

# MANAGEMENT'S DISCUSSION AND ANALYSIS

(REPORT OF THE DIRECTORS)

**Ke Ruiwen**

*Chairman and  
Chief Executive Officer*

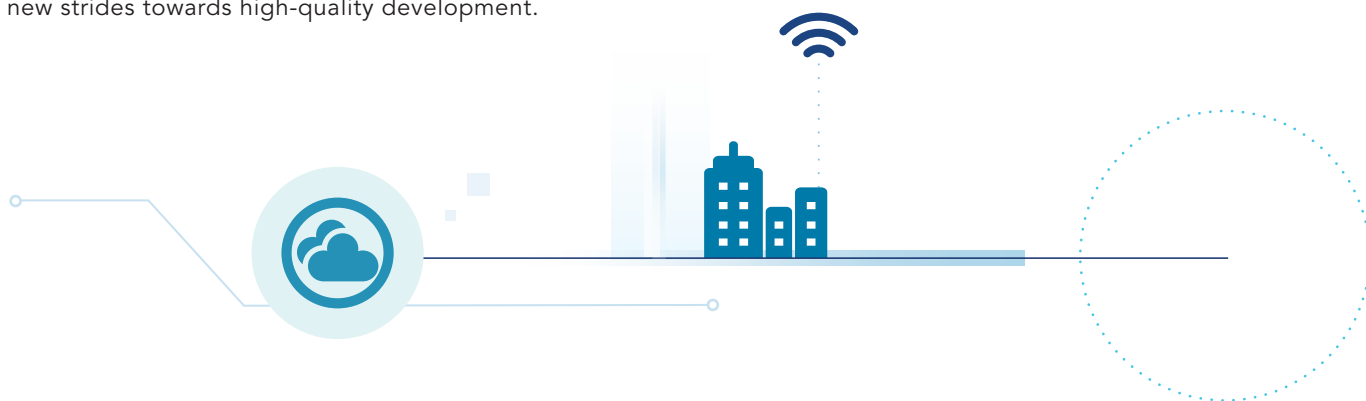


## 1. CHAIRMAN'S STATEMENT

At present, a new round of sci-tech revolution and industrial transformation is developing in depth, with new technologies represented by artificial intelligence driving industrial reshaping and structural adjustment. The waves of digitalised, network-based, intelligent, and green development are approaching, bringing valuable opportunities for the industry and the Company to continuously advance high-quality development. In 2024, the Company firmly grasped the direction of artificial intelligence development. Having implemented the new development principles completely, accurately and comprehensively, the Company is also resolutely fulfilling its responsibilities in building Cyberpower and Digital China, as well as safeguarding network and information security. The Company further deepened the implementation of its Cloudification and Digital Transformation strategy and accelerated the transformation towards a service-oriented, technology-oriented, and secured enterprise. Insisting on leading industrial innovation with sci-tech innovation, the Company accelerated the development of new quality productive forces in light of its own conditions and continuously improved the supply level of high-quality products and services. The Company also expanded the scale of strategic emerging businesses, consistently deepened corporate reform, and comprehensively advanced opening up and cooperation. With the enhancement of the quality and upgrade of digital information infrastructure, the Company maintained a continued growth in operating performance, and made solid new strides towards high-quality development.

## 1. Overall Results

In 2024, the Company's operating revenues amounted to RMB529.4 billion, representing an increase of 3.1% year-on-year. Of which, service revenues<sup>1</sup> amounted to RMB482.0 billion, representing an increase of 3.7% year-on-year. EBITDA<sup>2</sup> amounted to RMB140.8 billion, representing an increase of 2.9% year-on-year. Net profit<sup>3</sup> amounted to RMB33.0 billion, representing an increase of 8.4% year-on-year, and the basic earnings per share were RMB0.36. Capital expenditure was RMB93.5 billion, representing a decrease of 5.4% year-on-year. Free cash flow<sup>4</sup> reached RMB22.2 billion, representing an increase of 70.7% year-on-year.



<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

<sup>2</sup> EBITDA is calculated based on operating revenues minus operating expenses plus depreciation and amortisation

<sup>3</sup> Net profit represents profit attributable to equity holders of the Company

<sup>4</sup> Free cash flow is calculated based on EBITDA minus capital expenditure, income tax and depreciation charge for right-of-use assets other than land-use-rights

The strategic emerging businesses led the dual engines; fundamental businesses maintained stable growth; and Industrial Digitalisation business achieved sound growth. In 2024, the Company's mobile communications service revenues reached RMB202.5 billion, representing an increase of 3.5% year-on-year. Of which, revenue from mobile value-added and applications increased by 16.1% year-on-year, bringing the total number of mobile subscribers to 425 million, and mobile ARPU<sup>5</sup> reached RMB45.6. Wireline and Smart Family service revenues reached RMB125.7 billion, representing an increase of 2.1% year-on-year. Of which, revenue from the Smart Family business increased by 16.8% year-on-year. The number of broadband subscribers reached 197 million, and the broadband blended ARPU<sup>6</sup> reached RMB47.6. Revenue from Industrial Digitalisation business reached RMB146.6 billion, representing an increase of 5.5% year-on-year and accounting for 30.4% of service revenues, up by 0.5 p.p. over last year. The revenue from China Telecom Cloud amounted to RMB113.9 billion, representing an increase of 17.1% year-on-year; revenue from IDC reached RMB33 billion, representing an increase of 7.3% year-on-year; revenue from the security business reached RMB16.2 billion, representing an increase of 17.2% year-on-year; intelligent revenue<sup>7</sup> reached RMB8.9 billion, representing an increase of 195.7% year-on-year; Internet of Video Things (IoVT) revenue increased by 40.1% year-on-year.

The Company attaches great importance to shareholder returns. It continuously promotes the synchronised growth of market value and corporate value and strives to enhance its profitability and cash flow generation capabilities. Taking the Company's profitability into full consideration, alongside cash flow levels and capital needs for its future development, the Board of Directors has decided to recommend at the Annual General Meeting that the profit to be distributed in cash for the year 2024 shall represent 72% of the profit attributable to equity holders of the Company for the year. A final dividend

of RMB0.0927 per share (pre-tax) will be declared for year 2024. Together with the 2024 interim dividend of RMB0.1671 per share (pre-tax), which has been already distributed, the full year dividend of 2024 amounts to RMB0.2598 per share (pre-tax), and the aggregate amount of the full year dividend increased by 11.4% year-on-year. Within three years from 2024, the profit distributed in cash by the Company will gradually increase to above 75% of the profit attributable to equity holders of the Company for the year, continuously creating more value for shareholders.

## 2. Achieving New Results in Building of an Enterprise with “Three Orientations”<sup>8</sup>, Making Solid New Strides Towards High-Quality Development

### 2.1 Enriching the supply of high-quality products and services to meet the new demands of subscribers for digital consumption

The Company adhered to a customer-oriented approach, actively seizing new consumption trends driven by digital technology and deeply empowering product and service innovation and upgrades with AI and other strategic emerging elements to continuously enhance its business value and customer perception. For individual and home customers, the Company continued to strengthen integrated development, constantly advancing the upgrade of integrating elements such as connectivity, terminals, applications and privileges. The Company accelerated the upgrade of mobile networks to 5G-A and household broadband to Gigabit and FTTR<sup>9</sup>. Under the “Beautiful Home” brand, the Company continued to develop Smart Family applications to cater for different scenarios in “One All-fibre Network, One Intelligent Cloud and One Beautiful Home”. The Company stepped up the integration of CHBG<sup>10</sup> scenarios and continued

<sup>5</sup> Mobile ARPU = monthly average revenues from mobile services/the average number of mobile subscribers

<sup>6</sup> Broadband blended ARPU = monthly average revenues from broadband access and Smart Family/the average number of broadband subscribers

<sup>7</sup> Intelligent revenue includes the revenue from artificial intelligence and intelligent computing services provided to customers

<sup>8</sup> Enterprise with “three orientations”: service-oriented, technology-oriented and secured enterprise

<sup>9</sup> FTTR: Fibre to The Room

<sup>10</sup> CHBG: Customer, Home, Business, Government

to differentiate by cultivating integration as its leading advantage, marked by a steady growth in integrated customer base in 2024. The Company continued to strengthen value management, deepened and refined the accurate retention and application enrichment of existing customers, and actively explored the use of AI large models and other digitalised tools to enhance insights into customer demands. The Company developed new scenarios and new demands in digital consumption, and continued to satisfy customers' personalised needs for security, health, entertainment, low-carbon and intelligence, thereby consistently enhancing its value to customers. Mobile and broadband ARPU remained stable in 2024. The Company continued to empower its products and services with AI, quantum and satellite functionalities, launching the first customised AI smartphones with built-in self-developed Xingchen general-purpose large model covering speech and semantics within the industry. The Company introduced smart terminals such as AI cameras, AI cloud computers and AI home monitors, promoting AI upgrades for 5G New Telecommunications, Communications Assistant, Colour Ringback Tone with Video, Cloud Drive and other applications, and accelerated the scale development of strategic emerging businesses such as quantum-encrypted messages and calls and handset direct-to-satellite. In 2024, the penetration rate of AI, quantum-encrypted messages and calls and handset direct-to-satellite applications steadily increased. For government and business customers, the Company was committed to building a new integrated service model of "computing power + platform + data + model + application". It accelerated the upgrade of industry digital platform capabilities, launching a comprehensive set of

industry solutions for key areas such as smart cities, social livelihood, and emergency response and safety and empowering customers in a full range of industries through over 100 digital platforms. The Company advanced the upgrade of the 5G NICES<sup>11</sup> Pro+ integrated product portfolio, developed ten "5G+AI" industrial integrated scenario solutions, and had developed 45,000 industry application projects in fields such as power, chemical and mining. The Company accelerated the formation of a global layout of cloud network resources and the integration of international and domestic business processes. It actively expanded in key overseas markets, with regions such as Southeast Asia, the Middle East and Africa becoming important growth poles for its international business. Its strategic emerging businesses such as cloud, quantum, satellite, Internet of Vehicles and Internet of Video Things made breakthroughs overseas. These all contributed to an international business revenue of RMB16.9 billion for the year, representing a year-on-year growth of 15.4%.

The Company continued to deepen the "All Customers' Say" service mechanism and launched the brand-new "Good Service, Customised Service" initiatives, consolidating and enhancing its advantages in terms of customer satisfaction and service reputation. To meet subscribers' demands for efficient, convenient and intelligent subscriber services, the Company accelerated the embedding of customer service models and other AI capabilities for all process and all positions for services such as the 10000 hotline. The proportion of intelligent customer service increased by 13.5p.p. compared to the end of 2023, showcasing our significantly enhanced intelligent service capabilities.

<sup>11</sup> NICES: The 5-in-1 integrated solution which covers Network capabilities, Intelligence capabilities, Cloud computing capabilities, Elements capabilities and Service capabilities

## 2.2 Strengthening breakthroughs in key core technologies to promote high-level sci-tech self-reliance and self-improvement

The Company regarded sci-tech innovation as the core essence of its corporate strategy and the pillar for high-quality development, and accelerated its construction of a leading sci-tech enterprise. It focused on the four fundamental technology directions of network, cloud and cloud-network integration, artificial intelligence and quantum/security, and continuously strengthened core technologies. The Company achieved significant breakthroughs in the foundational software for cloud computing such as cloud server operating systems and databases, established China Telecom's No.1 technology, the "Xirang" integrated intelligent computing service platform, and made breakthroughs in key technologies such as distributed inference, hybrid training and inference, and hundred-kilometer lossless transmission. It built the first full-size, full-modality, fully homegrown trillion-parameter foundational large model system in China, addressing challenges in controllable video generation from long text, full-duplex interaction and multimodal deepfake detection. The Company pioneered the world's first distributed cryptographic system integrating QKD<sup>12</sup> and PQC<sup>13</sup>. It released the superconducting quantum computer "Tianyan-504" with the highest number of qubits in a single unit nationwide. It conducted the world's first demonstration and validation of a hollow-core optical cable transmission system with a single wavelength of 1.2 Tbit/s and a capacity exceeding 100 Tbit/s on an existing network, and completed multiple industry-first field trials in key 6G technology areas such as satellite-ground integration, sensing and communications integration, and wireless AI. The Company stepped up its investment in

R&D resources with R&D expenses increasing by 11.3% year-on-year. The echelon pattern of sci-tech talents, composed of 5 leading talents, a thousand chief/senior experts, and ten thousand technical experts, has been basically formed, and the integrated operation and development team has achieved full coverage of prefectural and municipal companies. The Company continued to exert its sci-tech influence and undertook multiple national-level innovation platforms in fields such as cloud computing, quantum communications, optical networks, and security. The two projects of "Fifth Generation Mobile Communications System" and "Next Generation Internet Source Address" were awarded the first prize of the National Science and Technology Progress Award<sup>14</sup>. Internet of Video Things (IoVT) was selected as one of the "Top Ten Super Projects of State-owned Central Enterprises for 2024" and won the "2024 World Internet Conference Award for Pioneering Science and Technology". The "Tianyan" quantum computing cloud platform was included in the Top Ten National Mega-Projects of State-owned Central Enterprises. The number of new invention patents obtained by the Company increased by 115.9% year-on-year, ranking second among global operators. It held important positions in international standardisation organisations such as ITU-T, 3GPP and IETF. The Company promoted industrial innovation and business innovation through sci-tech innovation, completing its layout in seven strategic emerging businesses including cloud computing and computing power, new-generation information communications, Big Data, AI, security, quantum and digital platforms. The Company continued to pursue external empowerment and internal applications, accelerated the cultivation of new growth poles, drove improvements in the quality and efficiency of its corporate operations, and continued to develop new momentum and new strengths for high-quality development.

<sup>12</sup> QKD: Quantum Key Distribution, which refers to the remote key distribution leveraging the physical properties of quantum such as indivisibility, non-replication, and uncertainty

<sup>13</sup> PQC: Post Quantum Cryptography, which refers to cryptographic technologies and relevant algorithms capable of resisting quantum computer attacks

<sup>14</sup> The "Key Technology and Engineering Application of the Fifth Generation Mobile Communications System (5G)" and "Key Technology and Large-scale Application of the Next Generation Internet Source Address Verification Architecture SAVA" of China Telecom received the first prize of the 2023 National Science and Technology Progress Award



### 2.3 Accelerating the expansion of security products and services to continuously enhance security assurance capabilities

The Company continued to build a complete and in-depth security and defence system, covering "cloud, network, edge, terminal, application, data and aerial-ground integration". It comprehensively enhanced customers' security assurance capabilities, and constructed systematic capabilities including Secure Connectivity, Secure Services and Secure Integration. A number of the Company's segmented capabilities were included in the first issue of the "Digital Security Escort Technology Capability Panorama" by the China Academy of Information and Communications Technology, spanning 12 major categories and 85 security domains. The Secure Connectivity capabilities carried by cloud-network resources secured customers' internet and cloud access. The terminal connections based Yunmai SASE was selected in Gartner's "Market Guide for Zero Trust Network Access, China". e-Surfing Security Brain, which was based on internet connections, developed 354,000 new lines, bringing the total to 500,000 lines. The cleaning capacity for whole-network traffic of its Anti-DDoS Cloud Dam, which was based on all-domain networks, reached 16.3 Tbps, maintaining a leading position in terms of its protection capability and market share. The Secure Services capabilities provided customers with over 40 types of security services, covering customers in more than 300 cities across 31 provinces. The Managed Security Service Provider (MSSP) Cloud Dam was classified in the leader's category among China's cloud-managed security service providers<sup>15</sup>. The Company added 17 new security capability pools, bringing the national total to 175. Security integration capabilities of the Company empowered externally through the "security + scenario" integration model, focusing on the security needs of scenarios such as intelligent cloud and low-altitude economy. By reinforcing infrastructure, enhancing interactive security protection, and upgrading security assessments, the Company strived to build a multi-level protection system and continuously launch scenario-based security products to provide customers with agile and reliable security services.

<sup>15</sup> Source: IDC MarketScape

<sup>16</sup> FLOPS: Floating-Point Operations Per Second, which is commonly used to estimate computer performance

### 3. China Telecom Cloud Advancing into a New Stage of Intelligent Cloud Development, with "AI+" and "Quantum+" Empowering Industrial Innovation

China Telecom Cloud is fully advancing into a new stage of intelligent cloud development. The "Xirang" integrated intelligent computing service platform offered capabilities such as heterogeneous ubiquitous computing power, robust computing network scheduling, efficient training and inference engines, one-stop intelligent computing services, high-quality datasets, secure and fast model services as well as a wealth of industry intelligent applications. It completed deep adaptation and optimisation with various mainstream intelligent computing chips and the DeepSeek-R1/V3 series of large models, becoming the first domestic operator-level cloud platform to achieve the full-stack localization of DeepSeek model inference services, and deployed them over a full suite of products such as cloud hosts, cloud computers, cloud phones, MaaS services, computing power scheduling platforms and edge security acceleration platforms. With advantages such as full-stack independent control, flexible model selection and heterogeneous computing power integration, it supported the efficient training and flexible deployment, and doubled inference performance of mainstream models like DeepSeek. The Company gathered resources from all parties to further its expansion in intelligent computing. In collaboration with 50 computing power partners, its total self-owned and connected intelligent computing power reached 62 EFLOPS<sup>16</sup>, providing rich, diverse, flexible, convenient and cost-effective computing power services to customers in sectors such as including various types of enterprises, AI service providers as well as educational and research institutions. The Company served over 4.9 million customers in the industry, ranking No.1 in China's computing power interconnection scheduling market and deemed as a leader in China's intelligent computing cloud service market.

The Company thoroughly implemented "AI+", completing the "1+1+1+M+N"<sup>17</sup> overall layout for artificial intelligence. Adhering to the philosophy of independent innovation, opening up and cooperation, it developed the Xingchen multimodal general large model foundation. This foundation provided a comprehensive suite of capabilities covering semantics, speech and visual perception, and was open-source in multiple sizes. The Company launched the industry's first large model supporting free mixing of Chinese, English and 50 dialects, as well as a knowledge-based view of all things control deployment large models. It developed AI-native applications such as intelligent systems and industrial solutions, as well as over 10 standardised AI products including AI smartphones and AI cloud computers. The Company launched over 50 industrial large models, serving more than 10,000 industrial customers. It accelerated the implementation and promotion of industrial large models in areas such as grassroots governance, smart government customer service and tourism guidance, effectively helped customers to improve efficiency and reduce costs, and continued to empower the intelligent transformation of the economy and the society, ranking 6th<sup>18</sup> in China's large model application market share with its AI. The Company thoroughly promoted the embedding and application of 13 internal large models in various processes in its corporate management and operations, such as customer service, network operations and office work, driving cost reduction and enhancement of quality and efficiency. The Company established the Xinghai Big Data brand and ranked first<sup>19</sup> for the year among data element service providers. Its data element platform expanded from Hainan to 7 provinces and 29 cities nationwide, while it also undertook the construction of 3 national-level data annotation bases. In the meantime, its data intelligence core platform served over 150 customers and built a large model training dataset comprising over 9 trillion Tokens.

The Company inspired the new momentum and new model of "Quantum+" for the future development of the industry. Alongside steady progress in the construction of quantum security infrastructure, its exploration of quantum technology transformation and commercialisation also showed initial results. In terms of capability enhancement, the Company relied on a new cryptographic system that integrated QKD, PQC and classical cryptography, constantly enriching the capabilities of its "Quantum+" products. The "Tianyan" quantum computing cloud platform achieved dual upgrades in computing power scale and types, forming the largest quantum computing cluster in China. In terms of infrastructure construction, the Company actively promoted the construction of quantum metropolitan networks in 16 key cities including Beijing and Shanghai. The Hefei quantum metropolitan network was selected as one of the first national "Digital China Classic Case Studies". The quantum information infrastructure construction project was included in the first batch of central enterprise sci-tech achievement application expansion projects. In terms of empowering industrial development, the Company formed quantum security solutions covering fields such as government affair, finance, energy and transportation, and demonstrated the integration and innovation of quantum technology in the context of various industrial applications. In terms of industrial chain integration, its acquisition of equity in Quantumctek Co., Ltd. enabled the integration and autonomous control of the upstream, midstream and downstream of the industrial chain. The Company took the lead in the formation of national-level innovation platform for quantum communications, encouraging leading enterprises in fields to expand their quantum business footprint, and driving the collaborative development of the quantum industry.

<sup>17</sup> 1+1+1+M+N: 1 foundation for intelligent cloud, 1 foundation for the general-purpose large models, 1 data foundation, "M" refers to the number of large models for own use, and "N" refers to the number of large vertical models

<sup>18</sup> Source: IDC

<sup>19</sup> Source: China Internet Week

#### 4. Comprehensively Deepening Reforms, Intensifying Efforts in Opening Up, and Continuously Stimulating Vitality for Corporate Innovation and Development

The Company comprehensively advanced the deepening and enhancement actions of state-owned enterprise reforms. It insisted on sci-tech innovation as the core, further deepened reforms in key areas, and accelerated the establishment of production relations in alignment with new quality productive forces. The Company improved the innovative allocation level of various resource elements, and was rated A-level in the assessment of key reform tasks of state-owned central enterprises by SASAC for three consecutive years. The Company continuously optimised the RDO<sup>20</sup> R&D organisation system, established specialised research institutes for cloud computing, artificial intelligence, quantum, and set up the first overseas research institute in Singapore. It formed a cloud-network operating system R&D centre, implemented sci-tech innovation assessment incentives for each enterprise, and deepened the incentive mechanism for the transformation of sci-tech achievements. The Company also improved a package of innovation supportive policies, strengthened breakthroughs in original and leading technologies, and enhanced the efficiency of sci-tech achievements transformation. The Company constantly deepened the reform of professional companies and industry BGs, established a satellite subsidiary and a cultural and publicity industry company, integrated high-quality internal and external resources through market mechanisms, consolidated and expanded the first-mover advantage in areas such as satellite communications, and enhanced the supply of high-quality strategic emerging products and industry informatization capabilities. The Company comprehensively advanced the optimization of its main processes centered around the cloud core platform and strengthened the talent team development for provincial and municipal company solutions, secondary development, delivery, and operation. It improved the coordination mechanism between provincial companies and professional

companies, and among professional companies, accelerated the implementation and promotion of proprietary products and capabilities, and facilitated the scale development of strategic emerging businesses. The Company deepened the reform of talent development systems and mechanisms, firmly implemented the strategy of strengthening the enterprise with talents, advanced the "Everest", "Kunlun", and "Five Mountains" programmes, and enhanced the cultivation and introduction of top talents and leading sci-tech talents. Insisting on balancing responsibilities, rights and interests with a dual emphasis on using incentives and constraints, the Company deepened the reform of market-oriented operation mechanisms. It enhanced the ability of managers at all levels to govern and develop the enterprise, promoted the improvement and expansion of tenure system and contractual management, optimised the assessment and incentive mechanisms, and mobilised the vitality and motivation of various business units.

The Company continued to intensify its efforts in opening up and cooperations, focusing on creating mutually beneficial and win-win ecological patterns. It strengthened deep-level opening up and cooperation in its corporate core capabilities such as technology and cloud-network, building a robust industry-academia-research cooperation system with national laboratories and leading universities to enhance joint cultivation of sci-tech talents, and delivered sci-tech achievements with industry competitiveness. The Company released a cloud-network capability open platform, opening over 100 capabilities in cloud-network connectivity, computing-network scheduling, cloud-network operations, and accelerated the productization and promotion of cloud-network capabilities in collaboration with partners. Focusing on customer market by strengthening opening up and cooperation in applications, channels, and services, the Company established a multi-format channel ecosystem for the individual market, enhanced cooperation in all-category terminals and distinctive privileges, built a high-quality application ecosystem and full-stack service ecosystem for the government and enterprise market, continuously broadening

<sup>20</sup> RDO: Fundamental research (R), applied technological research and development (D) and operational development (O)



the focus on high-quality development of its fundamental and Industrial Digitalisation business. The Company created a more prosperous national cloud ecosystem, constantly strengthened the "AI+" ecosystem alliance, gradually built a "proprietary + ecosystem" differentiated competitive advantage, and promoted the rapid development of strategic emerging businesses. The Company deepened the construction of international cooperation and innovation platforms, and gave full play to the role of the World Broadband Association (WBBA) as an international exchange platform as well as a hub for industrial innovation, with its number of members reaching 160, covering 47 countries and regions across five continents.

## 5. Expediting the Enhancement and Upgrade of New Digital Information Infrastructure, Consolidating the Key Foundation for High-Quality Development

The Company fully leveraged the advantages of cloud-network integration, adhered to the principle of network as the foundation, cloud as the core and security as the guarantee, seizing the direction of artificial intelligence development, expediting the enhancement and upgrade of new digital information infrastructure and empowering the development of AI.

Network for AI, the Company appropriately advanced the deployment of cloud-network infrastructure for AI, establishing two all-liquid-cooling pools with ten-thousand GPUs in Beijing-Tianjin-Hebei and Yangtze River Delta, and deploying computing power pools with a thousand GPUs in Guangdong, Jiangsu, Zhejiang, Mongolia and Guizhou, making the intelligent computing

power resources reaching 35 EFLOPS. The Company promoted the comprehensive upgrade of data centres to AIDC<sup>21</sup>, relying on large parks in key regions, provincial and municipal telecom facility rooms, and edge stations to meet various intelligent computing deployment needs such as training and inference, central and edge, cloud side and terminal side. The Company constructed a high-throughput, low-latency intelligent computing and interconnection network, sizeably deployed G.654E new optical fibre, and constructed a 400Gbps all-optical transmission network. The average latency between the eight major hubs has decreased by 7% and the new metropolitan network covered over 200 edge computing power pools, achieving millisecond-level access to computing. With 9.29 million 10G PON ports in the Gigabit fibre network, the residential coverage rate in cities and towns exceeded 95%, and the 50G PON network was also pilot deployed to support the ten-gigabit access needs of key communities, industrial parks, factories, and other areas.

AI for Network, the Company leveraged AI technology to enhance network value, actively explored network intelligent endogenesis, pilot deployed intelligent network elements in wireless networks, core networks, and metropolitan area networks, built real-time perception of business quality and application-level analysis capabilities, achieved intelligent identification and precise control of users and applications. The IoVT business leveraged its video aggregation advantages to innovate video data governance, create high-quality video datasets, and empower AI services across all scenarios, creating over a hundred "AI + IoVT" scenario applications such as Security Smart Eye and Kitchen Monitoring. The Company promoted the enhancement of cloud network operation



<sup>21</sup> AIDC: Artificial Intelligence Data Centre

capabilities through AI empowerment, embedding self-developed network large models into production processes. The automatic activation rate of key emerging products significantly increased to 99%, and the efficiency of handling network breakdown improved by 30%. Both the number of network fault work orders and processing time achieved a dual reduction, with the overall self-intelligence level of cloud network operations reaching L3.6.

At present, Network for AI and AI for Network have initially formed a positive cycle of mutual promotion between "infrastructure optimisation" and "intelligent computing capability feedback," which not only accelerates the implementation of AI but also further enhances network value.

The Company continuously strengthened its fundamental network connectivity capabilities, and continued deepening of co-building and co-sharing with China Unicom. The total number of 5G mid-to-high frequency base stations reached 1.375 million, steadily advancing the "one single 4G network". The 5G network achieved contiguous coverage in areas of townships and above across the country, while the in-depth coverage rate of key areas and key scenes increased to 90%. Coverage and perceived speed of mobile network steadily increased. The Company continued to strengthen the strategic deployment of 5G-A, sizeably deploying approximately 70,000 stations across 121 cities, with RedCap coverage exceeding 200 cities. The Company consolidated the capabilities of aerial-ground integrated information network, proactively promoted the construction of the satellite mobile communication system with high, medium, and low orbit coordination, and the

number of mobile phone direct satellite connection users has exceeded 2.4 million. The e-Surfing Artificial Intelligence of Things (AIoT) platform supports secure and reliable access of ultra-large scale terminals at the hundred-million level, as well as online sensing and control of IoT network connectivity at the billion level, with the number of terminal users reaching 630 million. The Company enhanced the construction of international network capabilities, initiated the establishment of full-service international communication gateway stations in Kunming and Haikou, increased submarine cable bandwidth by 5T, and actively opened strategic transit channels in "the Belt and Road" direction.

The Company proactively implemented the green development principles, continuously advancing the "1248"<sup>22</sup> green development model, with a year-on-year decrease of 19.2% in carbon emissions per unit of the total volume of telecommunications services. The Company promoted the green development of cloud-network infrastructure and the transformation of energy consumption structure. The renewable energy usage rate and green electricity scale are industry-leading, with a cumulative total of 28 national green datacentres accredited. The Company continuously promoted AI energy saving for base stations and facility rooms, with an annualised electricity-saving exceeding 1 billion kWh. The Company continuously enhanced its green product and service capabilities, promoted the expansion of key products such as ecological environment perception, green lighting, and environmental protection cloud, which supported the green transformation of the economy and society.

<sup>22</sup> 1248: "1" represents one strategic focus, i.e., green and low-carbon development as an important element of the "Cloudification and Digital Transformation" strategy; "2" represents two priorities, i.e., accelerating transformation towards green development on internal fronts and developing a green production and lifestyle on external fronts; "4" represents four basic strategies, i.e., high-quality development, coordinated development, sustainable development, and innovative development; and "8" represents eight major green initiatives, i.e., constructing new green cloud-network, creating new green operation, building new green ecology, strengthening new green empowerment, promoting new green technologies, consolidating new green support, developing new green energy, and creating new green value

## 6. Proactively Fulfilling Social Responsibilities, Continuously Strengthening Market Capitalisation Management, and Gaining Widespread Recognition from the Capital Markets

The Company successfully completed communications assurance tasks for multiple key events including the 75th Anniversary of the founding of the People's Republic of China and the launch of the Shenzhou-18 and Shenzhou-19 manned spaceships. The Company utilised Tiantong satellites and drones to efficiently assist flood fighting and disaster relief efforts during times of natural disasters such as the super typhoon "Yagi". The Company empowered rural revitalization with data and intelligence, and continuously bridging the digital divide between urban and rural areas. The Company remained committed to social welfare initiatives, benefiting the public by integrating services into 90,000 urban and rural business halls, with an annual service scale exceeding 18 million people, and was awarded the "Significant Contribution Units of Dual 15 Project of Labour Union" by All-China Federation of Trade Unions. The Company protected the rights and interests of its employees in accordance with the law, created a comprehensive system for employee care, and continued to enhance its institutional guarantees. The Company also facilitated professional development paths for employees, fostering the mutual growth of employees and the Company.

Insisting on high-standard corporate governance, the Company fulfilled its obligations of information disclosure in compliance with laws and regulations and increased the level of corporate transparency. The Company continued to improve

its corporate compliance management system, maintained compliance and efficient operation of its Shareholders Meeting, Board of Directors and Supervisory Committee and continued to optimise the internal control process. The Company maintained steady and compliant operations and effectively safeguarded the best and long-term interests of its shareholders. The Company proactively strengthened investor relations management by actively organising and participating in various investor relations activities such as results announcement briefings and investor communication meetings. The Company widely invited investors, industry analysts, media, and others to visit the Company and gain a deeper understanding, fully showcasing the Company's investment value and continuously enhancing market recognition.

The Company received high affirmation from domestic and international capital markets for its performance. It was voted as the "Most Honored Companies in Asia" for the 14th consecutive year in the "All-Asia-Executive Team Poll 2024" organised by Institutional Investor. In the 2024 China Securities "Golden Bauhinia Awards" selection, it won two awards, namely the "Outstanding Contribution Enterprise Award for the 75th Anniversary of the Founding of the People's Republic of China" and the "Best Listed Company in Investment Value". It was accredited "Golden Bull Most Investment Value Award" and "Golden Bull Award for Hong Kong Stocks" in the Golden Bull Award poll organised by China Securities Journal. Moreover, the Company was awarded the "Top 100 Value of Main Board Listed Companies in China" by the Securities Times and the "Best Practise of the Board of Directors for Listed Companies" in 2024 by the China Association for Public Companies.

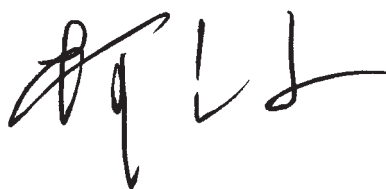
## 7. Outlook

Currently, China's economy is in a critical period of structural adjustment and transformative upgrade. The new round of sci-tech revolution and industrial transformation is accelerating, with the new-generation of information technology represented by artificial intelligence profoundly changing the production, life, and social governance models. New scenarios and new demands for digital services are continuously emerging, exhibiting new characteristics of diversification and scenario-based development. The country is providing stronger support for the "Two Focuses" projects and intensifying the implementation of the "Two Upgrades" policies, placing the industry and Company at a crucial juncture for accelerating high-quality development.

Achievement is based on ambition, and success is built on diligence. Facing the future, the Company will actively grasp the direction of the industry and artificial intelligence development. It will continue to deeply implement its Cloudification and Digital Transformation strategy, and strive to build a service-oriented, technology-oriented, and secured enterprise. It will place greater emphasis on the theme of high-quality development, while harnessing driving forces from reforms and opening up, with strengthening the enterprise with talents as the key. The Company will continue to promote the deep integration of sci-tech innovation and industrial innovation, facilitating the smooth transition between new and old development momentum. It will further strengthen the supply of high-quality, efficient digitalised and intelligent products and services, thereby boosting consumption and meeting

the new demands of thousands of industries and households for a better digital life. Promoting the empowerment of economy and society with artificial intelligence applications, the Company continuously enhancing its core functions and core competitiveness. Accelerating the building of a world-class enterprise, the Company will proactively bring returns to shareholders, and strive to write a new chapter in Chinese-style modernised telecommunications.

Finally, on behalf of the Board of Directors, I would like to take this opportunity to express our sincere appreciation to all shareholders and customers for their continued care and support, and our sincere thanks to all our employees for their hard work and contributions. Furthermore, I would also like to extend our heartfelt gratitude towards Mr. Liang Baojun and Mr. Li Jun for their outstanding contributions to the Company's transformation and upgrades as well as continued development made during their tenure.



**Ke Ruiwen**  
*Chairman and Chief Executive Officer*  
Beijing, China

25 March 2025



## 2. OVERVIEW OF THE COMPANY'S INDUSTRY DURING THE REPORTING PERIOD

### 1. INDUSTRY OVERVIEW

In 2024, the telecommunications industry fully advanced the in-depth implementation of the "14th Five-Year Plan" tasks, achieving steady growth in both volume and revenue. The development of the industry highlighted sci-tech innovation more prominently, with accelerated optimization of and upgrades to new information infrastructure, as well as the deepening and solidification of integration applications, yielding positive results in empowering economic and social development.

#### 1. The telecommunications industry continued to promote the enhancement of quality and efficiency

**Steady increase in the volume and revenue of telecommunications businesses.** In 2024, the total volume of telecommunications businesses calculated based on the pricing adopted in the previous year increased by 10% year-on-year, effectively driving the stable growth of the service industry. The revenue from telecommunications businesses for the year amounted to RMB1.74 trillion, representing an increase of 3.2% year-on-year. **The driving effect of emerging businesses remained prominent.** The proportion of revenue from emerging businesses, primarily cloud computing, big data, IoT, and data centres, has risen to a quarter, representing an increase of 10.6% year-on-year, contributing 78% to the growth of telecommunications revenue. The industry actively promoted the integration and innovation of new-generation information technology, constructing new digital consumption scenarios, and Smart Family service revenue increased by 11.3% year-on-year. **Sci-tech innovation capabilities continued to improve.** Facing the new stage of digitalised and intelligent transformation, the industry actively promoted the restructuring of R&D models and organisational systems, with R&D expenditure in 2024 increasing by 5.1% year-on-year. Breakthroughs in key areas of innovation were achieved continuously, with

the global share of 5G standard essential patent declarations exceeding 40%. New progress was made in the development of hollow-core optical fibres and high-speed optoelectronic modulator devices, and the pilot program for 10 Gigabit fibre networks was launched. The construction and application of low-altitude intelligent networks, ocean sensing and communications integration, inter-satellite and satellite-to-ground communications were accelerated. The proprietary AI large model achieved multiple capability upgrades, accelerating the process of scaled application in areas such as customer service, government administration, culture and tourism, industry, and smart cities.

#### 2. Dual enhancement of the quantity and quality of information communications infrastructure

**Accelerated construction of high-speed transmission networks.** In 2024, the total length of fibre cable lines nationwide reached 72.88 million kilometres, among which the year-on-year growth rates of local network trunk fibre cable lines and access network fibre cable lines were 19.9% and 9.9%, respectively. The construction of backbone networks entered a new phase, with the 400G backbone network officially entering large-scale deployment. High-speed transmission channels were initially established to connect the eight major national hub nodes, hubs with the surrounding major cities, as well as key provinces, significantly enhancing transmission bandwidth, network capacity, and ultra-low latency. **The coverage of "dual-Gigabit" networks continued to improve.** The construction targets for 5G and the Gigabit fibre network as outlined in the "14th Five-Year Plan" were completed ahead of schedule, achieving gigabit connectivity in every county, 5G connectivity in every township, and 5G connectivity in more than 90% of administrative villages. As of the end of 2024, the number of 5G base stations in China reached 4.251 million, with an average of 30.2 5G base stations per 10,000 people. With the upgrade of 5G network evolution, 5G-A network deployment steadily advanced. The achievements in Gigabit network construction were remarkable, with the number of 10G PON ports capable of providing Gigabit network services reaching 28.20 million, representing a net



increase of 5.183 million over last year, and 207 Gigabit cities were established. **The construction of computing power infrastructure significantly accelerated.** The industry actively implemented the national integrated computing power network construction goals and accelerated enhancements to the computing power network layout. As of the end of 2024, the number of data centre cabinets provided to the public by the three fundamental telecommunications enterprises reached 830,000, with the eastern region accounting for 71.1%, representing an increase of 1.3 percentage points year-on-year. The industry accelerated the construction of intelligent computing centres and the implementation of cluster projects with ten-thousand GPUs, with the scale of intelligent computing exceeding 50EFlops (FP16), achieving double year-on-year growth.

### 3. Telecommunications services becoming more universally accessible

**The penetration rate of mobile phone users and the scale of 5G users continued to lead globally.** As of the end of 2024, the number of mobile phone subscribers in China reached 1.79 billion. The mobile phone penetration rate reached 127.1 units per hundred people, which was 19.5 points higher than the global average (107.6 units per hundred people). Of which, the number of 5G mobile phone users reached 1.014 billion, accounting for 56.7% of mobile phone users, which was 2.3 times of the global average. Mobile phone users rapidly migrated to 5G, with a net increase of over 200 million 5G mobile users last year and a net increase of 192 million this year. **The proportion of gigabit users exceeded 30%, and the average bandwidth level per household continued to increase.** As of the end of 2024, the number of wireline broadband access users reached 670 million, including 573 million household broadband access users. The household broadband penetration rate reached 115.9 units per 100 households, representing an increase of 5.7 points as compared to the end of last year. Of which, Gigabit users reached 207 million, accounting for 30.9% of wireline broadband access users, representing an increase of 5.2 percentage points as compared to the end of last year. To meet the demands for high-definition video and live streaming, and to cultivate innovative applications

for smart homes, enterprises accelerated the high-quality supply of wireline broadband "last ten metres", with the scale of Fibre-to-the-Room (FTTR) users exceeding 35 million. In 2024, the total access bandwidth of wireline broadband users reached 307,000 Tbps, representing an increase of 17.9% year-on-year. The average contracted bandwidth per household reached 511.8 Mbps per household, representing an increase of 55.3 Mbps per household as compared to the end of last year. **Data traffic levels reached a record high.** Benefiting from network evolution and upgrades, deep coverage of "signal enhancement", innovation in video services, and the implementation of AI applications, both mobile and wireline Internet access traffic maintained a relatively rapid growth trend. In 2024, the mobile Internet access traffic increased by 11.6% year-on-year, with 5G mobile data traffic accounting for nearly 60%, and the year-on-year growth rate exceeding 40%. The monthly mobile Internet access traffic per user (also known as dataflow of usage, DOU) for the year reached an average of 18.18GB/user month, and the DOU for December alone reached 19.7GB/user, both at historical highs. The data traffic of wireline Internet broadband users increased by 14.9% year-on-year, with the growth rate improving by 4.3 percentage points over last year.

### 4. Enabling the deepening of industry digitalisation

**The application of mobile IoT terminals grew rapidly.** As of the end of 2024, the number of mobile IoT (cellular) terminal users in China reached 2.656 billion, representing an increase of 13.9% year-on-year, with a net increase of 324 million this year, accounting for 59.7% of the total mobile terminal connections. The scale of mobile IoT (cellular) terminal applications in the fields of public services, Internet of Vehicles, smart retail, and smart home reached 997 million, 477 million, 372 million, and 320 million users respectively, with the fields of public services and smart home experiencing a year-on-year growth of over 20%. Driven by the rapid enhancement of terminals and active application in certain areas, mobile IoT terminal access traffic in 2024 has doubled as compared to the previous year. **Industry integration applications advanced in depth and substance.** 5G and gigabit

fibre networks extensively empowered industry digitalised transformation, constantly deepening the popularisation of applications in key areas. The cumulative number of 5G industry virtual private networks exceeded 55,000, with an addition of 23,000 networks this year, riding on the surge in such networks in the previous year. 5G applications were integrated into 80 major categories of the national economy, with a total of 138,000 application cases. The number of Gigabit fibre network application cases reached nearly 40,000. The industrial Internet achieved full coverage of 41 major industrial categories, with the key industries accelerating their pace of integration. The number of "5G + industrial Internet" projects has exceeded 17,000, cultivating 20 typical scenarios across 10 major industries, and construction in connection with "5G + industrial Internet" integration application has commenced in 10 initial pilot cities, including Nanjing, Wuhan, and Qingdao.

*Note: The above data are extracted from the "Statistical Communiqué of the Communications Industry in 2024 and its interpretations: High-Quality Development of the Communications Industry Reaches a New Level" issued by the MIIT.*

## 2. SIGNIFICANT IMPACT OF NEW LAWS, ADMINISTRATIVE REGULATIONS, DEPARTMENTAL RULES AND INDUSTRY POLICIES ON THE INDUSTRY

During the Reporting Period, a number of administrative regulations, departmental rules and departmental normative documents were promulgated and implemented, introducing new requirements for the development and compliance operation of the industry.

On 22 January 2024, the State Council promulgated the *Provisions of the State Council on Thresholds for Prior Notification of Concentrations of Undertakings* (the "*Provisions on Notification of Concentrations of Undertakings*"), which became effective from the date of promulgation. The *Provisions on Notification of Concentrations of Undertakings* raised the notification thresholds for concentrations of undertakings and established a mechanism for assessing the implementation of notification thresholds, further relaxed market entry thresholds, reduced institutional transaction

costs of concentration of undertakings, effectively alleviating the burden on enterprises and enhancing the effectiveness of regulation and enforcement with respect to antitrust.

On 15 March 2024, the State Council promulgated the *Regulation on the Implementation of the Law of the People's Republic of China on the Protection of Consumer Rights and Interests* (the "*Regulation on the Implementation of the Law on the Protection of Consumer Rights and Interests*"), which became effective on 1 July 2024. The *Regulation on the Implementation of the Law on the Protection of Consumer Rights and Interests* mainly refined the obligations stipulated in the *Law of the People's Republic of China on the Protection of Consumer Rights and Interests*, including safeguarding consumers' personal and property safety, handling defective products, prohibiting false advertising, clear pricing, adoption of standard clauses, fulfilling quality assurance responsibilities, and protecting consumers' personal data. It also made specific provisions regarding issues such as "big data discrimination" and "automatic renewal" in the field of online consumption, as well as infringement issues related to prepaid consumption, thereby strengthening the protection of the legitimate rights and interests of consumers.

On 6 June 2024, the State Council promulgated the *Regulation on Fair Competition Review* (the "*Regulation*"), which became effective on 1 August 2024. The *Regulation*, for the first time, included laws and local regulations in the drafting stage within the scope of fair competition review, and further optimised market entry and exit, free flow of goods and factors, impact on production and operation costs, and impact on production and operation behaviour across four aspects with 19 policy measures that must not be included, strictly limiting the applicable conditions for exceptions. In addition, the *Regulation* clarified the review mechanism and supervision and guarantee mechanism for conducting fair competition reviews of policy measures and proposed the requirement to establish and improve mechanisms for spot checks, the handling of reports, and supervision related to fair competition reviews.

On 24 September 2024, the State Council promulgated the *Regulation on Network Data Security Management*, which became effective on 1 January 2025. The *Regulation on Network Data Security Management* elaborated on the obligations of network data processors in collecting, processing, and protecting personal information, the obligations to identify and report important data, as well as the conditions for providing personal information and important data abroad and the requirements for data export security assessment. In addition, the *Regulation on Network Data Security Management* clarified the obligations of network platform service providers in network data security protection, as well as the relevant provisions on the setting requirements for personalised recommendation services and public services for network identity authentication. It was conducive to regulating network data processing activities, ensuring network data security, and promoting the lawful, reasonable, and effective use of network data.

On 22 March 2024, the Cyberspace Administration of China promulgated the *Provisions on Promoting and Regulating Cross-border Data Flow* (the "*Cross-border Data Provisions*"), which became effective upon promulgation. The *Cross-border Data Provisions* stipulated the standards for declaring security assessments for the outbound transfer of important data, adjusted the conditions for data outbound activities that would be required to complete filings with respect to security assessments for data outbound transfer, establish standard contracts for personal information outbound transfer, and obtain certification with respect to personal data protection, while also clarifying the conditions for exemption from the foregoing obligations. In addition, the *Cross-border Data Provisions* proposed the establishment of a negative list system for pilot free trade zones and measures to extend the validity period of the results of the outbound data transfer security assessment. Under the premise of ensuring national data security, it appropriately relaxed the conditions for cross-border data flow, moderately narrowed the scope of data outbound security assessment, and facilitated cross-border data flow.

On 26 November 2024, the Ministry of Public Security, in conjunction with the National Development and Reform Commission, the Ministry of Industry and Information Technology, and the People's Bank of China, jointly issued the *Measures for Joint Punishments against Telecom and Online Fraud and Related Illegal and Criminal Activities* (the "*Joint Punishments Measures*"), which became effective on 1 December 2024. The *Joint Punishments Measures* clarified the scope and criteria for identifying punishment targets, standardised and detailed telecom network punishment measures and procedures, and required telecommunications business operators to strictly implement telecom network punishment measures for the punishment targets.

The Company will conscientiously implement the relevant newly issued and revised laws, administrative regulations, departmental rules and industry policies, and proactively follow and study the relevant upcoming laws, administrative regulations, departmental rules and industry policies to ensure that the relevant business operations are in compliance with laws and regulations and that the Company operates in compliance with laws and regulations.

### 3. BUSINESS OF THE COMPANY DURING THE REPORTING PERIOD

In 2024, the Company firmly seized opportunities arising from the new round of sci-tech revolution and industrial transformation represented by AI. In response to the new consumption demands for intelligence, security, and green from 2C/2H/2B/2G customers, the Company continued to strengthen the supply of high-quality products and services, solidly advancing the dual engines of fundamental business and Industrial Digitalisation business led by strategic emerging businesses, driving continuous improvement in the Company's operating performance.

**For individual users**, the Company continued to advance mobile network upgrades to 5G-A, enhancing 5G network coverage in key scenarios and continuously enriching applications such as new 5G communications to create more superior mobile communications experience. The Company persistently promotes upgrades to 5G applications, accelerating AI upgrades for applications such as Communications Assistant, Colour Ringback Tone with Video, and Cloud Drive, and expanding the scale of strategic emerging businesses like quantum-encrypted messages and calls and handset direct-to-satellite. The Company also continued to advance terminal upgrades, launching the first customised AI smartphones with built-in self-developed Xingchen general-purpose large model covering speech and semantics within the industry, achieving convenient applications without the need for APPs, and constantly meeting users' growing demands for personalised and diversified information services.

**For household users**, the Company continuously promoted the upgrade of household broadband to Gigabit and FTTR, creating faster, more comfortable, and safer all-fibre network services. The Company continuously advanced Smart Family application upgrades. Under the "Beautiful Home" brand, the Company continued to develop Smart Family applications to cater for different scenarios in "One All-fibre Network, One Intelligent Cloud and One Beautiful Home", launching smart terminals such as AI cameras, AI cloud computers, and AI home monitors to meet customers' personalised needs for safety, health, entertainment, low-carbon, and intelligence. The Company consistently advanced platform upgrades, constantly enriching home-community-government connectivity scenarios, accelerating the creation of emerging products and scenario-based solutions such as street cloud/township cloud, community living circles, and digital health care, stepping up the integration of CHBG scenarios, and continuously maintaining a leading edge in differentiated development capabilities.

**For government and enterprise customers**, the Company continued to advance the deployment of computing power, creating the "Xirang" scheduling platform for integrated computing power layout with the integration of general computing, intelligent computing and supercomputing, achieving

convenient intelligent computing applications, unified scheduling of computing and network, and accelerated heterogeneous computing power. The Company participated in the formulation of 10+ industry standards and served 18 cities including Beijing, Shenzhen, Suzhou, and Tianjin to build regional computing power networks. The Company continuously optimised the IDC resource layout to provide AIDC multi-element product service capabilities integrating cloud, AI, security, and other elements. The Company consistently developed industry-leading large model scenario applications, having launched over 50 segmented industry large model scenario applications for sectors such as government affairs, emergency response, industry, education, and cultural promotion. The Company continuously accelerated the upgrade and iteration of digital platforms, forming a batch of high-quality industry platforms with differentiated competitive advantages. The proprietary industry platforms cumulatively facilitated over 15,000 projects and contracts worth RMB15.8 billion in total. The Company constantly upgraded the 5G+AI integrated scenario solutions for three types of ten major industries' 5G customised networks, cumulatively developing 45,000 industry application projects across numerous sectors such as manufacturing, mining, electricity, chemical industry, ports, and low-altitude areas.

**For international users**, the Company expedited the high-quality development of international business, accelerated the formation of a global layout of cloud network resources and the integration of international and domestic business processes. It actively expanded in key overseas markets, with regions such as Southeast Asia, the Middle East and Africa becoming important growth poles for its international business. Its strategic emerging businesses such as cloud, quantum, satellite, Internet of Vehicles and Internet of Video Things has achieved breakthroughs overseas. These all contributed to an international business revenue of RMB16.9 billion for the year, representing a year-on-year growth of 15.4%.

For detailed business analysis of the Company, please refer to "5. MAJOR OPERATION DURING THE REPORTING PERIOD" in this section.

## 4. ANALYSIS OF CORE COMPETITIVENESS DURING THE REPORTING PERIOD

In 2024, China Telecom closely grasped the development direction of artificial intelligence, fully, accurately, and comprehensively implemented the new development philosophy, firmly fulfilled the construction of Cyberpower and Digital China, safeguarding network and information security and continuously and deeply implemented the Cloudification and Digital Transformation strategy, further accelerated the transformation towards a service-oriented, technology-oriented, and secured enterprise, deepened reform and opening up on all fronts, fully promoted high-quality development, and accelerated the development of new quality productive forces.

**Continuous promotion of the construction of digital information infrastructure driven by sci-tech innovation.** The Company regarded sci-tech innovation as the core essence of its corporate strategy and the pillar for high-quality development, and accelerated its construction of a leading sci-tech enterprise. With a focus on the four fundamental technology directions of network, cloud and cloud-network integration, artificial intelligence and quantum/security, the Company continuously strengthened its core technologies and achieved significant breakthroughs in the foundational cloud computing softwares such as cloud server operating systems and databases, established China Telecom's No.1 technology, the "Xirang" integrated intelligent computing service platform, and made breakthroughs in key technologies such as distributed inference, hybrid training and inference, and hundred-kilometre lossless transmission. It built the first full-size, full-modality, fully homegrown trillion-parameter foundational large model system in China, resolving challenges in controllable video generation from long text, full-duplex interaction and multimodal deepfake detection. The Company pioneered the world's first distributed cryptographic system integrating QKD and PQC. It released the superconducting quantum computer "Tianyan-504" with the highest number of qubits in a single unit nationwide. The Company conducted the world's

first demonstration and validation of a hollow-core optical cable transmission system with a single wavelength of 1.2 Tbit/s and a capacity exceeding 100 Tbit/s on an existing network, and completed multiple industry-first field trials in key 6G technology areas such as satellite-ground integration, sensing and communications integration, and wireless AI. With its growing influence on science and technology, the Company has undertaken multiple national-level innovation platforms with two projects "Fifth Generation Mobile Communications System" and "Next Generation Internet Source Address" being awarded the first prize of the National Science and Technology Progress Award. Internet of Video Things (IoVT) was selected as one of the "Top Ten Super Projects of State-owned Central Enterprises for 2024" and won the "2024 World Internet Conference Award for Pioneering Science and Technology". The "Tianyan" quantum computing cloud platform was included in the "2024 Top Ten National Mega-Projects of State-owned Central Enterprises". The number of new invention patents obtained by the Company increased by 115.9% year-on-year, ranking second among global operators. The Company held important positions in international standardisation organisations such as ITU-T, 3GPP and IETF. The Company adhered to the principle of network as the foundation, cloud as the core, seizing the direction of artificial intelligence development, expediting the enhancement and upgrade of new digital information infrastructure and empowering the development of AI. The Company appropriately advanced the deployment of cloud-network infrastructure for AI and established two all-liquid-cooling pools with ten-thousand GPUs in Beijing-Tianjin-Hebei and Yangtze River Delta, deploying computing power pools with a thousand GPUs in Guangdong, Jiangsu, Zhejiang, Mongolia and Guizhou, making the intelligent computing power resources reaching 35 EFLOPS. The Company promoted the comprehensive upgrade of data centres to AIDC, meeting various intelligent computing deployment needs. The Company constructed a high-throughput, low-latency intelligent computing and interconnection network, sizeably deployed G.654E new optical fibre, and constructed a 400Gbps all-optical transmission network. The average latency between the eight major hubs has decreased by 7% and the new metropolitan network covered over 200 edge computing power pools, achieving millisecond-level



access to computing. With 9.29 million 10G PON ports in the Gigabit fibre network, the residential coverage rate in cities and towns exceeded 95%, with the 50G PON network pilot deployed. The Company leveraged AI technology to enhance network value, pilot deployed intelligent network elements in wireless networks, core networks, and metropolitan area networks, built real-time perception of business quality and application-level analysis capabilities, achieved intelligent identification and precise control of users and applications. The IoT business created high-quality video datasets, and empowered AI services across all scenarios, creating over a hundred "AI + IoT" scenario applications such as Security Smart Eye and Kitchen Monitoring. The Company promoted the enhancement of cloud network operation capabilities through AI empowerment, embedding self-developed network large models into production processes. The automatic activation rate of key emerging products significantly increased to 99%, and the efficiency of handling network breakdown improved by 30%. The Company has achieved reductions in both the number of network fault work orders and processing time, with the overall self-intelligence level of cloud network operations reaching L3.6. The Company continuously strengthened its fundamental network connectivity capabilities and deepened co-building and co-sharing with China Unicom. The total number of 5G mid-to-high frequency base stations reached 1.375 million, steadily advancing the "one single 4G network". The 5G network achieved contiguous coverage in areas of townships and above across the country, while the in-depth coverage rate of key areas and key scenes increased to 90%. Coverage and perceived speed of mobile network steadily increased. The Company continued to strengthen the strategic deployment of 5G-A, sizeably deploying approximately 70,000 carrier aggregation stations across 121 cities, with RedCap coverage in over 200 cities. The Company consolidated the capabilities of aerial-ground integrated information network, proactively promoted the construction of the satellite mobile communication system with high, medium, and low orbit coordination, and the number of mobile phone direct satellite connection users has exceeded 2.4 million. The e-Surfing Artificial Intelligence of Things (AIoT) platform supports secure and reliable access of ultra-large scale terminals at the hundred-million level, as

well as online sensing and control of IoT network connectivity at the billion level, with the number of terminal users reaching 630 million. The Company enhanced the construction of international network capabilities, initiated the establishment of full-service international communication gateway stations in Kunming and Haikou, increased submarine cable bandwidth by 5T, and actively opened strategic transit channels in "the Belt and Road" direction.

**Accelerating breakthroughs in scale application, promoting the transformation of innovative achievements into real productivity.** The Company fully completed the layout of seven major strategic emerging businesses and actively empowered the intelligent transformation of thousands of industries. Having continuously empowered its products and services with AI, quantum and satellite functionalities, the Company launched the first customised AI smartphones with built-in self-developed Xingchen general-purpose large model covering speech and semantics within the industry. The Company introduced smart terminals such as AI cameras, AI cloud computers and AI home monitors, promoting AI upgrades for 5G New Telecommunications, Communications Assistant, Colour Ringback Tone with Video, Cloud Drive and other applications, and accelerated the scale development of strategic emerging businesses such as quantum-encrypted messages and calls and handset direct-to-satellite. For government and business customers, the Company was committed to building a new integrated service model of "computing power + platform + data + model + application". It accelerated upgrades in industry digital platform capabilities, launching a comprehensive set of industry solutions for key areas and empowering customers in a full range of industries through over 100 digital platforms. The Company advanced the upgrade of the 5G NICES Pro+ integrated product portfolio, developed ten "5G+AI" industrial integrated scenario solutions and 45,000 industry application projects in fields such as power, chemical and mining. China Telecom Cloud is fully advancing into a new stage of intelligent cloud development. The "Xirang" integrated intelligent computing service platform offered capabilities such as heterogeneous ubiquitous computing power, robust computing network scheduling, efficient training and inference engines, one-stop

intelligent computing services, high-quality datasets, secure and fast model services as well as a wealth of industry intelligent applications. It completed deep adaptation and optimisation with various mainstream intelligent computing chips and the DeepSeek-R1/V3 series of large models, becoming the first domestic operator-level cloud platform to achieve the full-stack localization of DeepSeek model inference services, and deployed them over a full suite of products such as cloud hosts, cloud computers, cloud phones, MaaS services, computing power scheduling platforms and edge security acceleration platforms. It supported the efficient training and flexible deployment, and doubled inference performance of mainstream models like DeepSeek. The Company gathered resources from various parties to further its expansion in intelligent computing. In collaboration with 50 computing power partners, its total self-owned and connected intelligent computing power has reached 62 EFLOPS, providing rich, diverse, flexible, convenient and cost-effective computing power services to customers in sectors including central state-owned enterprises, AI service providers as well as educational and research institutions. The Company served over 4.9 million customers in the industry, ranking No.1 in China's computing power interconnection scheduling market and deemed as a leader in China's intelligent computing cloud service market. The Company thoroughly implemented "AI+", completing the "1+1+1+M+N" overall layout for artificial intelligence. It developed the Xingchen multimodal general large model foundation. This foundation provided a comprehensive suite of capabilities covering semantics, speech and visual perception, and was open-source in multiple sizes. The Company launched the industry's first large model supporting free mixing of Chinese, English and 50 dialects, as well as a knowledge-based view of all things control deployment large models. It developed AI-native applications such as intelligent systems and industrial solutions, as well as over 10 standardised AI products. The Company launched over 50 industrial large models, serving more than 10,000 industrial customers. It accelerated the implementation and promotion of industrial large models in areas such as grassroots governance, smart government customer service and tourism guidance, effectively helped customers to improve efficiency and reduce costs, and continued to empower the intelligent

transformation of the economy and the society, ranking 6th in China's large model application market share with its AI. The Company thoroughly promoted the embedding and application of 13 internal large models in various processes in its corporate management and operations, such as customer service, network operations and office work, driving cost reduction and enhancement of quality and efficiency. The Company established the Xinghai Big Data brand and ranked first for the year among data element service providers. Its data element platform expanded from Hainan to 7 provinces and 29 cities nationwide, while it also undertook the construction of 3 national-level data annotation bases. In the meantime, its data intelligence core platform served over 150 customers and has developed a large model training dataset comprising over 9 trillion Tokens. The Company inspired the new momentum and new model of "Quantum+" for the future development of the industry. In terms of capability enhancement, the Company relied on a new cryptographic system that integrated QKD, PQC and classical cryptography, constantly enriching the capabilities of its "Quantum+" products. The "Tianyan" quantum computing cloud platform achieved dual upgrades in computing power scale and types, forming the largest quantum computing cluster in China. In terms of empowering industrial development, the Company formed quantum security solutions covering fields such as government affair, finance, energy and transportation, and demonstrated the integration and innovation of quantum technology in the context of various industrial applications.

**Further deepening comprehensive reform and opening up to promote industrial prosperity and development.** The Company comprehensively advanced the deepening and enhancement actions of state-owned enterprise reforms. It further deepened reforms in key areas, and accelerated the establishment of production relations in alignment with new quality productive forces. The Company improved the innovative allocation level of various resource elements, and was rated level A in the assessment of key reform tasks of state-owned central enterprises by SASAC for three consecutive years. The Company continuously optimised the RDO R&D organization system, established specialised research institutes for

cloud computing, artificial intelligence, quantum, and set up the first overseas research institute in Singapore. It established a cloud-network operating system R&D centre, implemented sci-tech innovation assessment incentives for each enterprise, and deepened the incentive mechanism for the transformation of sci-tech achievements. The Company also improved a basket of innovation supportive policies. The Company constantly deepened the reform of professional companies and industry BGs, established a satellite subsidiary and a cultural and publicity industry company, and consolidated and expanded the first-mover advantage in areas such as satellite communications. The Company comprehensively advanced the optimization of its main processes centred around the cloud core platform and strengthened the talent team development for provincial and municipal company solutions, secondary development, delivery, and operation. It improved the coordination mechanism between provincial companies and professional companies, and among professional companies, and accelerated the implementation and promotion of proprietary products and capabilities. The Company deepened the reform of talent development systems and mechanisms, firmly implemented the strategy of strengthening the enterprise with talents, advanced the "Everest", "Kunlun", and "Five Mountains" programmes, and enhanced the cultivation and introduction of top talents and leading sci-tech talents. Insisting on balancing responsibilities, rights and interests with a dual emphasis on using incentives and constraints, the Company deepened the reform of market-oriented operation mechanisms. It enhanced the ability of managers at all levels to govern and

develop the enterprise, promoted the improvement and expansion of tenure system and contractual management, optimised the assessment and incentive mechanisms, and mobilised the vitality and motivation of various business units. The Company continued to intensify its efforts in opening up and cooperations, focusing on creating mutually beneficial and win-win ecological patterns. It strengthened and opened up in-depth collaborations in respect of its corporate core capabilities such as technology and cloud-network, building a robust industry-academia-research cooperation system with national laboratories and leading universities to enhance joint cultivation of sci-tech talents. The Company has launched a cloud-network capability open platform, opening up over 100 capabilities in cloud-network connectivity, computing-network scheduling, cloud-network operations, and accelerated the productization and promotion of cloud-network capabilities in collaboration with partners. Focusing on customer market by strengthening opening up and cooperation in applications, channels, and services, the Company established a multi-format channel ecosystem for the individual market, enhanced cooperation in all-category terminals and distinctive privileges, and built a high-quality application ecosystem and full-stack service ecosystem for the government and enterprise market. The Company created a more prosperous national cloud ecosystem and constantly strengthened the "AI+" ecosystem alliance. The Company deepened the construction of international cooperation and innovation platforms, the number of members of the World Broadband Association (WBBA) reaching 160, covering 47 countries and regions across five continents.



## 5. MAJOR OPERATION DURING THE REPORTING PERIOD

The Company adhered to customer-oriented principles, deeply understanding the new intelligent, secure, and green consumption needs of 2C/2H/2B/2G customers, constantly strengthening the supply of high-quality products and services, achieving steady growth in fundamental businesses, sound growth in Industrial Digitalisation business, and making solid new strides towards high-quality development. In 2024, the Company's operating revenues amounted to RMB529.4 billion, representing an increase of 3.1% year-on-year, of which service revenues amounted to RMB482.0 billion, representing an increase of 3.7% year-on-year.

**Accelerating the upgrade of 5G applications and terminals, continuously optimising customer experience, and driving healthy growth of mobile communications service revenues. Continuously advancing network upgrades,** the Company accelerated the transition of mobile networks to 5G-A, increased 5G network coverage in key scenarios, and continuously enriched applications such as new 5G communications to create a new mobile communication experience characterised by "faster speeds, broader connectivity, wider coverage, more precise perception, lower latency, and higher efficiency", thereby promoting the continuous increase in the penetration rate of 5G network users. **Continuously advancing the upgrade of 5G applications,** the Company reshaped 5G applications and customer perception through AI technology, and consistently promoted AI upgrades for applications such as Communications Assistant, Colour Ringback Tone with Video, and Cloud Drive, accelerating the scale expansion of quantum-encrypted messages and calls, handset direct-to-satellite, and other strategic emerging businesses. **Continuously advancing terminal upgrades,** the Company was the first in the industry to launch a custom AI phone with a built-in proprietary Xingchen speech and language general-purpose model, achieving convenient applications without the need for APPs, and constantly meeting users' growing demands for personalised and diversified

information services. In 2024, the Company's mobile communications service revenues reached RMB202.5 billion, representing an increase of 3.5% year-on-year. Of which, revenue from mobile value-added and applications reached RMB29.9 billion, representing increase of 16.1% year-on-year. The net addition of mobile subscribers was 16.75 million, bringing the total number of mobile subscribers to 425 million, and mobile ARPU reached RMB45.6.

**Accelerating the renewal and upgrade of Gigabit and Smart Family applications, continuously strengthening the integration of CHBG scenarios, and promoting steady growth in Wireline and Smart Family revenue. Continuously advancing network upgrades,** the Company accelerated the upgrade of household broadband to Gigabit and FTTR, providing users with faster, more comfortable, and safer all-fibre network services, and strengthening the foundation of smart home connectivity. **Continuously advancing Smart Family application upgrades,** under the "Beautiful Home" brand, the Company continued to develop "One All-fibre Network, One Intelligent Cloud and One Beautiful Home", constantly enriching AI + e-Surfing HD, AI + e-Surfing Family Health and other Smart Family applications, launching AI cameras, AI cloud computers, AI home monitors and other smart terminals to meet customers' personalised needs for safety, health, entertainment, low carbon, and intelligence. **Continuously advancing platform upgrades,** the Company consistently enriched the connectivity scenarios among home, community, and government, accelerating the development of emerging products and scenario-based solutions such as street cloud/township cloud, community living circle, and digital health care, strengthening the integration of CHBG scenarios in rural and community management, community services, and home applications, and maintaining a leading edge in differentiated development capabilities. In 2024, the Company's Wireline and Smart Family service revenues reached RMB125.7 billion, representing an increase of 2.1% year-on-year. Of which, revenue from Smart Family services reached RMB22.1 billion, representing an increase of 16.8% year-on-year. The number of broadband subscribers saw a net addition of 7.28 million, reaching 197 million, while the broadband blended ARPU reached RMB47.6.

**Accelerating the deep integration of sci-tech innovation and industrial innovation, continuously creating new impetus and new advantages for high-quality development, and promoting the healthy development of strategic emerging businesses and Industrial Digitalisation revenue. Continually advancing the intelligence integration upgrade of China Telecom Cloud.**

The Company continuously upgraded the industry-leading "Xirang" integrated intelligent computing service platform, providing powerful computing network scheduling, efficient heterogeneous computing, and one-stop training and inference service capabilities, aggregating resources from various parties to deepen the intelligent computing layout. It connected with 50 computing power partners, with a total of 62EFLOPS of self-owned and accessed intelligent computing power, offering rich, diverse, flexible, convenient, and cost-effective computing power services to customers in sectors such as central state-owned enterprises, AI infrastructure providers, and educational and research institutions. **Continuously promoting the deep integration of large industry models into production scenarios**, the Company provided customers with integrated services of "computing power + platform + data + model + application". The efficiency of document writing in grassroots governance large models increased sixfold, and the efficiency of conflict mediation doubled. In industrial quality inspection large model detection scenarios, accuracy exceeded 99.4%. In tourism guide large models, the accuracy of intent recognition and digital human explanation Q&A services both exceeded 95%. In education, the precision teaching large model reduced teachers' 70% workload in grading, and the rate of excellent student writing increased by 60%. **Continuously promoting "Quantum+" intelligent upgrade.** Relying on the distributed cryptographic system architecture integrated with quantum key distribution to provide a technological foundation for the construction of quantum security

infrastructure, the Company built a "Quantum+" product capability system. The capabilities and scale of quantum secure communication products were leading domestically, providing quantum security and confidentiality services for important sectors of the national economy such as government affairs, finance, energy, and transportation. **Continually advancing the intelligent upgrade of 5G industry applications.** The Company innovatively launched the NICES Pro+ product system, upgraded the 5G+AI integration scenario solutions for three categories and ten major industries, targeting manufacturing, mining, power, chemical, port, low-altitude sectors and thousands of industries, cumulatively developing 45,000 industry application projects. The 5G deterministic network completed the tiered and categorised scenario solutions, leading in the industry. **Continuously promoting significant breakthroughs in the scale of key markets for industry digital platforms.** The Company deeply engaged in the digital economy sector, accelerated the advancement of new industrialisation, and the proprietary new industrial products applications such as e Cloud Collection, e Cloud Control, and large industrial models were implemented in 19 provinces, serving over 10,000 enterprises. The proprietary intelligent cockpit large model's multimodal scene recognition accuracy was above 95%, reaching industry-leading levels. The "e-Surfing Smart Enterprise" standard ICT solution for SMEs was launched on the unified entry for e-Surfing Smart Enterprise customers, building new internet-based processes, cumulatively serving 837,000 SMEs. The Company deeply engaged in the digital society sector, and the National Health Big Data Platform participated in the construction of over 130 provincial and municipal platforms, with cumulative contracts exceeding RMB2.6 billion. The county-level medical community information platform was implemented in 200+ counties, the education campus safety platform covered 8,437 schools, the vocational education comprehensive



management service platform expanded to over 287 vocational education clients, and smart agriculture and related products covered 589 districts and counties. The Company deeply engaged in the digital government sector, participated in the government digitalised transformation and construction of 31 provinces, over 250 cities, and more than 1,000 districts and counties. Through the "e-Surfing Governance" city intelligent hub platform, a new foundation for smart cities with unified standards and open interfaces was created, providing government applications such as "access to services via a single website, management via a single website, collaboration via a single website". The integrated service platform for public demands consolidated public service channels, enabling intelligent analysis and precise handling and tracking of public demands. It already provided intelligent operation foundations for various government service hotlines in over 220 cities. In 2024, the Company's Industrial Digitalisation business achieved sound development, with revenue reaching RMB146.6 billion, representing an increase of 5.5% year-on-year; the proportion of Industrial Digitalisation revenue increased to 30.4%, up by 0.5p.p. over the same period last year. **Continuously promoting the high-quality development of international business.** The Company accelerated the high-quality development of international business, expedited the global deployment of cloud and network resources, and promoted the integration of international and domestic business processes. It actively expanded in key overseas markets, with regions such as Southeast Asia, the Middle East and Africa becoming important growth poles for its international business. Its strategic emerging businesses such as cloud, quantum, satellite, Internet of Vehicles and Internet of Video Things made breakthroughs overseas. These all contributed to an international business revenue of RMB16.9 billion for the year, representing a year-on-year growth of 15.4%.

## 6. FINANCIAL REVIEW

In 2024, seizing the strategic opportunities brought by the new round of sci-tech revolution and industrial transformation, the Company implemented the new development principles completely, accurately and comprehensively, and continued to deeply implement its Cloudification and Digital Transformation strategy. The Company accelerated its construction as a service-oriented, technology-oriented, and secured enterprise, further enhanced its core functions and core competitiveness, maintained a continued growth in operating performance, and attained new results in corporate high-quality development. In 2024, operating revenues were RMB529,417 million, representing an increase of 3.1% from year 2023. Service revenues<sup>23</sup> were RMB482,033 million, representing an increase of 3.7% from year 2023. Operating expenses were RMB489,614 million, representing an increase of 2.8% from year 2023. The profitability of the Company continued to improve. Profit attributable to equity holders of the Company was RMB33,012 million, representing an increase of 8.4% from year 2023. Basic earnings per share were RMB0.36. EBITDA<sup>24</sup> amounted to RMB140,847 million, representing an increase of 2.9% from year 2023. EBITDA margin<sup>25</sup> was 29.2%.

### Operating Revenues

In 2024, the Company adhered to customer-oriented principles, actively seizing new consumption trends driven by digital technology. By deeply empowering product and service innovation and upgrades through strategic emerging elements such as AI, the Company constantly strengthened the supply of high-quality products and services. The value of fundamental businesses steadily increased, Industrial Digitalisation business achieved sound growth, and the revenue structure was continuously optimised. In 2024, operating revenues were RMB529,417 million, representing an increase of 3.1% from year 2023. Service revenues were RMB482,033 million, representing an increase of 3.7% from year 2023.

<sup>23</sup> Service revenues are calculated based on operating revenues minus sales of mobile terminals, sales of wireline equipment, and other non-service revenues

<sup>24</sup> EBITDA is calculated based on operating revenues minus operating expenses plus depreciation and amortisation. Although EBITDA has been widely applied in the global telecommunications industry as a benchmark to reflect operating performance, debt raising ability and liquidity, it is not regarded as a measure of operating performance and liquidity under the IFRS Accounting Standards. It also does not represent net cash from operating activities. In addition, our EBITDA may not be comparable to similar indicators provided by other companies

<sup>25</sup> EBITDA margin is calculated based on EBITDA divided by service revenues

The following table sets forth a breakdown of the operating revenues for year 2024 and 2023, together with their respective rates of change:

(RMB million, except percentage data)	For the year ended 31 December		
	2024	2023	Rates of change
Service revenues	482,033	464,965	3.7%
Of which: Mobile communications service revenues	202,524	195,660	3.5%
Wireline and Smart Family service revenues	125,680	123,063	2.1%
Industrial Digitalisation service revenues	146,588	138,890	5.5%
Other service revenues	7,241	7,352	-1.5%
Revenue from sales of goods and others	47,384	48,586	-2.5%
Total operating revenues	529,417	513,551	3.1%

### Mobile communications service revenues

In 2024, the Company continued to advance 5G network upgrades, increased 5G network coverage in key scenarios, and persistently promoted the intelligent upgrade of 5G applications, resulting in a steady enhancement of mobile subscribers scale and value. In 2024, mobile communications service revenues were RMB202,524 million, representing an increase of 3.5% over last year and accounting for 38.3% of operating revenues.

### Wireline and Smart Family service revenues

In 2024, the Company promoted the upgrade of household broadband to Gigabit and FTTR, continuously optimising household networking quality through AI empowerment, and persistently advancing the intelligent upgrade of Smart Family applications. The value contribution from Smart Family service continued to increase. In 2024, Wireline and Smart Family service revenues were RMB125,680 million, representing an increase of 2.1% over last year and accounting for 23.7% of operating revenues.

### Industrial Digitalisation service revenues

In 2024, the Company proactively seized opportunities arising from network-based, digitalised, and intelligent transformation and development of the economy and society, accelerated the deep integration of sci-tech innovation and industrial innovation, and expedited the creation of a new integrated service model of "computing power + platform + data + model + application", driving robust growth in Industrial Digitalisation business. In 2024, revenue from Industrial Digitalisation business reached RMB146,588 million, representing an increase of 5.5% over last year and accounting for 27.7% of operating revenues.

### Other service revenues

In 2024, revenues from other services amounted to RMB7,241 million, representing a decrease of 1.5% from year 2023.

### Revenue from sales of goods and others

In 2024, revenue from sales of goods and others amounted to RMB47,384 million, representing a decrease of 2.5% from year 2023, mainly due to the decline in the sales volume of mobile terminals.

## Operating Expenses

The Company continued to accelerate the scale expansion of its strategic emerging businesses, increasing investment in key fields such as sci-tech innovation, 5G and Industrial Digitalisation. At the same time, deepening AI empowerment in cost reduction and efficiency enhancement, the Company continuously increased efficiency of resources utilisation to support corporate high-

quality development and long-term value creation. In 2024, operating expenses were RMB489,614 million, representing an increase of 2.8% from year 2023. Operating expenses accounted for 92.5% of operating revenues.

The following table sets forth a breakdown of the operating expenses in 2024 and 2023 and their respective rates of change:

(RMB million, except percentage data)	For the year ended 31 December		
	2024	2023	Rates of change
Depreciation and amortisation	101,044	99,702	1.3%
Network operations and support	165,598	160,411	3.2%
Selling, general and administrative	66,663	66,804	-0.2%
Personnel expenses	98,279	92,805	5.9%
Other operating expenses	58,030	56,701	2.3%
Total operating expenses	489,614	476,423	2.8%

### Depreciation and amortisation

In 2024, the Company actively maintained a prudent investment strategy, continuously enhanced investment efficiency and implemented precise measures by category, while further deepened 5G co-building and co-sharing as well as 4G network co-sharing. Depreciation and amortisation amounted to RMB101,044 million, representing an increase of 1.3% from year 2023 and accounting for 19.1% of operating revenues.

### Network operations and support

In 2024, the Company further enhanced its network quality and capabilities to accelerate the expansion of strategic emerging businesses. The Company appropriately increased investment in the building of capabilities. Meanwhile, leveraging AI empowerment, the Company strengthened accurate management of costs, optimised cost structure and further increased resource utilisation efficiency. Network operations and support expenses amounted to RMB165,598 million, representing an increase of 3.2% from year 2023 and accounting for 31.3% of operating revenues.

### Selling, general and administrative

In 2024, the Company maintained necessary input of marketing resources to expedite the scale development with value. At the same time, the Company leveraged AI and big data technologies to drive marketing digitalisation and enhanced marketing efficiency. Selling, general and administrative expenses amounted to RMB66,663 million, representing a decrease of 0.2% from year 2023 and accounting for 12.6% of operating revenues. Of which, selling expenses were RMB50,161 million, representing a decrease of 2.0% from year 2023.

### Personnel expenses

Firmly seizing the period of opportunities arising from the development of digital economy, the Company intensified the efforts to attract sci-tech and innovative talents, built a high-quality R&D team, and increased incentives for high-performance teams, key business units, and frontline employees. Investments in personnel expenses were in line with the direction of building the Company as a sci-tech company. In 2024, personnel expenses

amounted to RMB98,279 million, representing an increase of 5.9% from year 2023 and accounting for 18.6% of operating revenues. For details regarding the number of employees, remuneration policy and training programs, please refer to the 2024 Sustainability Report (ESG Report).

### Other operating expenses

In 2024, other operating expenses amounted to RMB58,030 million, representing an increase of 2.3% from year 2023 and accounting for 11.0% of operating revenues. The increase was mainly due to further acceleration of international business development by the Company, leading to an increase in interconnection settlement charges.

### Net finance costs

In 2024, net finance costs amounted to RMB228 million, representing a decrease of RMB104 million from year 2023. The decrease was mainly because of the decrease in the interest expense on the Company's lease liabilities.

## Profitability Level

### Income taxes

The Company's statutory income tax rate is 25.0%. In 2024, income tax expenses were RMB9,197 million while the effective tax rate was 21.8%, representing a decrease of 0.6 percentage point from last year. The reason for the effective tax rate to be lower than the statutory tax rate was because income from investment in the associate company, China Tower Corporation Limited ("China Tower"), was not subject to tax during the period of the investment held, the application of preferential policies such as additional tax deduction from research and development expenses, and some subsidiaries and some branches located in the western region of China enjoyed low tax rates.

## Profit attributable to equity holders of the Company

The Company firmly seized the strategic opportunities arising from the booming digital economy, adhered to leading industrial innovation through sci-tech innovation, accelerated the development of new quality productive forces, and promoted the scale expansion of strategic emerging businesses. The resource utilisation and operating efficiency of the Company continued to increase while its profitability further strengthened. In 2024, the profit attributable to equity holders of the Company was RMB33,012 million, representing an increase of 8.4% from year 2023.

## Capital Expenditure And Cash Flows

### Capital expenditure

In 2024, the Company actively maintained a prudent investment strategy, continuously enhanced investment efficiency, and accelerated the enhancement and upgrade of new digital information infrastructure. The Company continuously optimised the layout of cloud-intelligent integrated computing power infrastructure and consolidated the key foundation for high-quality development. At the same time, the Company further deepened 5G co-building and co-sharing as well as 4G network co-sharing. Capital expenditure for the year was RMB93,513 million, representing a decrease of 5.4% from year 2023.

### Cash flows

In 2024, the net increase in cash and cash equivalents was RMB1,072 million.

The following table sets forth the cash flow position in 2024 and 2023:

For the year ended 31 December			
(RMB million, except percentage data)	2024	2023	Rates of change
Net cash flow from operating activities	145,049	137,508	5.5%
Net cash used in investing activities	(103,432)	(95,492)	8.3%
Net cash used in financing activities	(40,545)	(33,477)	21.1%
Net increase in cash and cash equivalents	1,072	8,539	(87.4%)

In 2024, the net cash inflow from operating activities was RMB145,049 million, representing an increase of 5.5% year-on-year, with the overall operating cash flow remaining stable.

In 2024, the net cash outflow in investing activities was RMB103,432 million, representing an increase of 8.3% year-on-year, mainly because the Company optimised the deposit structure, and the large denomination certificates of deposit and time deposits increased.

In 2024, the net cash outflow in financing activities was RMB40,545 million, representing an increase of 21.1% year-on-year, mainly due to the decrease in deposits absorbed by the affiliated finance company over last year.

### Working Capital

The Company consistently upheld stable and prudent financial principles and stringent fund management policies. At the end of 2024, the working capital (total current assets minus total current liabilities) deficit was RMB137,252 million, representing an increase in deficit of RMB1,679

million compared to the end of 2023. As at 31 December 2024, the unutilised credit facilities were RMB196,413 million (2023: RMB205,452 million). Given the stable net cash inflow from operating activities and sound credit record, the Company has sufficient working capital to satisfy operational needs. As at the end of 2024, cash and cash equivalents amounted to RMB82,207 million, among which cash and cash equivalents denominated in Renminbi accounted for 92.6% (2023: 93.6%).

### Assets and Liabilities

In 2024, the Company continued to maintain a solid financial position. At the end of 2024, the total assets increased by 3.7% from RMB835,814 million as at the end of 2023 to RMB866,625 million. The total liabilities increased from RMB388,647 million at the end of 2023 to RMB410,073 million, representing an increase of 5.5%. The debt-to-asset ratio was 47.3% at the end of 2024.

### Indebtedness

The indebtedness analysis as at the end of 2024 and 2023 is as follows:

(RMB million)	As at 31 December	
	2024	2023
Short-term debts	2,835	2,867
Current portion of long-term debts	1,238	1,133
Long-term debts	7,459	5,142
Total indebtedness	11,532	9,142

As at the end of 2024, the total indebtedness<sup>26</sup> was RMB11,532 million, representing an increase of RMB2,390 million from the end of 2023, which was mainly due to the increase in preferential rate loans for the technology-based subsidiaries. Of the total indebtedness, loans denominated in

Renminbi, US Dollars and Euro accounted for 98.1% (2023: 97.3%), 1.3% (2023: 1.8%) and 0.6% (2023: 0.9%), respectively. 66.0% (2023: 93.2%) of the indebtedness were loans with fixed interest rates while the remaining portion of the indebtedness represented loans with floating interest rates.

<sup>26</sup> Total indebtedness refers to interest-bearing debts excluding lease liabilities



As at 31 December 2024, neither the Company nor any of its subsidiaries pledged any assets as collateral for debt (2023: Nil).

Most of the revenues received and expenses paid in the course of the Company's business were denominated in Renminbi, therefore there were no significant risk exposures arising from foreign exchange fluctuations.

## Contractual Obligations

Contractual obligations as at 31 December 2024 are as follows:

(RMB million)	Total	Within 1 year	Between 1 to 2 years	Between 2 to 5 years	Thereafter
Short-term debts	2,869	2,869	–	–	–
Long-term debts	9,602	1,402	1,568	5,343	1,289
Lease liabilities	52,476	15,614	14,451	19,092	3,319
Capital commitments	20,226	20,226	–	–	–
Total contractual obligations	85,173	40,111	16,019	24,435	4,608

*Note: Amounts of short-term debts, long-term debts and lease liabilities include recognised and unrecognised interest payable, and the amounts shown above were not discounted.*

## 7. DISCUSSION AND ANALYSIS ON THE FUTURE DEVELOPMENT OF THE COMPANY

### 1. INDUSTRY LANDSCAPE AND TREND

At present, development of the information and communications industry faces new strategic opportunities. The industry should proactively and accurately analyse and assess the situation, actively respond to changes, seize opportunities, and open up new prospects.

**Firstly**, the economic foundation of China is stable, with multiple advantages, strong resilience, and great potential. The long-term favourable supporting conditions and fundamental trends remain unchanged, and the continuous strengthening of macro policies introduces a new momentum for development. In 2024, the Central Economic Work Conference deployed greater efforts to support "Two Focuses" projects, intensify and expand the implementation of "Two Upgrades" policies, and

include 5G mobile phones and other 3C products in the scope of trade-in programs. It also deeply carried out the "Artificial Intelligence+" initiative to promote the deep integration of artificial intelligence and the real economy. The state has intensively issued documents and systematically deployed the promotion of new urban infrastructure construction to build resilient cities and develop and utilise public data resources. The Ministry of Industry and Information Technology and other ministries vigorously promote the coordinated development of new information infrastructure and deploy the "Raising the Sail" action for large-scale 5G applications. A series of incremental and stock policies are superimposed to solidly promote the economy towards an upward structure and maintain a positive development trend.

**Secondly**, cutting-edge technologies such as artificial intelligence and quantum technology are emerging in concentration, triggering chain transformations and profoundly impacting global sci-tech innovation, industrial structure adjustment, and economic and social development. Artificial intelligence is a strategic technology leading the new round of sci-tech revolution and industrial

transformation, iterating and innovating at an unprecedented speed, bringing disruptive and reshaping impacts. For example, through underlying technology optimisation, DeepSeek has broken through the limitations of limited computing resources, achieving higher performance and lower costs, leading open-source initiatives and causing a sensation globally. This will further promote the enhancement of large models across the industry and the popularisation of AI applications. Quantum technology is a major disruptive technological innovation that impacts and restructures traditional technology systems. Currently, quantum technology is at a critical juncture of rapid technological advancement, gradual application maturity, and intensified international competition. Recently, Google launched a new quantum chip capable of completing a standard benchmark calculation within 5 minutes, whereas a supercomputer would take up to  $10^{25}$  years. Germany launched the Qube satellite to conduct space QKD tests, and the European Space Agency initiated a quantum-secure satellite data link project, among others.

**Thirdly**, the waves of digitalised, network-based, intelligent, and green transformation are approaching, making it more urgent to maintain the safety baseline. The potential and space for the transformation and development needs of the economy and society are enormous. First, the digital transformation of the economy and society continues to deepen. AI empowers the accelerated development of new industrialisation, with industry models rapidly implemented in sectors such as finance, industry, and healthcare. AI drives the coordinated upgrade of networks, terminals, and applications, creating new consumption scenarios with significant potential in smart healthcare, smart elderly care, and digital education. The construction of digital governments, smart cities, and smart communities is also accelerating. Secondly, there is a comprehensive green transformation of economic and social development. Synergistic development of digitalisation and greening will promote the transformation and upgrading of energy resources, industrial structure, and consumption structure. Carbon footprint labels have become key certifications for products. The explosive growth of intelligent computing scale has a significant impact on the energy supply system, urgently requiring the promotion of innovative development in the

integration of computing power with electricity, communication, and energy. Finally, the demand for security as a baseline is becoming more pressing. On one hand, traditional cyber-attack activities continue to escalate, showing trends of high organisation, clear attack targets, increased attack frequency, and enhanced concealment. On the other hand, new industries, new business types, and new models bring opportunities as well as new security challenges.

Facing new changes in the situation and new task requirements, the Company will accurately grasp its historical position, firmly seize new strategic opportunities for development, continue to deeply implement the Cloudification and Digital Transformation strategy, accelerate the construction of a world-class enterprise, and continuously create greater value for shareholders.

## 2. DEVELOPMENT STRATEGY OF THE COMPANY

China Telecom firmly fulfils its responsibility of building Cyberpower and Digital China, and safeguarding network and information security, anchoring the goal and vision of creating a service-oriented, technology-oriented, and secured enterprise. By fully and deeply implementing its Cloudification and Digital Transformation strategy, it insists on being customer-oriented, strengthens the core capability of sci-tech innovation, actively promotes the construction of new digital information infrastructure, and builds a platform that empowers the economic and social digitalised transformation. It provides customers with intelligent, convenient, green, secure, and excellent quality digital information services, continuously enhancing corporate value, customer value, and employee value, accelerating the construction of a world-class enterprise.

## 3. BUSINESS PLAN

In 2025, the Company will continue to actively explore the development directions of the new economy and new technologies, and deeply implement its Cloudification and Digital Transformation strategy. **Continuously strengthening high-quality sci-tech innovation**, the Company will focus on four major technological

directions and seven major strategic emerging businesses, accelerate the promotion and leadership of industrial innovation and development, and effectively transform the layout advantages in strategic emerging fields such as artificial intelligence, cloud, security, and quantum into differentiated advantages in business development. **Continuously strengthening the supply of high-quality products and services**, the Company will accelerate the advancement of connection upgrades, terminal upgrades, application upgrades, and platform upgrades, and promote the innovative development of fundamental businesses. It will expedite the expansion of the digital economy, digital society, and digital government incremental space, and drive the rapid development of industrial digitalised services. **Continuously enhancing the high-quality customer service experience**, the Company will adhere to a customer-centric approach, accelerate the improvement of digital and intelligent application and operation management levels, better meet customers' diverse and personalised needs, and promote the achievement of new and greater success in high-quality corporate development.

## 4. POTENTIAL RISKS

### Risks of adapting to economic and policy environment

At present, the adverse impacts brought by changes in the external environment are deepening, and China's economic operation still faces many difficulties and challenges, but the supporting conditions and fundamental trend of long-term improvement remain unchanged. The Company's internal Cloudification and Digital Transformation and structural adjustments need to be further deepened, and the foundation for promoting the transformation of development mode, promoting the effective enhancement of quality and the reasonable growth of quantity needs to be further consolidated. The Company will proactively adapt to market, technology and business development trends, strengthen sci-tech innovation, deepen reform and opening up, focus on enhancing intrinsic motivation for high-quality development, continuously shape new momentum and new advantages for development, and accelerate corporate transformation to become a service-oriented, technology-oriented and secured enterprise.

### Risks relating to sci-tech innovation

The new round of sci-tech revolution and industrial transformation has developed in depth, spawning a large number of new scenes, new business forms and new models. Large models have shown an explosive growth trend. Artificial intelligence, computing power service and cloud service have become the main development directions, and the value of data elements has been released rapidly. The Company's sci-tech innovation and proprietary R&D and control capabilities of products need to be continuously improved. The Company will continue to strive for breakthroughs in key core technologies, strengthen original and leading sci-tech breakthroughs, further increase the deployment of high-level sci-tech innovation platforms around strategic emerging businesses and future industries, enhance R&D efficiency, strengthen the transformation and application of innovative achievements, implement the project of strengthening the enterprise with talents, and create a talent centre and innovation highland.

### Network and data security risks

The network and data security problems are showing characteristics of complexity and diversity. While the threshold for the occurrence of cyber-attacks has greatly lowered, the scale of the attacks have increased significantly. The security risks brought by new technologies and new scenes increased, and the dynamic characteristics of hybrid multi-cloud environments make security monitoring more complex. The use of data in compliance with laws and regulations and the prevention of data leakage face new challenges. The Company's network and data security system needs to be further improved, and the capabilities to maintain network and data security needs to be continuously fortified. The Company will further intensify the construction of the network and data security system, enhance the network security protection capabilities, strengthen the risk prevention of extreme scenes, and improve the independent and self-control capability of core network technologies. The Company will further deepen the protection of data security and users' personal information, improve the building of organisation and capability of anti-fraud governance, and effectively safeguard the security of data and personal information.

### Risks from strategic emerging businesses and future industries

There are many uncertainties in the development of strategic emerging businesses and future industries. The competition in the digital service market has become more diversified, and the competition in business areas such as large models and intelligent computing cloud is fierce. The R&D and application capabilities of the Company's emerging businesses need to be further improved. The Company will gain further insight into customer needs, further strengthen ecological cooperation, increase investment in R&D, step up the creation of scene-based solutions, intensify the promotion of differentiated and standardised products and services, and promote the rapid development of strategic emerging and future industry emerging businesses.

### Operational risks of international business

At present, factors such as the intertwined changes in the world, changes in the policy environment of the countries/regions where the Company's business and investments are located have led to increased uncertainties in international business expansion. The Company still has certain deficiencies in terms of overseas product services, government and enterprise product development and operation capabilities, and sales channel expansion. The Company will closely track changes in the international situation, pay attention to changes in policies and rules of relevant countries/regions, and actively use the rule of law and rules to safeguard the legitimate rights and interests of the Company. The Company will strengthen the building of overseas compliance management and risk prevention systems, and conduct risk assessment and regular tracking and monitoring of international business operations to enhance risk response capabilities.

## 8. OTHER DISCLOSURES

### 1. Principal Business

The principal business of the Company and the Group is digital information services including mobile communications, wireline communications, satellite communications, Internet access, cloud computing and computing power, Big Data, AI, quantum, ICT integration, etc.

### 2. Dividend Policy

The basic principles of the Company's profit distribution policy are:

- (1) The Company attaches great importance to reasonable investment returns to investors, and the Company's profit distribution policy will take into account the overall interests of all shareholders, the Company's long-term interests and the Company's sustainable development;
- (2) Under the premise that the Company's profit distribution does not exceed the cumulative distributable profit and that the Company takes into account the continuous profits, meets regulatory requirements, operates regularly and develops in the long term, the Company will give priority to cash distribution of dividends.

The Board is responsible for formulating the dividend distribution plan and will execute the relevant approval procedures in accordance with relevant laws, rules, regulations and articles of association of the Company (the "Articles of Association") before proceeding with the distribution. In the future, the Company will strive for profitability enhancement and at the same time continue to deliver favourable dividend return for the shareholders. Details of the dividend policy of the Company are set out in the "Corporate Governance Report" of this annual report.

### 3. Dividends

The Board of Directors proposes a final dividend of RMB0.0927 per share (pre-tax) based on total number of issued share capital of the Company at the record date for the implementation of the dividend distribution. Cash dividend to be distributed amounts to an aggregate amount of approximately RMB8,483 million calculated based on 91,507,138,699 shares, being the total number of issued share capital of the Company as at 31 December 2024. Together with the 2024 interim dividend of RMB0.1671 per share (pre-tax) which has been distributed, the full year dividend of the year 2024 amounts to RMB0.2598 per share (pre-tax) in an aggregate amount of approximately RMB23,774 million which represents 72% of the profit attributable to equity holders of the Company for the year 2024. In case of any change in the total number of issued share capital of the Company before the record date for the implementation of the dividend distribution, the total distribution amount will remain unchanged, and the distribution amount per share will be adjusted accordingly. The dividend proposal will be submitted for consideration at the Annual General Meeting to be held on Wednesday, 21 May 2025 (the "2024 AGM"). Dividends will be denominated and declared in Renminbi. Details of the profit distribution of the Company for 2024 are set out in the "Corporate Governance Report" of this annual report.

Dividends for holders of A Shares and the investors of the Shanghai Stock Exchange and Shenzhen Stock Exchange (including enterprises and individuals) investing in the H shares of the Company listed on the Hong Kong Stock Exchange (the "Southbound Trading Link") (the "Southbound Investors") will be

paid in Renminbi, whereas dividends for H share shareholders other than Southbound Investors will be paid in Hong Kong dollars. The relevant exchange rate will be the average median rate of Renminbi to Hong Kong dollars as announced by the People's Bank of China for the week prior to the date of declaration of dividends at the 2024 AGM. The proposed final dividends are expected to be paid on or before 18 July 2025 upon approval at the 2024 AGM.

Pursuant to the "Enterprise Income Tax Law of the People's Republic of China", the "Implementation Rules of the Enterprise Income Tax Law of the People's Republic of China" and the "Circular of the State Taxation Administration on Issues Relating to the Withholding of Enterprise Income Tax by PRC Resident Enterprises on Dividends Paid to Overseas Non-PRC Resident Enterprise Shareholders of H Shares" (Guo Shui Han [2008] No. 897), the Company shall be obliged to withhold and pay 10% enterprise income tax when it distributes the proposed 2024 final dividends to non-resident enterprise shareholders of overseas H shares (including HKSCC Nominees Limited, other corporate nominees or trustees, and other entities or organisations) whose names appear on the Company's H share register of members on Tuesday, 10 June 2025.

Pursuant to the "Notice of the State Taxation Administration on Issues Concerning Taxation and Administration of Individual Income Tax After the Repeal of Guo Shui Fa [1993] No. 045 (Guo Shui Han [2011] No. 348)", if the individual H share shareholders who are Hong Kong or Macau residents and those whose country of domicile is a country which has entered into a tax treaty with PRC stipulating a dividend tax rate of 10%, the Company will finally withhold and pay individual income tax at the rate of 10% on behalf of the individual H share shareholders. If the individual H share shareholders whose country of domicile is a country which has entered into a tax treaty with PRC stipulating a dividend tax rate of less than 10%, the Company will finally withhold and pay individual income tax at the rate of 10% on behalf of the individual H share shareholders. If the individual H share shareholders whose country of domicile is a country which has entered into a tax treaty with PRC stipulating a dividend tax rate of more than 10% but less than 20%, the Company will withhold



and pay individual income tax at the actual tax rate stipulated in the relevant tax treaty. If the individual H share shareholders whose country of domicile is a country which has entered into a tax treaty with PRC stipulating a dividend tax rate of 20%, or a country which has not entered into any tax treaties with PRC, or under any other circumstances, the Company will withhold and pay individual income tax at the rate of 20% on behalf of the individual H share shareholders. If those shareholders need to request a refund of tax overpaid from the PRC tax authorities on his own or through an agent or the Company in accordance with the relevant requirements of the *"Announcement of the State Taxation Administration on Promulgating the Administrative Measures for Non-resident Taxpayers for Treatments under Tax Treaties"* (Announcement [2019] No. 35 of the State Taxation Administration), they shall submit the *"Information Report on Non-resident Taxpayers for Treatments under Tax Treaties"* (Announcement [2019] No. 35 of the State Taxation Administration), and collect and file such information.

The Company will determine the country of domicile of the individual H share shareholders based on the registered address as recorded in the H share register of members of the Company on Tuesday, 10 June 2025 (the "Registered Address"). If the country of domicile of an individual H share shareholder is not the same as the Registered Address or if the individual H share shareholder would like to apply for a refund of the additional amount of tax finally withheld and paid, the individual H share shareholder shall notify and provide relevant supporting documents to the Company on or before Wednesday, 4 June 2025. Upon examination of the supporting documents by the relevant tax authorities, the Company will follow the guidance given by the tax authorities to implement relevant tax withholding and payment provisions and arrangements. Individual H share shareholders may either personally attend or appoint a representative to attend to the procedures in accordance with the requirements under the tax treaties notice if they do not provide the relevant supporting documents to the Company within the time period stated above.

For Southbound Investors (including enterprises and individuals), the Shanghai branch of China Securities Depository and Clearing Corporation Limited and the Shenzhen branch of China Securities Depository and Clearing Corporation Limited, as the nominees of the investors of the Southbound Trading Link, will receive all dividends distributed by the Company and will distribute the dividends to the relevant investors under the Southbound Trading Link through its depository and clearing system. According to the relevant provisions under the "Notice on Taxation Policies for Shanghai-Hong Kong Stock Connect Pilot Programme (Cai Shui [2014] No. 81)" and "Notice on Taxation Policies for Shenzhen-Hong Kong Stock Connect Pilot Programme (Cai Shui [2016] No. 127)", the Company shall withhold and pay individual income tax at the rate of 20% with respect to dividends received by the Mainland individual investors for investing in the H shares of the Company listed on the Hong Kong Stock Exchange through the Southbound Trading Link. In respect of the dividends received by Mainland securities investment funds investing in the H shares of the Company listed on Hong Kong Stock Exchange through the Southbound Trading Link, the tax levied shall be ascertained by reference to the rules applicable to individual investors. The Company is not required to withhold and pay income tax on dividends derived by the Mainland enterprise investors under the Southbound Trading Link, and such enterprises shall report the income and make tax payment by themselves. The record date for entitlement to the shareholders' rights and the relevant arrangements of dividend distribution for the Southbound Investors are the same as those for the Company's H share shareholders.

The Company assumes no responsibility and disclaims all liabilities whatsoever in relation to the tax status or tax treatment of the individual H share shareholders and for any claims arising from any delay in or inaccurate determination of the tax status or tax treatment of the individual H share shareholders or any disputes relating to the tax withholding and payment mechanism or arrangements.

## 4. Directors and Senior Management of the Company

The following table sets out certain information of the Directors and senior management of the Company:

Name	Age	Position in the Company	Date of Appointment
Ke Ruiwen	61	Executive Director, Chairman and Chief Executive Officer	30 May 2012*
Liu Guiqing	58	Executive Director and Executive Vice President	19 August 2019*
Tang Ke	50	Executive Director and Executive Vice President	22 March 2022*
Li Yinghui	54	Executive Director, Executive Vice President, Chief Financial Officer and Secretary of the Board	6 January 2023*
Liu Ying	51	Executive Vice President	25 March 2025**
Chen Shengguang	61	Non-Executive Director	23 May 2017*
Ng Kar Ling Johnny	64	Independent Non-Executive Director	6 January 2023*
Yeung Chi Wai, Jason	70	Independent Non-Executive Director	26 October 2018*
Chen Dongqi	68	Independent Non-Executive Director	6 January 2023*
Lyu Wei	68	Independent Non-Executive Director	23 May 2023*

\* Date of appointment as Director

\*\* Date of appointment as senior management

References are made to the announcements in relation to the changes of Directors and senior management published by the Company on the following dates:

Due to change in work arrangement, Mr. Xia Bing has resigned from his positions as an Executive Director and Executive Vice President of the Company with effect from 19 January 2024.

Due to his age, Mr. Shao Guanglu has retired from his positions as an Executive Director, the President and Chief Operating Officer of the Company with effect from 23 May 2024.

On 12 July 2024, Mr. Liang Baojun ("Mr. Liang") has been appointed as the President and Chief Operating Officer of the Company. The relevant appointment became effective from 12 July 2024 until the annual general meeting of the Company for the year 2025 to be held in year 2026. The appointment of Mr. Liang as an Executive Director

of the Company was approved at the extraordinary general meeting of the Company held on 21 August 2024 (the "2024 First EGM"). The relevant appointment became effective from 21 August 2024 until the annual general meeting of the Company for the year 2025 to be held in year 2026.

Due to change in work arrangement, Mr. Li Jun has resigned from his position as an Executive Director of the Company with effect from 22 January 2025.

Due to change in work arrangement, Mr. Liang has resigned from his positions as an Executive Director, the President and Chief Operating Officer of the Company with effect from 10 February 2025.

On 25 March 2025, Madam Liu Ying has been appointed as an Executive Vice President of the Company. The relevant appointment became effective from 25 March 2025 until the annual general meeting of the Company for the year 2025 to be held in year 2026.

## 5. Supervisors of the Company

The following table sets out certain information of the Supervisors of the Company:

Name	Age	Position in the Company	Date of Appointment*
Huang Xudan	56	Chairlady of the Supervisory Committee and Shareholder Representative Supervisor	21 August 2024
Luo Laifeng	52	Employee Representative Supervisor	21 August 2024
Guan Lixin	53	Employee Representative Supervisor	23 May 2023
Luo Zhendong	47	Shareholder Representative Supervisor	23 May 2023
Wang Yibing	59	Shareholder Representative Supervisor	22 March 2022

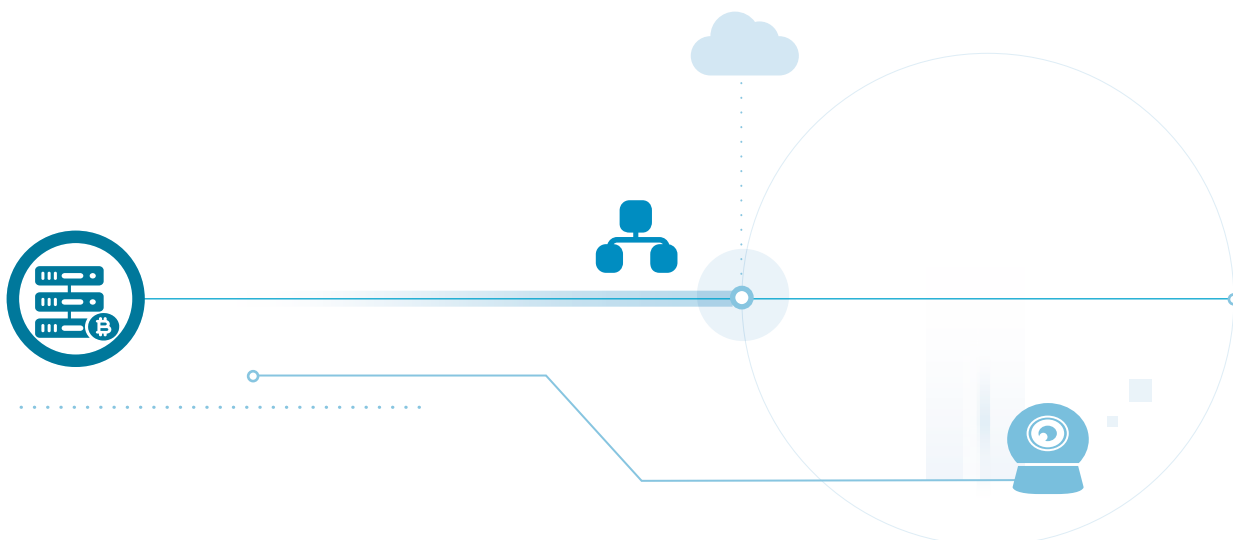
\* Date of appointment as Supervisor

The appointment of Madam Huang Xudan ("Madam Huang") as a Shareholder Representative Supervisor of the Company were approved at the 2024 First EGM. Meanwhile, Mr. Luo Laifeng has been elected as an Employee Representative Supervisor by the employee representatives of the Company democratically. Terms of office of the Supervisors commenced from 21 August 2024 until the annual general meeting of the Company for the year 2025 to be held in year 2026. Madam Huang has been elected as the Chairlady of the eighth session of the Supervisory Committee at a meeting of the Supervisory Committee held on 21 August 2024, with a term commencing from 21 August 2024 until the annual general meeting of the Company for the year 2025 to be held in year 2026. In addition, Madam Han Fang ("Madam Han") and Mr.

Zhang Jianbin ("Mr. Zhang") resigned from their positions as Supervisors due to changes in work arrangement. The resignation of Madam Han took effect on the date of election of the new Shareholder Representative Supervisor at the 2024 First EGM. The resignation of Mr. Zhang took effect on the date of election of the new Employee Representative Supervisor by the employee representatives of the Company democratically.

## 6. Share Capital

As at 31 December 2024, the total share capital of the Company was RMB91,507,138,699, divided into 91,507,138,699 shares at a nominal value of RMB1.00 per share (including 77,629,728,699 A Shares and 13,877,410,000 H Shares).



## 7. Material Interests and Short Positions In Shares and Underlying Shares of the Company

As at 31 December 2024, the interests or short position of persons who are entitled to exercise or control the exercise of 5% or more of the voting power at the shareholders' class meetings of the Company (excluding the Directors and Supervisors) in the shares and underlying shares of the Company as recorded in the register required to be maintained under Section 336 of the Securities and Futures Ordinance (the "SFO") are as follows:

Name of shareholder	Number of shares*	Class of share	Approximate percentage of the respective class of shares in issue	Approximate percentage of the total number of shares in issue	Capacity
China Telecommunications Corporation	58,240,172,066 (Long Position)	A Share	75.02%	63.65%	Beneficial owner
Guangdong Rising Holdings Group Co., Ltd.	5,614,082,653 <sup>#</sup> (Long Position)	A Share	7.23%	6.14%	Beneficial owner
CHINA CITIC FINANCIAL AMC INTERNATIONAL HOLDINGS LIMITED	1,217,572,000 (Long Position)	H Share	8.77%	1.33%	Beneficial owner
China CITIC Financial Asset Management Co., Ltd.	1,217,572,000 (Long Position)	H Share	8.77%	1.33%	Interest of controlled corporation

<sup>#</sup> As at 31 December 2024, the interest in the shares of the Company has been provided by such shareholder as security to a person other than a qualified lender, and the number of shares involved was 820,000,000.

<sup>\*</sup> The information disclosed above is based on the interests and short position as recorded in the register required to be maintained by the Company under Section 336 of the SFO. Pursuant to the relevant provisions of the SFO, shareholders only have to file a disclosure of interest on the occurrence of certain events — called "relevant events". Accordingly, the exact numbers of shares held by the above-mentioned shareholders as at 31 December 2024 may be different from those as disclosed above.

Save as disclosed above, as at 31 December 2024, in the register required to be maintained under Section 336 of the SFO, no other persons were recorded to hold any interests or short positions in the shares and underlying shares of the Company.

## 8. Directors' and Supervisors' Interests and Short Positions In Shares, Underlying Shares and Debentures

Save as disclosed below, as at 31 December 2024, none of the Directors and Supervisors of the Company had any interests or short positions in the shares, underlying shares or debentures of the Company or its associated corporations (as defined in Part XV of the SFO) as recorded in the register required to be maintained under Section 352 of the SFO or as otherwise notified to the Company and the Hong Kong Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix C3 of the Listing Rules.

Name	Position	Class of share	Number of Shares	Capacity	Shares held as approximate percentage of the total number of respective class of shares in issue	Shares held as approximate percentage of the total number of shares in issue
Chen Shengguang	Non-Executive Director	A Share	1,000	Beneficial owner	0.00%	0.00%
			(Long Position)			
			1,000	Interest of spouse	0.00%	0.00%
			(Long Position)			

During the year 2024, the Company has not granted its Directors or Supervisors, or their respective spouses or any of their respective minor child (natural or adopted) or on their behalf any rights to subscribe for the shares or debentures of the Company or any of its associated corporations and none of them has ever exercised any such right to subscribe for the shares or debentures.

## 9. Directors' and Supervisors' Interests In Transactions, Arrangements or Contracts

Reference is made to the announcement published by the Company on 11 March 2024. On 11 March 2024, China Telecom Quantum Information Technology Group Limited ("China Telecom Quantum Group"), a wholly-owned subsidiary of the Company, entered into the Conditional Share Subscription and Strategic Cooperation Agreement (the "Share Subscription Agreement") with Quantumctek Co., Ltd. ("Quantumctek"), planning to subscribe for non-public issued shares of Quantumctek with self-owned funds. Mr. Ke Ruiwen who serves as the Chairman of China Telecommunications, Mr. Shao Guanglu who served as a Director and the President of China Telecommunications, Mr. Liu Guiqing who serves as a Director of China Telecommunications, Mr. Tang Ke and Mr. Li Jun who serve as Vice Presidents

of China Telecommunications, and Mr. Li Yinghui who serves as the Chief Accountant of China Telecommunications therefore abstained from voting on the relevant board resolution in respect of transactions contemplated under the Share Subscription Agreement.

Reference is made to the announcement published by the Company on 15 November 2024. Pursuant to the offering application and review documents of Quantumctek, the number of shares issued to China Telecom Quantum Group was adjusted from 24,112,311 shares to 22,486,631 shares and the total amount of the offering was adjusted from approximately RMB1.903 billion to approximately RMB1.775 billion. On 15 November 2024, the Board considered and approved the resolution in relation to the adjusted number of new shares subscribed by China Telecom Quantum Group in the offering of Quantumctek. Mr. Ke Ruiwen who serves as the Chairman of China Telecommunications, Mr. Liang



Baojun who served as a Director and the President of China Telecommunications, Mr. Liu Guiqing who serves as a Director of China Telecommunications, Mr. Tang Ke and Mr. Li Jun who serve as Vice Presidents of China Telecommunications, and Mr. Li Yinghui who serves as the Chief Accountant of China Telecommunications therefore abstained from voting on the above board resolution.

Reference is made to the announcement published by the Company on 12 July 2024 and the circular published by the Company on 2 August 2024. On 12 July 2024, the Company and China Telecommunications entered into the Engineering Framework Agreement, the Ancillary Telecommunications Services Framework Agreement, the Interconnection Settlement Agreement, the Community Services Framework Agreement, the Centralised Services Agreement, the Property and Land Use Right Leasing Framework Agreement, the IT Services Framework Agreement, the Supplies Procurement Services Framework Agreement, the Internet Applications Channel Services Framework Agreement, the Lease Financing Framework Agreement, the Telecommunications Resources Leasing Agreement, the Trademark License Agreement and the Intellectual Property License Framework Agreement with a term from 1 January 2025 to 31 December 2027. On the same day, the Company and E-surfing Pay entered into the Payment and Digital Finance Related Services Framework Agreement with a term from 1 January 2025 to 31 December 2027. In addition, on 12 July 2024, financial services framework agreements were entered into between the Company and China Telecom Finance, China Telecom Finance and China Telecommunications, China Telecom Finance and CCS, China Telecom Finance and New Guomai Digital Culture Co., Ltd, China Telecom Finance and Beijing Global Safety Technology Co., Ltd, respectively. The respective terms of all these financial services framework agreements are effective from 1 January 2025 until 31 December 2027. Mr. Ke Ruiwen who serves as the Chairman of China Telecommunications, Mr. Liu Guiqing who serves as a Director of China Telecommunications, Mr. Tang Ke and Mr. Li Jun who serve as Vice Presidents of China Telecommunications and Mr. Li Yinghui who serves as the Chief Accountant of China

Telecommunications therefore abstained from voting on the relevant board resolutions in respect of the above agreements.

Save as disclosed above and the service agreements entered into between the Company and the Directors and Supervisors, for the year ended 31 December 2024, the Directors and Supervisors of the Company or their connected entities did not have any material interest, whether directly or indirectly, in any transactions, arrangements or contracts which was significant to the Company's business and which was entered into by the Company, its parent company or any of its subsidiaries or fellow subsidiaries.

## 10. Service Contracts

None of the Directors or Supervisors of the Company has entered into any service contract which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

## 11. Emoluments of the Directors and Supervisors

Please refer to note 34 of the audited consolidated financial statements for details of the emoluments of all Directors and Supervisors of the Company in 2024.

## 12. Employees and Emolument Policy

The details of the Group's emolument policy are set out in the "Corporate Governance Report" in this annual report. The details of share appreciation rights are set out in the "Corporate Governance Report" in this annual report and note 46 of the audited consolidated financial statements.

## 13. Purchase, Sale or Redemption of Listed Securities of the Company

In 2024, neither the Company nor any of its subsidiaries purchased, sold or redeemed any of the Company's listed securities (including sale of treasury shares). As of 31 December 2024, the Company did not hold any treasury shares.

## 14. Material Acquisitions and Disposals

Reference is made to the announcement published by the Company on 11 March 2024. On 11 March 2024, China Telecom Quantum Group, a wholly-owned subsidiary of the Company, entered into the Share Subscription Agreement with Quantumctek, planning to subscribe for non-public issued shares of Quantumctek with self-owned funds. Reference is made to the announcement published by the Company on 15 November 2024. Pursuant to the offering application and review documents of Quantumctek, the number of shares issued to China Telecom Quantum Group was adjusted from 24,112,311 shares to 22,486,631 shares and the total amount of the offering was adjusted from approximately RMB1.903 billion to approximately RMB1.775 billion. On 15 November 2024, the Board considered and approved the resolution in relation to the adjusted number of new shares subscribed by China Telecom Quantum Group in the offering of Quantumctek. Based on the adjusted number of shares subscribed, upon completion of the subscription, China Telecom Quantum Group holds approximately 21.86% of the issued shares of Quantumctek and will have the power to control the board of directors of Quantumctek. According to the applicable accounting principles, Quantumctek will become an indirect non-wholly owned subsidiary of the Company and the financial results of Quantumctek will be consolidated into the Group's consolidated financial statements.

Save as disclosed above, for the year ended 31 December 2024, the Company had no material acquisitions and disposals of subsidiaries, associates or joint ventures.

## 15. Public Float

As at the date of this Report of the Directors, based on the information that is publicly available to the Company and within the knowledge of the Directors, the Company has maintained the public float required under the Listing Rules and as agreed with the Hong Kong Stock Exchange.

## 16. Summary of Financial Information

Please refer to pages 248 to 250 of this annual report for a summary of the operating results, assets and liabilities of the Group for each of the years in the five-year period ended 31 December 2024.

## 17. Bank Loans and Other Borrowings

Please refer to note 20 of the audited consolidated financial statements for details of bank loans and other borrowings of the Group.

## 18. Charge On Assets

As at 31 December 2024, no fixed assets was pledged to banks as loan security (31 December 2023: Nil).

## 19. Capitalised Interest

Please refer to note 32 of the audited consolidated financial statements for details of the Group's capitalised interest for the year ended 31 December 2024.

## 20. Fixed Assets

Please refer to note 4 of the audited consolidated financial statements for movements in the fixed assets of the Group for the year ended 31 December 2024.

## 21. Reserves

Distributable reserves of the Company as at 31 December 2024 before deducting the proposed final dividends for 2024 amounted to RMB166,419 million.

Please refer to note 26 of the audited consolidated financial statements for details of the movements in the reserves of the Company and the Group for the year ended 31 December 2024.

## 22. Equity-Linked Agreements

The Company did not enter into any equity-linked agreement, nor did any equity-linked agreement exist for the year ended 31 December 2024.

## 23. Donations

For the year ended 31 December 2024, the Group made charitable and other donations with a total amount of RMB3.027 million.

## 24. Subsidiaries and Associates

Please refer to note 9 and note 10 of the audited consolidated financial statements for details of the Company's subsidiaries and the Group's associates as at 31 December 2024.

## 25. Permitted Indemnity

For the year ended 31 December 2024 and as at the date of approval of this report, the Company has arranged appropriate insurance coverage in respect of legal actions against the directors of the Group.

## 26. Changes In Equity

Please refer to the consolidated statement of changes in equity as contained in the audited consolidated financial statements of the year.

## 27. Retirement Benefits

Please refer to note 45 of the audited consolidated financial statements for details of the retirement benefits provided by the Group.

## 28. Pre-Emptive Rights

There are no provisions for pre-emptive rights in the Articles of Association requiring the Company to offer new shares to the existing shareholders in proportion to their shareholdings.

## 29. Major Customers and Suppliers

For the year ended 31 December 2024, revenue generated from the five largest customers of the Group accounted for an amount of less than 30% of the total operating revenues of the Group.

For the year ended 31 December 2024, purchases from the five largest suppliers of the Group accounted for an amount of less than 30% of the total annual purchases of the Group.

## 30. Competing Business

None of the Directors of the Company had any interest in any business which competes or may compete, either directly or indirectly, with the business of the Group.

### 31. Management Contracts

During the Reporting Period, the Company had not entered into any management contracts with respect to the entire or principal business of the Company.

### 32. Related Party Transactions

Details of the related party transactions of the Group ("Related Party Transactions") are set out in note 43 of the consolidated financial statements. Only the Related Party Transactions set out in note 43(a) of the consolidated financial statements constitute continuing connected transactions under Chapter 14A of the Listing Rules, the details of which (except for fully exempt continuing connected transactions) have been disclosed in "Significant Events" in this annual report. Other Related Party Transactions do not constitute connected transactions or continuing connected transactions under Chapter 14A of the Listing Rules.

### 33. Business Review

The details of the material development of the Group in 2024, a fair review of the business and a discussion and analysis of the Group's performance during the year and the material factors underlying its results and financial position, description of the principal risks and uncertainties faced by the Group and the outlook of the Group's business can be found throughout this annual report, particularly in this section. Particulars of important events affecting the Group that have occurred after 31 December 2024, if any, can also be found in the notes to the consolidated financial statements.

Description of the Group's key relationships with its employees, customers, suppliers and others that have a significant impact on the Company and on which the Company's success depends can be found throughout different parts of the annual report (including this section, "Corporate Governance Report", etc.), and are particularly detailed in the 2024 Sustainability Report (ESG Report) of the Company published on the websites of the Hong Kong Stock Exchange and the Company. In addition, more details regarding the financial key performance indicators and environmental policies, as well as compliance with relevant laws and regulations which have a significant impact on the Group, are also disclosed throughout this annual report (including this section, "Environmental and Social Responsibilities", "Corporate Governance Report", etc.) and the 2024 Sustainability Report (ESG Report) of the Company. Each of the above-mentioned relevant contents form an integral part of this Report of the Directors.

### 34. Compliance With the Corporate Governance Code

Please refer to the "Corporate Governance Report" for details of our compliance with the Corporate Governance Code.

### 35. Auditors

Reference is made to the announcements of the Company dated 30 July 2024 and 21 August 2024. In consideration of the Company's needs for audit services and in accordance with the relevant requirements for the selection and appointment of accounting firms by state-owned enterprises including the Administrative Measures for the Appointment of Accounting Firms by State-owned Enterprises and Listed Companies, after performing procedures for open selection and based on the results thereof, as recommended by the Audit Committee of the Company, the Board resolved to propose to the shareholders of the Company at the 2024 First EGM to approve, among other things, the appointments of KPMG and KPMG Huazhen LLP as the Company's external auditors for the year ended 31 December 2024 and to authorise the Board to fix the remuneration of the auditors. Shareholders of the Company have approved the resolution in relation to the change of external auditors of the Company for the year of 2024 at the 2024 First EGM. Accordingly, KPMG and KPMG Huazhen LLP have been appointed as the Company's external auditors for the year ended 31 December 2024. KPMG has audited the consolidated financial statements set out in this report, which have been prepared in accordance with IFRS Accounting Standards.

The Audit Committee and the Board of the Company have agreed on the re-appointment of KPMG and KPMG Huazhen LLP as the external auditors of the Company for the year of 2025 and would propose the re-appointment of KPMG and KPMG Huazhen LLP at the Annual General Meeting for the year of 2024 of the Company for consideration.

By Order of the Board

**Ke Ruiwen**

*Chairman and Chief Executive Officer*

Beijing, China  
25 March 2025

