certification for "multi-mode" handsets, and integrated the industry value chain, so as to strengthen handset business operation. In 2017, "multi-mode" handsets sales volume of the whole industry increased by over 20%¹ year-on-year, accounting for 80%¹ of total handset sales volume. Of which, China Telecom's "multi-mode" handset sales were over 130 million, representing a year-on-year increase of nearly 70%, opening up more room for mobile business development.

demonstrating high resilience and growth momentum. With Smart Family as springboard, the Company sped up developing the Smart Family ecosphere by launching convergence packages with various services including fibre broadband, e-Surfing HD, Intelligent WiFi Networking Services, Family Cloud, etc. so as to address the growing market demand for applications such as smart household, video entertainment, and household networking. Adhering to leading development concepts while further implementing the strategy of "Broadband China, Fibre Cities", the Company became the pioneer in achieving full fibre network coverage and leadership with Gbps capability, while also ensured high quality end-to-end Internet access experience with optimised network structure. The Company expedited response to installation and maintenance requests and promoted service standards of "installation within one day, repairs within one day, compensation in the event of delay", while also introduced the industry's first HD-TV service standard to enhance subscribers' experience, which all contributed to the industry-leading customer satisfaction ratings of wireline Internet access service.

e-Surfing HD
Subscribers Accounting
for **64%** of Broadband
Subscribers



3. Prominent brand differentiation edge of broadband service with strengthened resilience and growth momentum

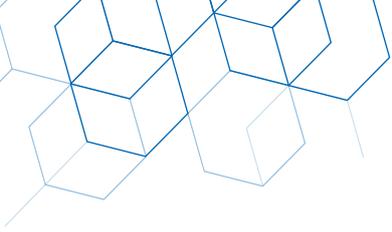
Net addition of wireline broadband subscribers was 10.41 million in 2017, reaching a total of 134 million, of which share of subscribers enjoying access bandwidth of 100 Mbps or above was nearly 50%. Net addition of e-Surfing HD subscribers was 24.43 million, reaching a total of 85.76 million.

In 2017, in face of intensified competition and changing market landscape, the broadband business of the Company continued to grow rapidly, with net addition of subscribers hitting five-year high,

Share of 100Mbps+
Bandwidth
Subscribers Nearly

50%

¹ The data is quoted from SINO Market Research.



Management's Discussion and Analysis

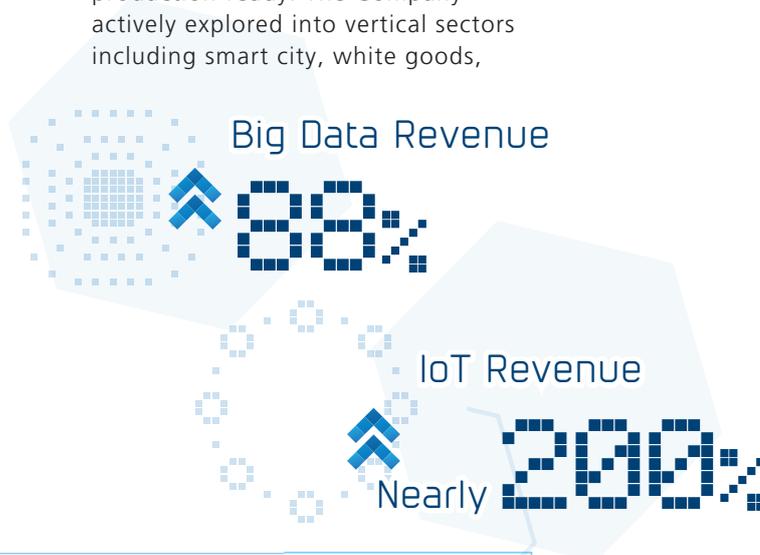
Business Review

4. Ecologicalised operation achieved significant results with emerging business demonstrating strong momentum

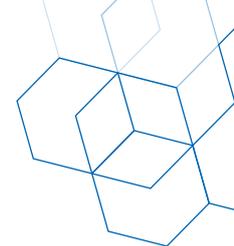
Revenue of New ICT Application ecosphere in 2017 grew by 20% year-on-year. Of which, revenues from IDC, cloud and Big Data increased by 20%, 62% and 88% respectively. Revenue from IoT ecosphere increased by nearly 200%.

In 2017, the Company accelerated the exploration of emerging business and launched cloud platform featuring ICT capability exposure for enterprise customers by consolidating cloud, Big Data and other smart platforms, and collaborating with partners in respect of contents, solutions and applications, in response to booming development of cloud, Big Data and IoT markets, as well as scale expansion of government administration cloud and smart city markets. The Company focused on four key targeted markets namely government administration, education, healthcare and industrial Internet, and extended efforts in strengthening open cooperation and fostering informatised applications,

so as to facilitate industry transformation and upgrades. The Company comprehensively upgraded its IoT open platform by fully leveraging on first-mover advantage of NB-IoT network, and innate edges of deep coverage of 800MHz frequency band, as well as high online rate of IoT connected devices. The Company also pioneered to announce a white paper for NB-IoT modules, and expedited the maturing process of upper stream of the industry value chain by means such as module subsidies and project engagement. 34 models of NB-IoT communication modules of 30 brands are now mass production-ready. The Company actively explored into vertical sectors including smart city, white goods,



New generation NB-IoT officially commercialised in Qingdao



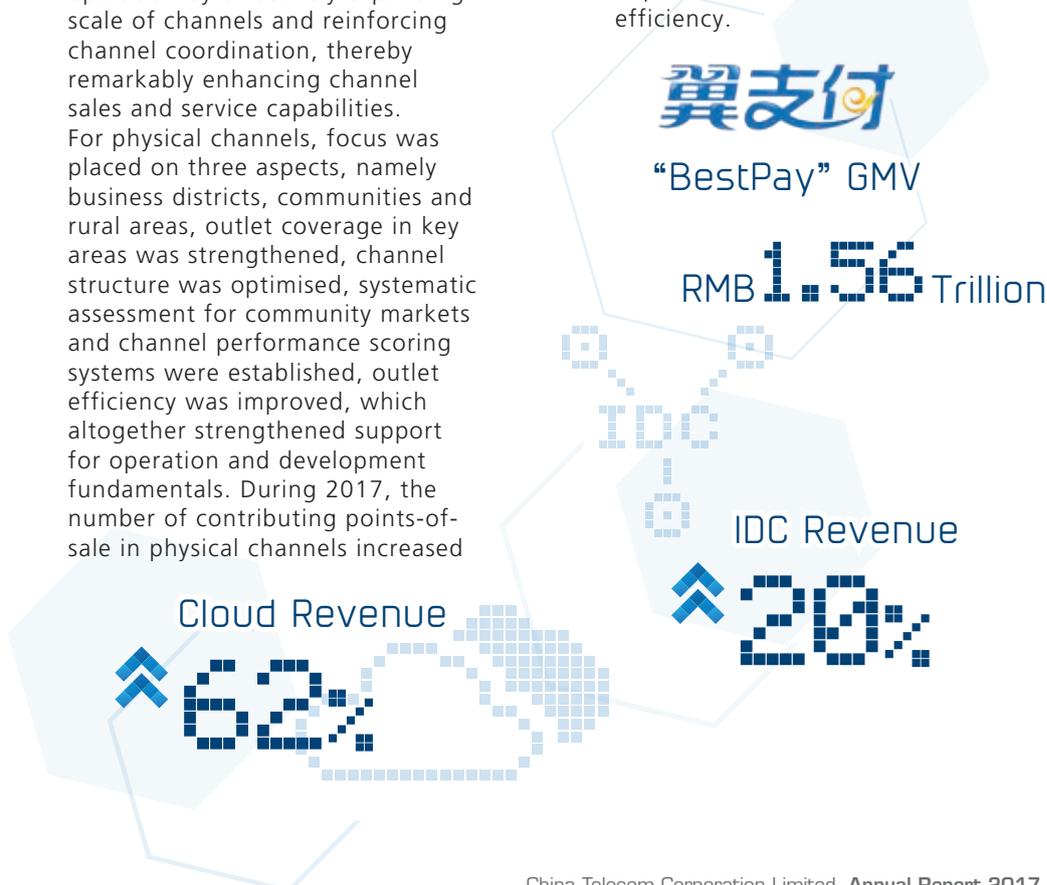
Management's Discussion and Analysis Business Review

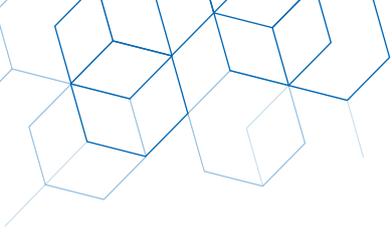
and Internet of livestock, and took the lead to launch smart applications and products with industry-leading partners to establish new benchmark of new generation IoT. The Company also propelled innovative development model of consumer financing by rolling out BestPay red packet and Orange Instalment Payment Service, which also mutually supported and coordinatedly developed with fundamental business. Through creating more spending scenarios in offline channel and increasing users' spending frequency, scale of "BestPay" active users, active participating merchants as well as the gross merchandise value grew rapidly.

5. Strengthening channel operation; channel sales and service capabilities steadily enhanced

The Company continued to push forward professional channel operation by effectively expanding scale of channels and reinforcing channel coordination, thereby remarkably enhancing channel sales and service capabilities. For physical channels, focus was placed on three aspects, namely business districts, communities and rural areas, outlet coverage in key areas was strengthened, channel structure was optimised, systematic assessment for community markets and channel performance scoring systems were established, outlet efficiency was improved, which altogether strengthened support for operation and development fundamentals. During 2017, the number of contributing points-of-sale in physical channels increased

by 20,000 year-on-year and the sales-per-self-owned outlet increased by 26% year-on-year. On the online channel frontier, the Company coordinated O2O operation through innovative sales models such as cooperation with Internet companies for Internet card products and precision marketing. As a result, online sales capability was further strengthened and online sales accounted for 13% of total sales volume. On the government and enterprise channel frontier, the Company reinforced the direct sales system and built a team integrating sales, support and servicing functions, so as to enhance sales capability in emerging business. The Company also explored new service channels and injected intelligence into services, and launched intelligentised services like customer servicing on live video chat and Wechat platforms as well as intelligent customer service robots, so as to achieve comprehensive improvement of customer service efficiency.





Management's Discussion and Analysis

Business Review

6. Basic completion of construction of superior networks further establishing network leadership advantages

The Company has accelerated the construction of 4G, all-fibre and IoT superior networks and quickened the pace of network intelligentisation, completing the first nationwide and the world's largest LTE-FDD 4G network with 1.17 million base stations in total, covering 98% population of China. The Company has established the largest FTTH network in the world achieving full coverage of fibre network in residential areas of cities, towns and townships. Gbps fibre network was also deployed on an on-demand basis in over 150 key cities, effectively securing leading edge of fibre network. Leveraging the low-frequency 800MHz LTE network, the Company became the pioneer in building the world's first full coverage NB-IoT network at low cost, which became the key carrier for Internet of everything such as smart family, smart city and intelligent manufacturing. Cloud infrastructure and Big Data platform under unified operation were basically established, offering strong support to the business scale development of ecospheres.

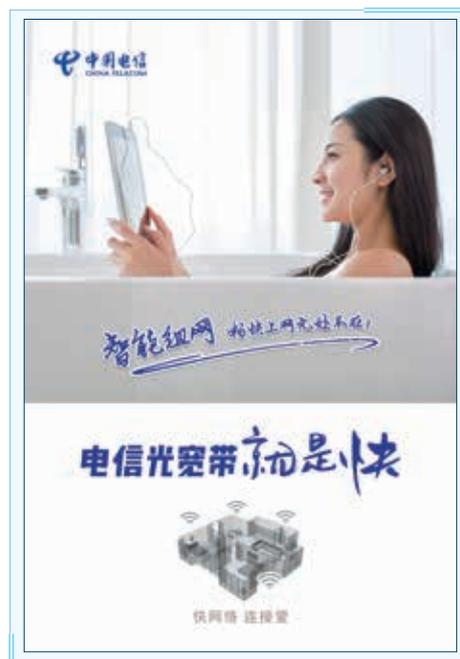




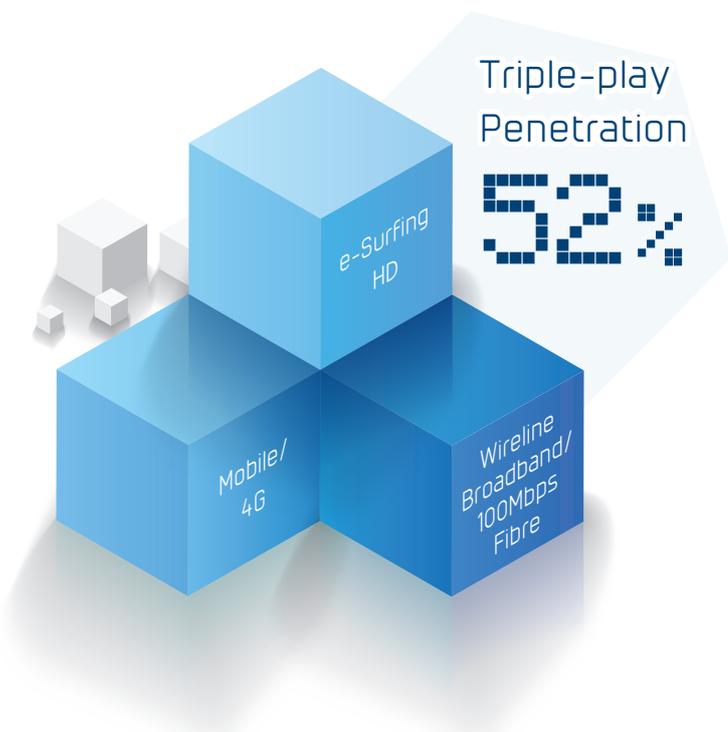
Management's Discussion and Analysis Business Review

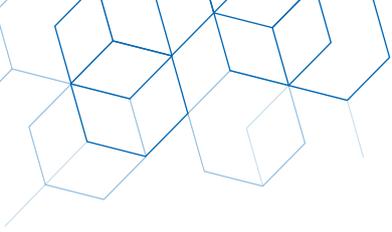
Outlook for 2018

2018 is a crucial year for the Company to further establish competitive edges and promote transformation and upgrades. Guided by various strategic principles, the Company will further bolster network intelligentisation, service ecologicalisation and operation intellectualisation, further develop the five ecospheres and forge differentiated edges, in a bid to achieve new breakthrough in both business scale and revenue. In respect of Intelligent Connections ecosphere, the Company will apply full-service convergence strategy, integrating differentiated edges in large data traffic plans, "multi-mode" handsets, BestPay red packet, premium broadband, 4K HD TV and Smart Family applications, so as to further expedite the scale expansion of 4G and fibre broadband businesses, and re-accelerate the development of fundamental business. The Company will strengthen data traffic operation and business development on existing subscribers, optimise the data operation model that integrates data traffic and content, so as to enhance subscriber value. In respect of Smart Family ecosphere, the Company will speed



up scale expansion and value monetisation of e-Surfing HD service, spur rapid volume growth, upgrade and content enrichment of key applications such as Family Cloud, Intelligent WiFi Networking Services, Smart Speaker, Webcam Surveillance and Unified Account, so as to expedite ecologicalisation. In respect of Internet Finance ecosphere, the Company will leverage its fundamental business edge to expand the scales of gross merchandise value, active users and actively participating merchants of "BestPay" with diversification of payment scenarios and enhancement in payment functions, with an aim of perfecting customer experience.





Management's Discussion and Analysis

Business Review

In respect of IoT ecosphere, the Company will target at three markets, namely smart city, vertical industries and personal consumption, leveraging advantages of 4G dedicated network and low-frequency NB-IoT network to produce enablement platform edge, seize the IoT application market and achieve scale breakthrough. In respect of New ICT Application ecosphere, the Company will make cloud the leading element of key businesses, build the advantage from converging "Two Ts"², transform "simple connectivity" to cloud-network integration and IoT-cloud integration, and use cloud to drive the development of mobile, dedicated line and satellite businesses, thereby achieving convergence development, competition by differentiation and ecologicalised synergies.

In 2018, the Company will accelerate operation intellectualisation, endeavour to establish supporting and enablement edges in terms of IT, Big Data, channel and customer service. The Company will forge an open digital capability operating platform for internal use and clients, integrating IT, data, platform and other standard capabilities across the entire network, and extend the application of such platform in marketing, customer service, product development and network operation in typical application scenarios, so as to foster enhancement in quality and efficiency and customer experience improvement. The Company will endeavour to build a new demand-oriented, Big Data application-driven and online-offline-intergrated comprehensive channel system, so as to enhance the sales and service capabilities of channels. The



² Two Ts: DICT and IoT



Management's Discussion and Analysis

Business Review

Company will also establish a nationwide-unified artificial intelligence platform with the "Proactive Service and Intelligent Alert" function to continuously increase service efficiency. A quality control mechanism for products, operation and services will be set up to further optimise the Company's quality management system and to secure quality edges of all products and services.

Guided by *CTNet2025*, the Company will also deepen the promotion of network intelligentisation, to build three superior fundamental networks, namely 4G network, all-fibre network and IoT network, so as to establish comprehensive network edge. The 4G network will aim to secure leading position in four aspects, i.e. appropriate leading position in wide area coverage, relative leading position in continuous coverage, absolute leading position in shallow coverage and focused leading position in deep coverage, to

ensure subscribers have brand new experience with and perception of the 4G network, and to support the scale commercialisation of VoLTE HD voice business. Meanwhile, end-to-end fine-tuning of broadband network will be reinforced, so as to strengthen the Company's advantage in fibre network coverage, and secure absolute edges in family broadband, government and enterprise access. In addition, the Company will continue to optimise NB-IoT network and accelerate the introduction of eMTC, aiming to build a premium IoT network. The Company will carry out coordinated planning for cloud/IDC infrastructure and CDN deployment, and promote SDN/NFV deployment as planned. The Company will proactively yet steadily promote the implementation of transformation and upgrades strategy, provide strong support to business scale development, continue to enhance the quality and efficiency of corporate development, and foster mutual growth in corporate value, customer value and employee value.



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