

# SUPERIOR EXECUTION as the Bedrock for Growth

5G<sup>hello</sup>



# CHAIRMAN'S STATEMENT



## CONNECTING INFINITY EMPOWERING FUTURE

The official commercialisation of 5G in China brought new development opportunities to the telecommunications industry. China Telecom has abundant network resources, professional team and good brand reputation which shape our unique edges. We focus on our customers, further promote “Cloudification”, that allows our network to be more agile and flexible to offer personalised, secure and reliable service to our customers. We march forward to promote digital transformation of the economy and society, satisfy the informatisation demand upgrade of our customers, and create new value for the Company and shareholders!

**Ke Ruiwen**

Chairman and Chief Executive Officer



### Dear shareholders,

In 2019, China Telecom capitalised firmly on the invaluable opportunities arising from the digital transformation of the economy and society, as well as 5G commercialisation. We proactively and effectively responded to the pressures and challenges arising in our operating environment, dedicated to lean management while ensuring stable and healthy operation, and elevated our high-quality development to a new level. The whole Company is determined to forge ahead and adhere to the new development principles. Abiding by customer-oriented principles, we sharpened our overall strengths, pushed forward value operation, and significantly enhanced our market

position. At the same time, the Company expanded proprietary innovation and open cooperation, while promoting co-building and co-sharing on all fronts and attaining a promising start in 5G commercialisation. Insisting on innovation and coordination, as well as deepening reform, we promoted the vitality of the Company and our employees, while working with our industry partners to create a new landscape for our further development, laying a solid foundation for the long-term growth of our corporate value and shareholder value in the future.

### Overall Results

In 2019, operating revenues of the Company amounted to RMB375.7 billion. Service revenues<sup>1</sup> amounted to RMB357.6 billion, representing an increase of 2.0% compared to last year and continuing to maintain higher than the industry average service revenues growth. Of which, mobile service revenues amounted to RMB175.5 billion, representing an increase of 4.7% over last year. Wireline service revenues were approximately RMB182.1

Service Revenues ↑ 2.0%



Surpassing  
Industry  
Average for  
**6**  
Consecutive  
Years

Total Number of Mobile Subscribers  
Approx. 336 Mil

Leaping to  
**No. 2**  
in the Industry



<sup>1</sup> Service revenues are calculated based on operating revenues minus sales of mobile terminals, sales of wireline equipment and other non-service revenues.

billion, representing a decrease of 0.4% over last year. Revenues from emerging businesses<sup>2</sup> accounted for 55.3% of total service revenues and contributed 4.5 percentage points to the total service revenues growth, alongside a continual optimisation of the revenue structure and the continuous expansion of development impetus. EBITDA<sup>3</sup> amounted to RMB117.2 billion, representing an increase of 12.5% compared to last year. Net profit<sup>4</sup> amounted to RMB20.5 billion, representing a decrease of 3.3% over last year and an increase of 2.0% compared to the 2018 net profit excluding the one-off after-tax gain from the listing of China Tower Corporation Limited<sup>5</sup>. Basic earnings per share were RMB0.25. Capital expenditure was approximately RMB77.6 billion, of which investment excluding 5G declined for the fourth consecutive year. Free cash flow<sup>6</sup> was RMB21.7 billion.

### Investment Excluding 5G



Taking shareholders' returns into full consideration, alongside the Company's profitability, cash flow level and capital requirement for its future development, the Board of Directors has decided to recommend at the forthcoming shareholders' meeting that a final dividend equivalent to HK\$0.125 per share for the year 2019 to be declared. Going forward, the Company will continue to create shareholder value, while fully balancing the cash flow required for the long-term development of the Company with returns to shareholders.

### Vibrant Commencement of 5G

2019 marked the first year of the 5G era in China. The official commercialisation of 5G has expedited the vibrant rise of information and communications technologies, as well as continuous upgrade in the demand for integrated



Chairman Ke Ruiwen received 5G license granted to China Telecom by the Ministry of Industry and Information Technology

<sup>2</sup> Revenues from emerging businesses include revenues from data traffic, Internet applications and DICT services.

<sup>3</sup> EBITDA is calculated based on operating revenues minus operating expenses plus depreciation and amortisation.

<sup>4</sup> Net profit represents profit attributable to equity holders of the Company.

<sup>5</sup> The one-off after-tax gain from the listing of China Tower Corporation Limited in 2018 was approximately RMB1.1 billion.

<sup>6</sup> In order to more objectively reflect the Company's free cash flow, enable a comparable basis to free cash flow of prior years and avoid incomparability of free cash flow resulting from the application of IFRS 16, the original free cash flow calculation "free cash flow = EBITDA minus capital expenditure and income tax" has been changed to "free cash flow = EBITDA minus capital expenditure, income tax and depreciation charge for right-of-use assets other than land-use-rights".

information services. This added strong momentum to the rapid development of the digital economy and society. By fully capitalising on our previous deployment and preparation for 5G, the Company strives to open up a new "blue ocean" for integrated information services.

**Building 5G network competitiveness through co-building and co-sharing on all fronts as well as mastering core technologies**

In 2019, in order to efficiently build a 5G network and quickly develop its 5G service capabilities, the Company collaborated with China United Network Communications Corporation Limited to leverage the mutually complementary advantages in network and spectrum resources and rolled out 5G network co-building and co-sharing, effectively saving costs on network construction, operation and maintenance while enhancing the market competitiveness of 5G network and business. By the end of 2019, the Company had invested RMB9.3 billion to build 40 thousand 5G base stations, and co-shared more than 20 thousand of China Unicom's 5G base stations. The total number of 5G base stations in use exceeded 60 thousand, covering key areas of over 50 cities where 5G commercialisation has commenced. Meanwhile, the Company accelerated the

resources and technologies accumulation for 5G carrying network and core network. As a result, the Company's network competitiveness was significantly enhanced.

The Company maintained its deep involvement in the evolution of global 5G standards. It took the lead in the formulation of various international 5G standards, and completed numerous patent applications and international standard publications. The Company also innovated SA solutions, conducted SA networking trials together with multiple vendors, and led the breakthroughs in 4G/5G integration and other bottlenecks hindering SA commercialisation. The Company was designated by GSMA to lead the global 5G SA industry chain to formulate and publish "5G SA Deployment Guidelines" in a timely manner. The Company conducted proprietary research and development ("R&D") of mobile edge computing ("MEC") platform and management platform for network slicing, expedited the maturity of the SA industry chain. The Company carried out innovative R&D of a series of technologies for indoor coverage, while promoting low-cost solutions for indoor coverage. As a result, the Company's ability to master 5G core technologies and capabilities continued to strengthen, while its status in the global 5G industry chain significantly elevated.



5G autonomous driving demonstration in the 6th World Internet Conference

### **Promising start of 5G led by application innovation and scale market expansion**

On 31 October 2019, the Company officially launched its 5G commercial services in 50 cities across the country, and created a membership-based innovative service model of "5G + Privileges + Applications" for individuals and 5G service combining "5G + Gigabit Broadband + Smart Family Applications" for households. By the end of February 2020, the scale of the Company's 5G package subscribers reached 10.73 million. Meanwhile, the Company also extensively explored the endowment of 5G into areas such as digital government, smart cities, industrial Internet and the like. The Company innovated integrated information service solutions by leveraging the ultra-large bandwidth, low latency, and massive connectivity features of 5G, as well as integrating new emerging technologies such as edge computing and industrial passive optical networks ("PON"). The Company has now rolled out 5G services

for smart cities based on SA architecture in Shenzhen, while also setting benchmarks in a number of demonstrative industries, including industrial Internet, smart energy, smart ports, telemedicine, and distance education. This allowed us to accumulate a number of promising application scenarios for SA commercialisation.

### **Stable and Healthy Operation throughout the Year and Significant Enhancement of Market Competitiveness**

In 2019, the Company accelerated its expansion of integrated information services, consolidated its capabilities in network, service and operation, while continuing to deepen its reform and innovation. Our operation proved to be highly resilient, with our market competitiveness strengthening on all fronts.

### **Customer-driven and accelerated expansion of integrated information services**

The Company focused on the flourishing demand among individual customers for informatisation services. With mobile data traffic as the driving force, the Company broadened its ecological cooperation and built an innovative customer privilege system to enhance our differentiated market competitiveness in convergence operation. As a result, our subscriber base continued to expand and our market position significantly elevated. The total number of mobile subscribers was approximately 336 million, leaping to the second place in the industry in the country. The net addition of mobile subscribers

### **5G Package Subscribers**



was almost 32.57 million for the full year, with a net addition market share reaching 53.2%. 4G penetration reached 83.8%, maintaining a leading position in the industry, laying a good foundation for users to upgrade to 5G and value growth in the future.

The Company also proactively planned new household informatisation services. The five-in-one Smart Family product and service portfolio – combining Smart Broadband, Smart Home Platform, Smart Applications, Smart Security and Smart Services – began to take shape. Amidst fierce market competition, the Company continued to expand its broadband subscriber scale with user stickiness remaining stable. The total number of wireline broadband subscribers reached 153 million, representing a net addition of 7.34 million. The triple-play penetration<sup>7</sup> of broadband subscribers reached 64%. The number of IPTV subscribers reached 113 million. As Smart Family applications such as Whole-home Wi-Fi, e-Surfing Webcam and Family Cloud become more enriched, the value contribution of these services will be more prominent. The broadband blended ARPU was RMB42.6.



Hunan citizens experienced China Telecom's 5G applications on 2019 Telecom Day



The Company also accelerated the extensive integration of emerging technologies into application scenarios for government and enterprise. The Company continued to build up and unleash the unique advantages of cloud-network integration, and expanded the combination of basic network access with technologies such as cloud computing, Big Data and Internet of Things (“IoT”), to thoroughly identify the needs of customers in benchmarking industries and to assess the market potential. The Company’s “e-Surfing Cloud” ranked seventh in the world and first among global operators in IaaS public cloud by market share<sup>8</sup>, and also ranked first in China’s hybrid cloud market<sup>9</sup>. Our IDC business ranked overall first within the country<sup>9</sup>. Revenue from cloud service reached RMB7.1 billion, representing an increase of 57.9% compared to last year, becoming the top growth driver within the DICT business. The number of IoT connected devices reached 157 million, with revenue increasing by 21.7% compared to last year. The Company’s DICT business is gradually becoming a new growth driver.

<sup>7</sup> The triple-play penetration rate represents the percentage of wireline broadband customers by identity document who also subscribe to mobile and e-Surfing HD services at the same time

<sup>8</sup> Source: IDC

<sup>9</sup> Source: China Internet Weekly

### **Consolidating network foundation and reinforcing the core competitiveness of cloud-network integration**

The Company continued to optimise the network user experience, and conducted targeted coverage and dynamic capacity expansion of its 4G network to support the scale development of 4G users and data traffic as well as the full commercialisation of its VoLTE business. The Company deployed 10G PON equipment, promoted the scale construction of gigabit networks in key cities, and reinforced broadband access edge. Meanwhile, to grasp the trend of increasing demand in migrating to cloud in integrated information services, the Company promoted "Cloudification" on all fronts, effectively consolidated IDC resources, optimised the deployment of cloud resource pools and

advanced the transformation of existing telecommunications facilities into data centres. The Company also deployed edge computing and CDN in a collaborative way, accelerated the launch of cloud-network products such as high-quality optical transport networks ("OTN"), software-defined wide area networks ("SD-WAN") and dedicated cloud-network for government and enterprise customers. China Telecom's core competitiveness of unified cloud-network architecture based on "cloud-as-the-core and cloud-led network" is quickly becoming evident.

### **Consolidating service edges and maintaining industry leading customer perceptions**

Led by customer perceptions, the Company enhanced the end-to-end service experience, established the reputation of its products for being secure and reliable, and built the competitive advantages of its services. By optimising its sales channels and broadening its customer reach, the Company explored sales models based on

### **"e-Surfing Cloud" Market Share Ranking**



**No. 1**  
among Global  
Operators

scene marketing. Forming teams of "Smart Family Engineers" and "Cloudification Enablement Experts", the Company developed an advantage in professional talent for integrated information services. The Company built its operation capabilities in cloud-network integration, enhanced the activation and maintenance efficiency of its dedicated lines for government and enterprise customers. The Company also gradually rolled out self-help service for government and enterprise customers. Through the introduction of services powered by AI technologies and promoting "new media" customer service, the Company effectively lowered the service volume delivered by human while optimising the user experience. The service satisfaction of the Company continued to be industry leading, ranking first for both overall satisfaction and for mobile Internet access among public users. We also had the lowest customer complaint rate in the industry<sup>10</sup>.

### Overall Satisfaction and Mobile Internet Access Satisfaction among Public Users



### Ongoing enhancement of corporate efficiency with intelligence-injected operation and management reinforcement

The Company strengthened its aggregation and application of data, with capabilities of its corporate core continuing to manifest. By launching the next generation BSS 3.0 system and through the optimisation of its product management as well as development and operation systems, the Company achieved rapid loading and automatic activation of its cloud-network integration services. The Company also conducted network construction and maintenance supported by using Big Data and applied AI technologies to automate management functions. With efficiency enhancement of key resources as the focus, the Company dynamically optimised its resource allocation, strengthened precision investment and effectively reduced the costs of average electricity tariff, per tower rental fee, sales channel costs and wireline terminal costs. The Company reinforced centralisation, and further centralised its capital management and equipment procurement, with an aim to reduce costs and increase efficiency, enabling it to maintain a solid financial structure.

<sup>10</sup> Source: The Ministry of Industry and Information Technology of the PRC

### **Deepening reform and innovation, stimulating corporate vitality and intrinsic motivation**

The Company firmly pushed forward with internal reforms. Confronted with key future application scenarios, the Company built innovation centres for digital government, smart cities and industrial Internet. The Company also shortened the end-to-end response time for customers and enhanced its capabilities to provide integrated information services. The Company continued to push forward reforms of its R&D system, consolidated R&D centres, and also established a system for scientists and chief experts. The Company accelerated the creation of new proprietary core technologies, incentivised the vitality of research personnel, enabling the Company to lead a number of key national R&D projects. The R&D expenses of the Company for the year increased by 57% compared to last year. The Company also optimised the department functions relating to network construction, operation and maintenance, as well as informatisation, in order to lay a solid foundation for implementing cloud-network integration and accelerating the digital transformation of the Company. At the same time, the Company further promoted the mixed ownership reform of its professional subsidiaries. Our Internet finance company was included in a pilot programme of mixed ownership reform

for state-owned enterprises (SOE), and the "Double-Hundred Action" for SOE reform, with the introduction of strategic investors attaining progressive results.

### **Embarking on a New Journey for Integrated Intelligent Information Services**

In the new year, China Telecom will forge ahead to become a leading integrated intelligent information service operator. The Company will accelerate "Cloudification" on all fronts, promote cloud-network integration and build the cloud-network integrated digital platform and establish a new type of network infrastructure. The Company will also deepen the application of cloud-network products and operation system reform while accelerate the data aggregation from 5G, cloud, DICT and capability centres. To enhance the capabilities of corporate core and strengthen the level of intelligent operation management within the Company, we will develop an open and compatible Big Data pool, and apply Big Data analytics to products, services, cloud-network construction and operation, risk management, and resource allocation, among other areas. The Company will reinforce its network and talent edges to strengthen market competitiveness. The

Company will make full use of its abundant 5G spectrum resources to accelerate 5G network construction, strengthen the unique advantage of cloud-network integration and accelerate the evolution towards a smart ubiquitous network, which is simple, agile, efficiently-centralised, open and secure. The Company will push forward market-oriented reforms, which will further stimulate the vitality and intrinsic motivation for corporate development. The Company will also push forward reforms for R&D system and accelerate the breakthroughs in key technology areas. The Company will carry out extensive innovation and cooperation and expedite the expansion of informatisation services. The Company will aggregate favourable resources, expand ecological cooperation, promote the development of 5G applications and SA scale commercialisation. The Company will continue to enrich its Smart Family product portfolio, strengthen and leverage on its leading edge in DICT business, continue to nurture new ecosystems represented by Smart Family, Cloud, IoT and Internet Finance, and create a new engine for the Company's long-term sustainable development.

### Corporate Governance and Social Responsibility

The Company strives to maintain a high level of corporate governance and has always adhered to excellent, prudent and efficient corporate governance principles.

The Company insists on governing the Company in accordance with laws and regulations, as well as compliance operation. The Company attaches great importance to risk management and control, continuing to enhance corporate transparency to ensure the healthy and sustainable growth of the Company. In the area of corporate governance, our consistent efforts and outstanding performance have been widely recognised and highly appreciated by the capital market. We were awarded "Most Honoured Company in Asia", for the 9th consecutive year by *Institutional Investor*. We were accredited with the "Platinum Award – Excellence in Environmental, Social and Governance" for the 11th consecutive year by *The Asset* and were also awarded "Highly Commended Initiative in Innovation" for our "Cloudification in 5G" strategy. In addition, we were awarded, for the 12th time, "The Best of Asia – Icon on Corporate Governance" by *Corporate Governance Asia*. We were also accredited the awards including "No. 1 Best Managed Company", "No. 1 Best Investor Relations" and "No. 1 Best ESG" in China region from *FinanceAsia*.

The Company insisted on integrating corporate social responsibility into corporate development, governing the Company in accordance with laws and regulations, upholding integrity within business operation, proactively implementing the Cyberpower strategy and firmly safeguarding network and information security to enable the digital transformation of the economy

and society. We also strengthened risk prevention of the Company and proactively carried out poverty alleviation leveraging information, while continuously promoting energy saving and emission reduction. We implemented "Speed Upgrade and Tariff Reduction" and "Mobile Number Portability", stood firmly against price war and promoted fair and orderly market competition and pushed forth the sustainable and healthy development of the industry. We also insisted on quality service and the protection of customer rights. We cooperated with our business partners to create ecological prosperity. We also effectively reduced the duplicate construction of infrastructure by promoting co-building and co-sharing of network infrastructure resources. In support of the "Belt and Road" initiative, we enhanced network interconnections and intercommunications with relevant countries. We also received a high level of recognition and appreciation from the wider society for our efforts in successfully delivering telecommunication assurance for major conferences and events including the 70th Anniversary of the Founding of the People's Republic of China, the 20th Anniversary of Macau Handover, the Boao Forum for Asia, the "Belt and Road" Summit for International Cooperation, and the China International Import Expo.

## Outlook

At present, a new round of technological revolution and industry transformation is unfolding. New information and communications technologies are evolving rapidly every day, while the demand for information consumption is continuing to escalate. Technology and market forces are the twin wheels that are propelling the nation's information and communications industry to a vast and bright future. At the same time, we are facing new challenges in the dynamic global situation and landscape, with economies of scale for the 5G industry yet to emerge.

The outbreak of the novel coronavirus (COVID-19) epidemic since the beginning of 2020 has impacted the business development and network construction of the Company. China Telecom has proactively fulfilled its corporate social responsibility, and was the first company to complete 5G network deployment for the Wuhan Huoshenshan Hospital and other locations. The Company also leveraged the advantages of e-Surfing Cloud and Big Data to support epidemic prevention and control, as well as the informatisation of medical diagnostics and treatment. The Company took proactive caring measures for employees' safety and well-being.



Telecommunication assurance for Wuhan Huoshenshan Hospital

Meanwhile, the Company will work hard to respond to the impact of the epidemic, while actively grasping the new changes in market demand and providing proliferating informatisation solutions to better serve its customers.

As a Chinese saying goes, "those with vision march steadily, while those with steadiness march further". We are fully confident about the future. China Telecom will continue to adhere to the new development principles, insist on customer and market-orientated approaches, and strive for innovation and development. The Company will push forward 5G network construction on all fronts, accelerate co-building and co-sharing, firmly promote cloud-network integration, deepen corporate reform and further cultivate intelligent operation. The Company will work with industry partners to create a better future, and continue to march towards becoming a leading integrated intelligent information services provider, while striving to create new value for shareholders and altogether enjoy the accomplishment of high-quality development.

Finally, on behalf of the Board of Directors, I would like to take this opportunity to express our sincere appreciation to

all our shareholders and customers for their support all along. I would also like to express our sincere thanks to all our employees for their hard work and contributions. Furthermore, I would like to extend our sincere gratitude towards Mr. Gao Tongqing for his outstanding contributions to the Company during his tenure. At the same time, I would like to welcome Mr. Li Zhengmao, President and Chief Operating Officer of the Company, to join the Company.



**Ke Ruiwen**

*Chairman and Chief Executive Officer*

Beijing, China  
24 March 2020