



中国通信服务
CHINA COMSERVICE

China Communications Services
Corporation Limited

Stock code: 552

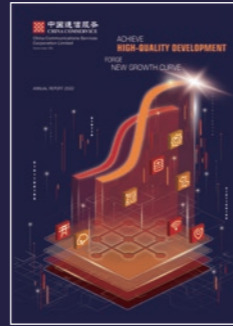
ACHIEVE
HIGH-QUALITY DEVELOPMENT

FORGE
NEW GROWTH CURVE

ANNUAL REPORT 2022



The theme of this cover is "Achieve High-quality Development, Forge New Growth Curve". The two curves imply that the Company aims to achieve stable growth in traditional businesses while focusing on building a new growth curve for digitalization businesses. In the context of the rapid development of the digital economy, the Company exploits the edge of "1 Positioning, 4 Roles", with a view to achieving high-quality development of the enterprise.



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Aim to become a **First-class Smart Service Innovative Enterprise**

Adhering to the positioning of

New Generation Integrated Smart Service Provider

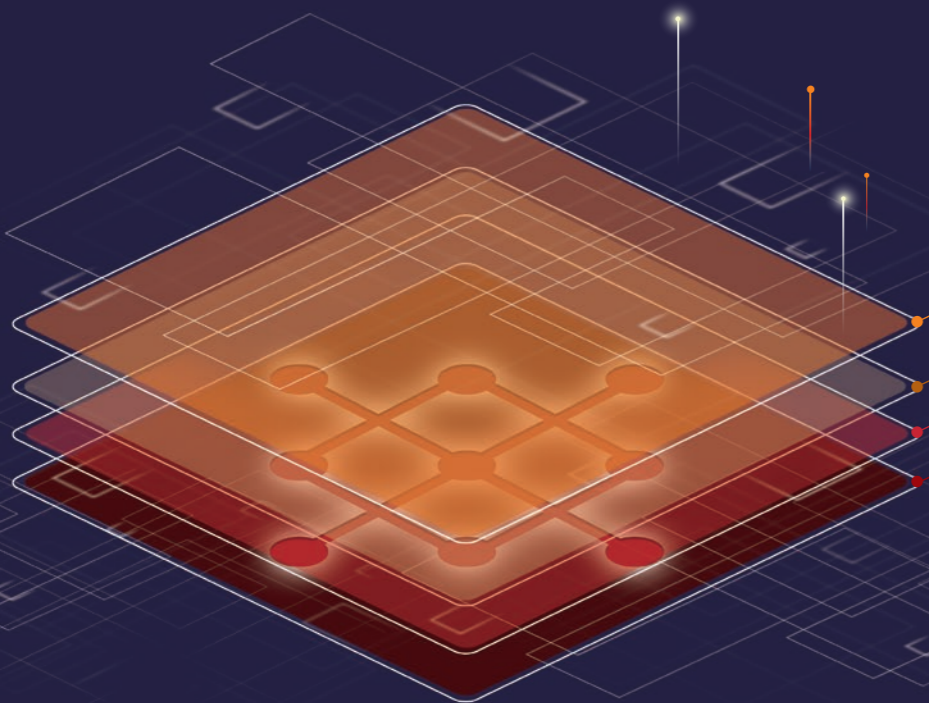
Provide Integrated Comprehensive Smart Solutions


The Main Force in Digital Infrastructure Construction


The Vanguard in Smart City Services


The Leading Enterprise in Industrial Digitalization Services


A Trusted Expert in Smart Operation

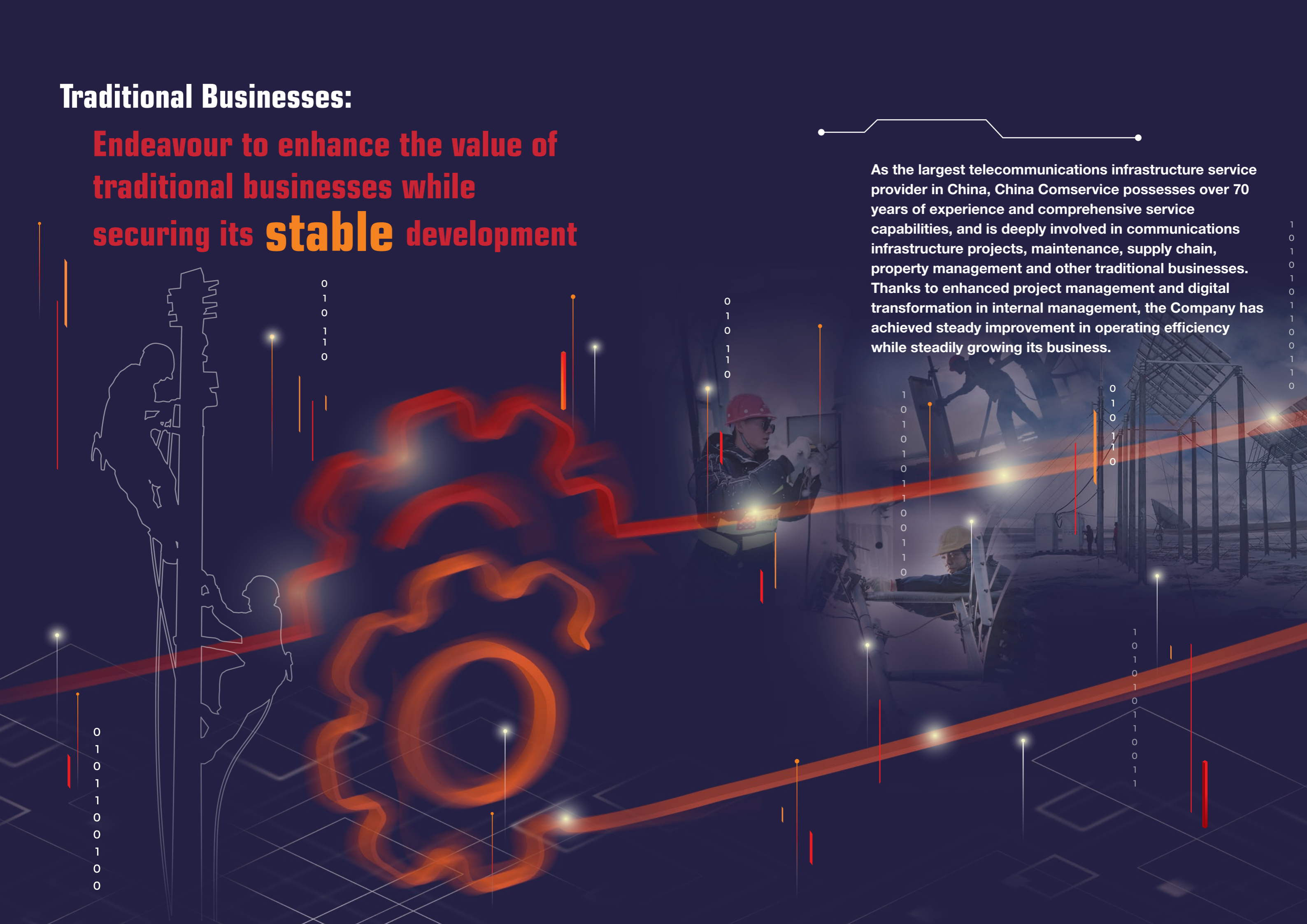


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Traditional Businesses:

Endeavour to enhance the value of traditional businesses while securing its **stable** development

As the largest telecommunications infrastructure service provider in China, China Comservice possesses over 70 years of experience and comprehensive service capabilities, and is deeply involved in communications infrastructure projects, maintenance, supply chain, property management and other traditional businesses. Thanks to enhanced project management and digital transformation in internal management, the Company has achieved steady improvement in operating efficiency while steadily growing its business.



Emerging Businesses:

Strive to achieve value
breakthrough by
proactive development

Focusing on strategic opportunities such as digital economy, industrial digitalization as well as “Dual Carbon”, the Company has focused on expanding in strategic emerging industries such as digital infrastructure, smart city, green and low-carbon as well as emergency management and security. Through improving its technological innovation capabilities and core competitiveness and leveraging high-value businesses as the lead, the Company has expedited the building of its second growth curve in a proactive manner.

Sustainable High-quality Development

In 2022, major indicators of operating results, efficiency and shareholders' return enhanced across the board

The Company has seized the opportunities of in-depth integration of digital economy and real economy, enhanced its core competitiveness and continued to promote high-quality development.

 Revenue growth
5.0%

 Net profit growth
6.4%

 Free cash flow growth
7.2%

 Dividend per share growth
12.0%

 Gross profit margin
11.4% Historic rebound from the bottom

 ROE
8.5% Stabilized and rebounded

The image features a dark blue background with a large, glowing orange-red curved band that sweeps across the frame. Scattered throughout are vertical lines of varying heights and colors, some ending in small glowing dots. Interspersed among these lines are vertical strings of binary code (0s and 1s) in white. The overall aesthetic is futuristic and digital.

MILESTONES

MILESTONES

2006 AUGUST

The Company was established, with primary service areas including Shanghai, Zhejiang Province, Fujian Province, Hubei Province, Guangdong Province and Hainan Province.

DECEMBER

The Company was listed on the Main Board of The Stock Exchange of Hong Kong Limited. Gross proceeds from the IPO was approximately HK\$3.3 billion.

2007 AUGUST

The Company completed the acquisition of the businesses of specialized telecommunications support services in 13 provinces (municipalities and autonomous regions) from China Telecommunications Corporation for a consideration of RMB4,630 million.

2008 APRIL

The Company completed the placement of 327 million new H Shares with net proceeds of approximately HK\$1,668 million.

MAY

The Company completed the acquisition of the 100% equity interests in China International Telecommunications Construction Corporation for a consideration of RMB505 million.

2009 MARCH

China Telecommunications Corporation completed the transfer of 506,880,000 and 236,300,000 domestic shares of the Company to China Mobile Communications Corporation and China United Network Communications Group Company Limited, respectively.

2012 FEBRUARY

The Company completed the rights issue. Dealing in the H rights shares commenced on The Stock Exchange of Hong Kong Limited on 10 February 2012. The rights issue raised gross proceeds of approximately RMB2,991 million (approximately HK\$3,677 million).

JUNE

The Company acquired the equity interests and assets in relation to several telecommunications infrastructure service companies in Ningxia and Xinjiang, etc. as well as 51% equity interests in Sino-British Submarine System Co., Ltd. for a total consideration of approximately RMB416 million.

2014 JULY

China Communications Facilities Services Corporation Limited (now renamed as China Tower Corporation Limited) indicated to the Company the relevant arrangements of preferential treatment and non-competition.

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MILESTONES

2015 JULY

The Company established a wholly-owned subsidiary, China Comservice Supply Chain Management Company Ltd.

2017 MAY

The Company established a wholly-owned subsidiary, Comservice Capital Holding Company Limited.

2018 MAY

The Company released the Smart Society Product Portfolio at China International Big Data Industry Expo and established “Smart Service Industrial Ecosystem Alliance” with business partners.

2019 MAY

The Company released the new position of “New Generation Integrated Smart Service Provider” during the China International Big Data Industry Expo.

DECEMBER

The Company’s domestic non-telecom operator customers became the largest customer group¹ for the first time.

2020 JANUARY TO FEBRUARY

The Company hastened to the frontline of combating the COVID-19 by completing the communication construction and support for Huoshenshan Hospital and Leishenshan Hospital in Wuhan, etc.

DECEMBER

The Company was awarded the title of “Advanced Group in Fighting against COVID-19 in the Industry and Information Technology System” by the Ministry of Industry and Information Technology.

The Company established the China Comservice General Research Institute.

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¹ Customers here are classified into four categories, including the domestic non-telecom operator customers, China Telecom, other domestic telecom operator customers and overseas customers.

MILESTONES

2021

JUNE

China Telecommunications Corporation, the controlling shareholder of the Company, proposed a share transfer of 166,000,000 domestic shares of the Company (representing 2.40% of the total issued share capital of the Company) to State Grid Information & Telecommunication Technology Group Co., Ltd.

The wholly-owned subsidiary of the Group, China Comservice Supply Chain Management Company Ltd. introduced four strategic investors including COSCO SHIPPING (Tianjin) Company Limited, Zhilian Shenzhen International Smart Logistics (Shenzhen) Co.,Ltd., Guoxin Shuangbai No. 1 (Hangzhou) Equity Investment Partnership (Limited Partnership) and Gongqingcheng Orient Securities Sucheng Investment Partnership (Limited Partnership), injecting a total of RMB900 million into it.

AUGUST

The Company ranked 4th in the “100 Most Competitive Software & IT Service Enterprises 2021” coordinated by China Federation of Electronics and Information Industry.

NOVEMBER

The share transfer procedures among China Telecommunications Corporation, the controlling shareholder of the Company, and State Grid Information & Telecommunication Technology Group Co., Ltd. was completed. State Grid Information & Telecommunication Technology Group Co., Ltd. officially became the strategic shareholder of the Company.

DECEMBER

The Share Appreciation Rights Incentive Scheme was approved by government regulatory authorities and the general meeting. There are approximately 207.27 million shares of Share Appreciation Rights under the Initial Grant.

2022

JUNE

The Company held its Annual General Meeting to approve the election of the sixth session of the Board of Directors and the Supervisory Committee.

Mr. Liu Guiqing was appointed as an Executive Director and the Chairman of the Company.

AUGUST

The Company established a wholly-owned subsidiary, China Comservice Smart Property Development Co., Ltd.

2023

JANUARY

Mr. Huang Xiaoqing resigned from his position as the President, an Executive Director and a member of the Strategy Committee of the Company. Mr. Yan Dong was appointed as the President of the Company and approved by the general meeting to serve as an Executive Director of the Company on 10 February 2023.

FEBRUARY

The Company ranked 4th in the “100 Most Competitive Software & IT Service Enterprises 2022” coordinated by China Federation of Electronics and Information Industry and placed in the top four for the second consecutive year.



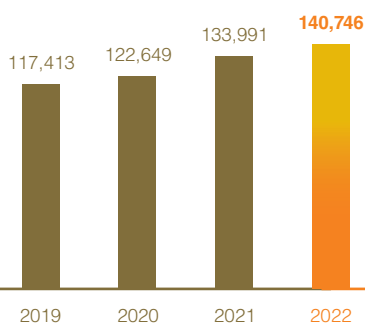
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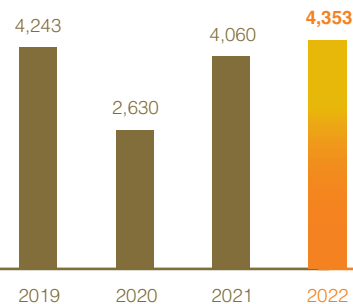
FINANCIAL HIGHLIGHTS

	2022	2021	Change
Revenues (RMB million)	140,746	133,991	5.0%
Profit attributable to equity shareholders of the Company (RMB million)	3,358	3,157	6.4%
Free cash flow ¹ (RMB million)	4,353	4,060	7.2%
Basic earnings per share (RMB)	0.485	0.456	6.4%
Total dividend per share (RMB)	0.1939	0.1732	12.0%

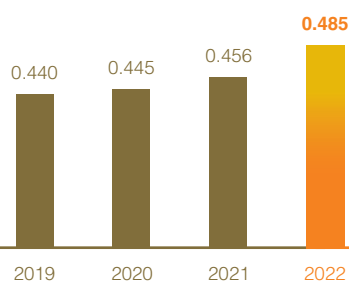
Revenues
(RMB million)



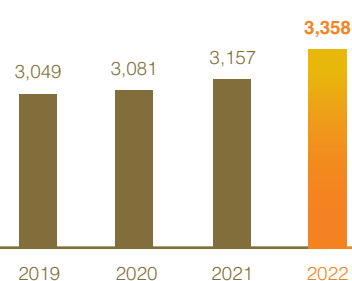
Free Cash Flow
(RMB million)



Basic Earnings per Share
(RMB)



Profit Attributable to Equity
Shareholders of The Company
(RMB million)



¹ Free cash flow = Profit for the year + Depreciation and amortisation – Changes in working capital – Capital expenditure

COMPANY PROFILE AND CORPORATE INFORMATION

China Communications Services Corporation Limited (the “Company”) is a leading service provider in the informatization sector in the PRC that positions itself as a “New Generation Integrated Smart Service Provider”, targets to become “the Main Force in Digital Infrastructure Construction, the Vanguard in Smart City Services, the Leading Enterprise in Industrial Digitalization Services, and a Trusted Expert in Smart Operation”, and commits to “Building Smart Society, Boosting Digital Economy, Serving a Good Life”. The Group provides integrated comprehensive smart solutions for the informatization and digitalization sectors, including telecommunications infrastructure services (such as design, construction and supervision), business process outsourcing services (such as management of infrastructure for information technology, general facilities management, supply chain and products distribution services), as well as applications, content and other services (such as system integration services, software development and system support services, value-added services). Our domestic share shareholders include China Telecommunications Corporation, China Mobile Communications Group Co., Ltd., China United Network Communications Group Company Limited, State Grid Information & Telecommunication Technology Group Co., Ltd. and China National Postal and Telecommunications Appliances Co., Ltd. Meanwhile, the aforesaid three telecommunications operators, China Radio and Television Network Co., Ltd. and China Tower Corporation Limited are our customers. Domestic non-telecom operator including the customers in government, transportation, electricity, park, Internet & IT sectors, is currently the largest customer group of the Company. At the same time, the Company provides services to overseas customers. Our service coverage is spread across the nation and we have also extended our business to dozens of countries and regions globally.

On 8 December 2006, the H shares issued by the Company were successfully listed on the Main Board of The Stock Exchange of Hong Kong Limited. As at 31 December 2022, the total issued share capital of the Company was 6,926,018,400, of which 2,391,420,240 were H shares.

Over the sixteen years since its listing, the Company has received many awards in the capital market. In 2022, the Company won various awards, including: in *Institutional Investor’s* “2022 Asia Executive Team Rankings”, the Company was named as “Most Honored Company” and also won the accolades of “Best CEO”, “Best CFO”, “Best IR Professional”, “Best IR Program” and “Best ESG” in the relevant category. In “12th Asian Excellence Award” held by *Corporate Governance Asia*, a well-known journal on corporate governance, the Company was awarded “Asia’s Best CEO”, “Asia’s Best CFO” and “Best Investor Relations Company”. In “The Asset ESG Corporate Awards 2022” held by *The Asset*, a financial magazine in Asia, the Company was honored with “Gold Award”. In the “7th Zhitong Finance Listed Company Awards” organized by the PRC leading financial platforms, the Company was awarded “The Best TMT Company”. In addition, the Company was included in “Hang Seng Corporate Sustainability Benchmark Index” in 2022, ranked 102nd in the “2022 FORTUNE China 500” published by *FORTUNE China* and ranked 1,649th in the “2022 Forbes Global 2000” by *Forbes*.

The Company’s industry influence remarkably improved in recent years. The Company ranked 4th in “100 Most Competitive Software & IT Service Enterprises 2022” by China Federation of Electronics and Information Industry for two consecutive years. And the achievements in technological innovation have been recognized with a number of awards, such as the first and second prizes for technological progress from provincial, municipal and industry associations.



COMPANY PROFILE AND CORPORATE INFORMATION

BOARD OF DIRECTORS

Executive Directors

Mr. Liu Guiqing (Chairman)
Mr. Yan Dong
Ms. Zhang Xu

Non-executive Directors

Mr. Gao Tongqing
Mr. Huang Zhen

Independent Non-executive Directors

Mr. Siu Wai Keung, Francis
Mr. Lv Tingjie
Mr. Wang Qi
Mr. Wang Chungge

BOARD COMMITTEES

Strategy Committee

Mr. Liu Guiqing (Committee Chairman)
Mr. Yan Dong
Mr. Gao Tongqing
Mr. Huang Zhen
Mr. Lv Tingjie
Mr. Wang Qi

Audit Committee

Mr. Siu Wai Keung, Francis (Committee Chairman)
Mr. Lv Tingjie
Mr. Wang Chungge

Remuneration Committee

Mr. Wang Qi (Committee Chairman)
Mr. Siu Wai Keung, Francis
Mr. Lv Tingjie

Nomination Committee

Mr. Liu Guiqing (Committee Chairman)
Mr. Lv Tingjie
Mr. Wang Qi

Non-Competition Undertaking Review Committee

Mr. Lv Tingjie (Committee Chairman)
Mr. Siu Wai Keung, Francis
Mr. Wang Chungge

Right of First Refusal and Priority Right Committee

Mr. Wang Chungge (Committee Chairman)
Mr. Siu Wai Keung, Francis
Mr. Wang Qi

SUPERVISORY COMMITTEE

Ms. Ye Lichun (Committee Chairperson)
Ms. Cai Manli (Independent Supervisor)
Ms. Liu Lian (Employee Representative Supervisor)

REGISTERED NAME (IN CHINESE)

中國通信服務股份有限公司

REGISTERED NAME (IN ENGLISH)

China Communications Services Corporation Limited

LEGAL REPRESENTATIVE

Mr. Yan Dong

COMPANY SECRETARY

Mr. Chung Wai Cheung, Terence

INTERNATIONAL AUDITOR

PricewaterhouseCoopers (Registered Public Interest Entity Auditors)

LEGAL ADVISORS

Freshfields Bruckhaus Deringer
King & Wood Mallesons

H SHARE REGISTRAR

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Hopewell Centre
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Wanchai
Hong Kong

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The Stock Exchange of Hong Kong Limited

STOCK CODE

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Office of Board of Directors

Telephone: (8610) 5850 2290

WEBSITE

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CHAIRMAN'S STATEMENT



In 2022, the Group adhered to the positioning of “1 Positioning, 4 Roles”, deeply participated in the construction of Digital China, upheld new development philosophy, accelerated market expansion and reform and innovation, strengthened its core competitiveness, and thus achieving improvements in both operating performance and development quality.



Mr. LIU Guiqing
Executive Director and Chairman

CHAIRMAN'S STATEMENT

Dear Shareholders,

In 2022, the Chinese government accelerated the construction of Cyberpower and Digital China, resulting in the acceleration of integrated development of the digital economy and the real economy. By positioning itself as a “New Generation Integrated Smart Service Provider” and targeting to become “the Main Force in Digital Infrastructure Construction, the Vanguard in Smart City Services, the Leading Enterprise in Industrial Digitalization Services, and a Trusted Expert in Smart Operation”, the Group adhered to the overall roadmap of “value-driven, seeking steady yet progressive growth and high-quality development”, upheld the concept of new development philosophy, strengthened the core competitiveness of the Group and actively fulfilled corporate social responsibilities. By closely following the industrial transformation driven by digitalization, the Group has accelerated the deployment in new tracks of strategic emerging industries, supporting the transformation and development of industries, enterprises and society, while also achieving steady improvements in the Group’s operating performance and development quality.

I. FULL-YEAR OPERATING PERFORMANCE HIT A RECORD HIGH, WITH MAJOR INDICATORS SHOWING IMPROVEMENTS ACROSS THE BOARD

In 2022, amid the impact of the changes in the macro environment, the Group persisted in progressive development while maintaining overall stability, actively seized the development opportunities of the digital economy, and endeavoured to minimize the impact of adverse factors. As a result, our indicators on operating performance, efficiency, and shareholders’ return improved across the board, with both total revenues and net profit¹ reaching historic highs.

During the year, the Group’s total revenues reached RMB140,746 million, representing a year-on-year increase of 5.0%. Gross profit amounted to RMB15,981 million, representing a year-on-year increase of 8.1%, and gross profit margin stabilized and rebounded to 11.4%, representing a year-on-year increase of 0.4 percentage point. Net profit was RMB3,358 million, representing a year-on-year increase of 6.4%, and such growth rate was higher than the revenue growth rate for the first time in recent years. Net profit margin was 2.4%, which stabilized and improved on a year-on-year basis. Free cash flow was RMB4,353 million, which was higher than net profit. Return on equity (ROE) was 8.5%, representing a year-on-year increase of 0.1 percentage point. Basic earnings per share were RMB0.485, representing a year-on-year increase of 6.4%.

Considering the solid operating results and the favourable cash flow for the full year, and to further increase shareholders’ return, the Board has proposed to increase the total dividend payout ratio from 38% in 2021 to 40% for the financial year ended 31 December 2022, representing a final dividend of RMB0.1939 per share with an increase of 12.0% over the total dividend per share of last year.

II. PROMOTING HIGH-QUALITY DEVELOPMENT OF THE COMPANY WITH VALUE CREATION AS THE FOCUS

In 2022, the Group seized the strategic opportunity of industrial digitalization upgrade, leveraged its strength as a “New Generation Integrated Smart Service Provider”, continuously enhanced its capabilities in market competitiveness, technological innovation, reform impetus, ecosystem collaboration, and risk control. By focusing on strategic emerging industries, the Group developed smart products and solutions for industrial digitalization, driving improvement in both business scale and quality. During the year, the revenue of telecommunications infrastructure (“TIS”) services amounted to RMB72,907 million, representing a year-on-year increase of 1.4%, accounting for 51.8% of total revenues, and the efficiency of development remained largely stable. Business process outsourcing (“BPO”) services continued to gain momentum, with revenue amounting to RMB43,072 million, representing a year-on-year increase of 6.0%, accounting for 30.6% of total revenues, and was an important contributor to revenue growth. Driven by industrial digitalization, revenue from applications, content, and other (“ACO”) services grew rapidly and amounted to RMB24,767 million, representing a year-on-year increase of 15.3%, accounting for 17.6% of total revenues, and continued to be the largest contributor to the Group’s revenue growth.

¹ Net profit refers to profit attributable to the equity shareholders of the Company.

1. Accelerating the Strategic Deployment in Key Fields

The Group focused on accelerating the deployment in key fields such as digital infrastructure, smart city, green and low-carbon, emergency management and security, and strengthened capabilities consolidation and capabilities empowerment to expand high-value businesses and drive high-quality development of the Company.

In the field of digital infrastructure, the Group actively engaged in the national strategic deployment of the Cyberpower and Digital China. By establishing a digital infrastructure industrial research institute and focusing on areas such as data centers, 5G, cloud computing and the Internet of Things (“IoT”), the Group actively served the national “East-To-West Computing Resources Transfer” projects, and participated extensively in the construction of national integrated big data center system for the “8 National Computing Hubs and 10 National Data Center Clusters”. The Group secured key digital infrastructure projects with contract size over RMB100 million each in more than ten provinces and cities, including Beijing, Shanghai, Jiangsu, Zhejiang, and Guangdong, and the total new contract amount for data centers exceeded RMB10 billion for the full year.

In the field of smart city, the Group seized the strategic opportunity of the national urban renewal, focused on key regions such as Beijing-Tianjin-Hebei region, Yangtze River Delta region, the Guangdong-Hong Kong-Macao area as well as the Chengdu-Chongqing region, accumulated rich smart city solutions in sectors such as government, transportation, park and healthcare, enhanced the full cycle integrated general contracting service capability in smart city and cultivated specialized local teams. The Group successfully undertook many projects with contract size over RMB100 million each, such as the Digital Road Intelligentization Project of the Rongdong Area in Xiong'an New Area, Hebei Province, the Phase 5 Intelligentization Project of the Xixi Park in Hangzhou City, Zhejiang Province, and the construction of the Government Affairs Data Brain cum Smart City Intelligent Operations Center (IOC²) Project of a city in Guangdong Province. The total new contract amount exceeded RMB10 billion for the full year. The Group's competitiveness in the field of smart city continued to increase, and its brand influence was further enhanced.

In the field of green and low-carbon, the Group implemented the national “Dual Carbon” strategy by focusing on key industries such as energy and power, industrial manufacturing, transportation, information and communications, as well as developing efficient, low-carbon, smart, and green products for new economy and industrial ecology. China Telecom (National) Digital Qinghai Green Big Data Center, a project undertaken by the Group as the general contractor, was the first benchmark case in the country for 100% clean energy traceable green big data centers, and it was also the first exemplary model of an integrated green power smart supply system incorporating source-grid-load-storage³ in the field of big data centers, showcasing the industry-leading level in the field of green and low-carbon.

In the field of emergency management and security, the Group firmly grasped the opportunity of public safety emergency management construction, strengthened research and development of proprietary core products and built up industry benchmark cases. In the field of cybersecurity, the Group developed core products such as asset surveying and mapping, situational awareness, and security orchestration, which were selected in the “China Cybersecurity Industry Panorama” by AQNIU⁴. In the field of emergency management, the Group developed products such as a safe production risk monitoring and early warning platform, an integrated intelligent park monitoring platform, and an Industrial IoT security access gateway. The Emergency Capacity Improvement Project undertaken by the Group in Anhui Province was recognized as a benchmark case by the relevant national authority.

² IOC (Intelligent Operations Center) is the intelligent operation center of smart cities.

³ “Source-grid-load-storage” refers to power supply, grid, load, and energy storage.

⁴ “AQNIU” is an influential third-party professional media and flagship think-tank in the domestic cybersecurity sector.

2. Deepening the Expansion of the Three Major Markets

- (A) **The domestic non-operator market showed stable growth and quality improvement and was the largest contributor to the rebound in gross profit margin.** The Group focused on digital transformation of society and seized opportunities from the acceleration in digital technology innovation applications in key industries. By leveraging its “Consultant + Staff + Housekeeper”⁵ service advantages and “Platform + Software + Service”⁶ capability advantages, as well as constructing an “Industry + Region” marketing system, the Group continuously strengthened comprehensive service capabilities and constantly expanded high-value businesses. During the year, revenue from the domestic non-telecom operator (“domestic non-operator”) market reached RMB60,583 million, achieving steady growth with a year-on-year increase of 5.5%.
- (B) **Domestic telecommunications operator market grew continuously and was an important revenue growth driver.** The Group responded in a timely manner to domestic telecommunications operator customers’ investment demand of emerging businesses, such as the “East-to-West Computing Resources Transfer”, digital information infrastructure construction and industrial digitalization. By adhering to the development strategy of “CAPEX + OPEX + Smart Applications”⁷, the Group continued to improve its service quality and strengthened its cooperation with the customers in market expansion, technology research and development, cloud-network construction and supply chain, resulting in remarkable results. After the 5G investment of operator customers reached its peak, revenue from such market maintained steady growth during the year, amounting to RMB77,165 million, representing a year-on-year increase of 4.6%, becoming an important driver and anchor for the growth of total revenues.
- (C) **Overseas market achieved rapid growth, with a stabilizing and improving development trend.** The Group overcame the impact of the macroeconomic environment and the pandemic in overseas regions by strengthening risk prevention, optimizing its market deployment, expanding into upstream and downstream of the industrial chain, and providing integrated services from network construction to operation. The Group continued to provide services in sectors such as digital infrastructure, power and energy for countries and customers along the “Belt and Road”. As a result, there was an improvement in the development in the overseas market, and the Group’s revenue from overseas market achieved relatively fast growth during the year and amounted to RMB2,998 million, representing a year-on-year increase of 9.3%.

⁵ “Consultant + Staff + Housekeeper” service model is a unique business model adopted by the Group in recent years. “Consultant” means that the Group acts as the “Consultant” to help its customers through leveraging its talents and product advantages, so as to turn customers’ needs into feasible solutions or projects. “Staff” means that the Group, as appointed by its customers, assists them in the capacity of “Staff” in coordinating other stakeholders of the project, so as to promote the smooth implementation of the project and ensure that its customers’ expectation could be achieved. “Housekeeper” means the Group provides full life cycle management and accompanying service of the relevant businesses and creates values for customers.

⁶ “Platform + Software + Service” capabilities: utilize core foundation platforms, including cybersecurity and IoT, focus on various smart applications for customer scenarios and the integrated service capabilities covering consultation and planning, project construction, operation and maintenance, to provide customers with customized integrated solutions.

⁷ “CAPEX + OPEX + Smart Applications”: CAPEX refers to the capital expenditure of domestic telecommunications operators, while OPEX refers to the operating expenditure of domestic telecommunications operators.

3. Strengthening Empowerment through Reform and Innovation

(A) Technological Innovation Enhanced Development Momentum for High-quality Development

Persisting in innovation-driven development, the Group continuously increased R&D investment and achieved breakthroughs in core products and remarkable results in technological innovation. The total research and development costs for the year were RMB4,952 million, representing a year-on-year increase of 17.0%. Targeting potential markets such as emergency management and security, IoT and cloud computing, the Group launched core products such as IoT Cloud Platform, Maintenance Cloud, Cyberspace Asset Surveying and Mapping, and Innovation Middle Platform. The Group accelerated the digital transformation of internal production and operation, optimized the construction of internal data middle platform, strengthened the internal promotion and implementation of proprietary digital scenarios, such as project onsite management systems, production efficiency enhancement platforms and smart legal affairs platforms, empowering the high-quality development of the Company. The Group's technological strength continues to be recognized by society, ranking 4th in the "100 Most Competitive Software & IT Service Enterprises 2022" by the China Federation of Electronics and Information Industry, being named in the "China Cybersecurity Industry Panorama" and "China AIoT Industry Panoramic Map", and winning a total of 28 provincial and ministerial-level or above awards during the year for its technological innovation achievements.

(B) Deepening Reform Stimulated Vitality for High-quality Development

The Group continued to improve systems for a modern enterprise and deepened reforms. The Group continued to promote human resources mechanism reform, fully implementing tenure system and contract management for management, implementing mid-to-long-term incentive policies such as share appreciation rights scheme and dividend reward for technology-based enterprises. As a result, overall labour productivity increased by about 10% during the year and the development vitality of the Company was fully stimulated. The Group deepened the mixed ownership reform of China Comservice Supply Chain Management Company Ltd., and established China Comservice Smart Property Development Co., Ltd., to promote business consolidation of its property management business.

III. ADOPTING A CUSTOMER-CENTRIC APPROACH AND STRENGTHENING CORE COMPETENCIES

1. Digital Infrastructure Construction Capability

The Group seized the strategic opportunity of “East-To-West Computing Resources Transfer”, grasped the development opportunities of expanding digital information infrastructure construction for government and enterprise customers, and focused on key areas such as data centers, 5G, and Industrial Internet. The Group persisted in technological innovation to drive development and featured innovative products and services. By strengthening technological empowerment through its digital infrastructure industrial research institute, the Group developed “Consultation and Design + General Contracting + Integration + Operation and Maintenance” multi-disciplinary and multi-regional collaboration advantages to provide full-profession, integrated, and full life cycle green and low-carbon digital infrastructure specialized services, built a local industry ecosystem, with a view to becoming the Main Force in Digital Infrastructure Construction.

2. Smart Product Service Capability

The Group closely followed the national strategic deployment of “Crafting Livable, Resilient, Smart Cities”, focusing on new urbanization construction and urban renewal, revitalization of old neighborhoods in urban areas and community development, and important needs of smart transportation, safe cities, smart government services, smart towns, city brains, one platform unified services, and digital villages. The Group capitalized on its advantages of “Consultation + Software + Platform + Service” to build up a “Construction + Sustainable Operation” model, leveraging its benchmark cases of medium to large-scale smart cities as the lead, the Group seized opportunities in urbanization construction and replicated and promoted its capabilities, with a view to becoming the Vanguard in Smart City Services.

3. Industrial Digitalization Service Capability

The Group established industrial research institutes, increased investment in technological research and development, expanded into strategic emerging industries, and leveraged its advantages in software research and development, system integration, and support services to forge benchmark products in the fields of power, Dual Carbon, and digitalization of state-owned enterprises, aiming to establish a virtuous cycle of mutual promotion between technological innovation and market expansion. Meanwhile, facing the digitalization needs of society, industry and customers, the Group strengthened cooperation with domestic telecommunications operator customers and industry-leading enterprises, promoted collaboration in ecosystem and worked together to empower industry customers' digital transformation and explore new potential, new models as well as new values in the industrial digitalization market, striving to become the Leading Enterprise in Industrial Digitalization Services.

4. Smart Operation Support Capability

The Group continuously upgraded its service capabilities such as smart supply chain, smart maintenance and smart property management. It strengthened the construction of a standardized system, and developed a unified production and operation platform to enhance digitalization value and improve its comprehensive smart service capabilities. Adhering to a customer-centric approach, the Group carried out product research and development, market expansion, and operational promotion in tandem to provide customers with safe, reliable, professional, efficient, green and low-carbon digitalized operation services, with a view to establishing an image of a Trusted Expert in Smart Operation.

IV. FULFILLING ENVIRONMENTAL AND SOCIAL RESPONSIBILITY AND ENHANCING CORPORATE GOVERNANCE

The Group upholds the corporate mission of “Building Smart Society, Boosting Digital Economy, Serving a Good Life”, actively fulfilling environmental, social, and governance responsibilities and tracking and monitoring relevant material risks, persisting in compliant operations, promoting green development, striving to give back to society, with a view to achieving coordinated and unified development of enterprises, society and the environment. The Group proactively responded to the concerns from the capital market and continued to enhance the transparency of its ESG information, which was recognized by the market. During the year, the Group was included in “Hang Seng Corporate Sustainability Benchmark Index”, reflecting the Group’s outstanding performance in corporate sustainability.

In 2022, the Group actively responded to the national “Dual Carbon” strategy by establishing a “Carbon Peak, Carbon Neutrality” management organization to research and implement green development work. The Group prepared a rolling development plan and action plan for “Dual Carbon” from 2023 to 2025, actively implemented green operations, and developed a series of green products and services such as green retrofit of old machine rooms, green data centers, and dual carbon energy-saving platforms to help customers save energy and reduce emissions.

The Group actively participated in the communications support work of multiple national strategic projects and major activities. The Group successfully completed project construction and communications services for events such as the “Beijing 2022 Winter Olympics” and the “Boao Forum for Asia Annual Conference 2022” and provided relevant technical support and communications support for national strategic projects such as the “Wentian Lab Module” rocket launch mission, the Long March 8 carrier rocket launch, and the construction of the national cloud.

The Group prioritized the safety of individuals and actively participated in emergency communications support for disaster prevention and relief and pandemic prevention and control across the country. The Group provided informatization construction, operation and maintenance services for government emergency command and various medical institutions, and utilized digital means to assist scientific fight against pandemic and resumption of work and production. In major disasters and public safety incidents such as the earthquakes in Ya’an and Luding in Sichuan, floods in Guangdong, wildfires in Chongqing, and the China Eastern Airlines Flight MU5735 aircraft accident, the Group responded promptly to ensure smooth communications.

The Group actively participated in rural revitalization of poverty-stricken areas, as well as helping distressed small and medium-sized enterprises. The Group formulated key work tasks to help promote comprehensive rural revitalization, established an effective coordination mechanism to consolidate and expand the achievements of poverty alleviation and rural revitalization, introduced assistance funds at no cost, and actively carried out agricultural product procurement assistance activities. The Group also helped small and medium-sized enterprises which were in distress by means of reducing or exempting rent.

The Group continuously optimized its corporate governance, and its good corporate governance has been widely recognized by the capital market. The Group ranked 102nd in the “2022 FORTUNE China 500” released by *FORTUNE China* and was elected for the “2022 FORTUNE China ESG Influential List”. The Group ranked 1,649th in the “2022 Forbes Global 2000” released by *Forbes*. The Group was awarded with awards including “Most Honored Company”, “Best CEO”, “Best CFO”, and “Best ESG” in the “2022 Asia Executive Team Rankings” by *Institutional Investor*. We also won awards such as “Asia’s Best CEO”, “Asia’s Best CFO”, and “Best Investor Relations Company” in the “12th Asian Excellence Award 2022” held by the well-known corporate governance magazine, *Corporate Governance Asia*. In the “7th Zhitong Finance Listed Company Awards” held by a PRC leading financial platform, the Group won the “The Best TMT Company” award.

CHAIRMAN'S STATEMENT

V. OUTLOOK

Currently, digitalization is spawning disruptive industrial changes, and the integration of digital economy and real economy is deepening, bringing rare strategic opportunities to the Group. Capitalizing on the development of industrial digitalization, the Group will deeply participate in the construction of Digital China. By leveraging its positioning of "1 Positioning, 4 Roles", the Group will persist in high-quality development as the principle, value creation as the focus, and digital transformation as the driver and continuously focus on strategic emerging industries with broad prospects and enormous market potential, including digital infrastructure, smart city, green and low-carbon, emergency management and security. The Group will enhance market competitiveness with better quality, superior technological innovation capability for better products, stronger reform impetus, more valuable synergistic capability in ecosystem, and more effective risk control capability. The Group aims to build itself as a First-class Smart Service Innovative Enterprise, creating more value for shareholders, customers, employees, and society.

Last but not least, on behalf of the Board, I would like to express my sincere gratitude to our shareholders, customers and all sectors of society for their long-term attention and support, and deeply thank all of our employees for their continued dedication and hard work. I would also like to express my sincere gratitude to those directors and supervisors who resigned or retired during the year, including Mr. Huang Xiaoqing, Mr. Mai Yanzhou, Mr. Wu Taishi, Mr. Liu Linfei, Mr. Hai Liancheng and Mr. Si Jianfei for their outstanding contributions to the development of the Group during their tenure; and my sincere welcome to Mr. Yan Dong, Mr. Wang Qi and Mr. Wang Chungue who have joined the Board, and Ms. Cai Manli and Ms. Liu Lian who have joined the Supervisory Committee.

**Liu Guiqing***Executive Director and Chairman*

Beijing, PRC
29 March 2023

BUSINESS OVERVIEW

The Group is a leading service provider in the informatization sector in the PRC. Leveraging its position as a “New Generation Integrated Smart Service Provider” and targeting to become “the Main Force in Digital Infrastructure Construction, the Vanguard in Smart City Services, the Leading Enterprise in Industrial Digitalization Services, and a Trusted Expert in Smart Operation” (“1 Positioning, 4 Roles”), the Group commits to “Building Smart Society, Boosting Digital Economy, Serving a Good Life” and provides integrated comprehensive smart solutions for the informatization and digitalization sectors. The Group provides integrated smart solutions including telecommunications infrastructure services, business process outsourcing services as well as applications, content and other services for its customers including telecommunications operators, governments, industrial customers and SMEs.

The Group’s business spans across China and dozens of countries and regions globally, with overseas customers mainly located in key regions such as Southeast Asia and the Middle East.

WE PROVIDE INTEGRATED COMPREHENSIVE SMART SOLUTIONS FOR THE INFORMATIZATION AND DIGITALIZATION SECTORS



(in RMB million, except percentages)	Revenue in 2022	Revenue in 2021	Change
Domestic non-telecom operator customers (“Domestic non-operator customers”)	60,583	57,446	5.5%
Domestic telecommunications operator customers	77,165	73,803	4.6%
Of which: China Telecom	50,268	46,047	9.2%
China Mobile, China Unicom, China Tower	26,897	27,756	-3.1%
Overseas customers	2,998	2,742	9.3%
Total	140,746	133,991	5.0%

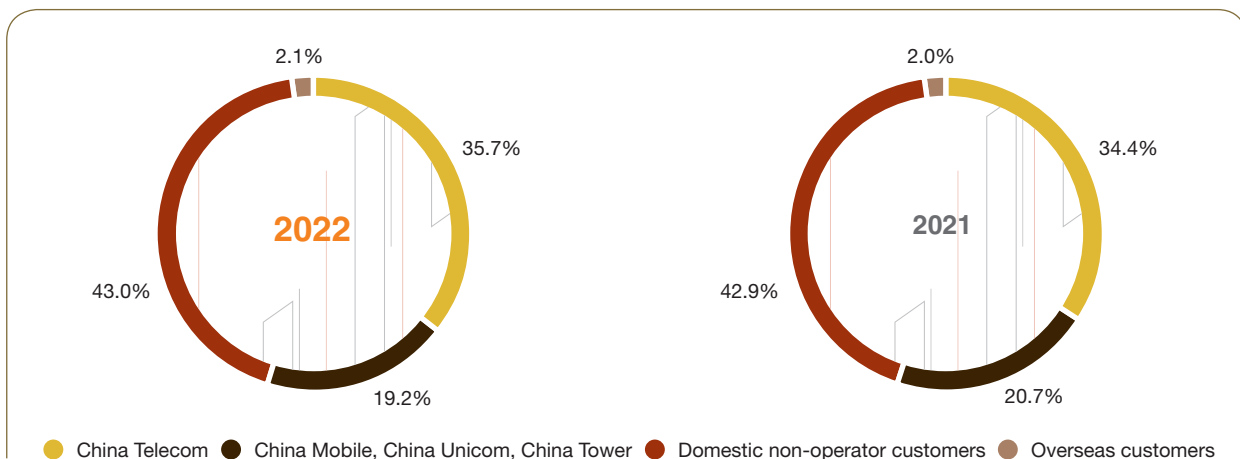
BUSINESS OVERVIEW

MARKET EXPANSION

In 2022, the Group overcame multiple difficulties and continued to adhere to the overall roadmap of “value-driven, seeking steady yet progressive growth and high-quality development”, actively engaged in the trend of building Digital China and seized the development opportunities in digital economy. Along the path of high-quality development, the Group further enhanced market development and shifted growth momentum, thereby optimizing its business structure and improving development quality. Total revenues amounted to RMB140,746 million for the year, representing a year-on-year growth of 5.0%.

In 2022, the Group focused on the digitalization reform of society and grasped the opportunities in accelerating digital technology innovation application in key industries. The revenue from the domestic non-operator market amounted to RMB60,583 million for the year, representing a year-on-year increase of 5.5%. The Group kept abreast of the investment demand of emerging businesses of domestic telecommunications operators, adhering to the development strategy of “CAPEX + OPEX + Smart Applications” to enhance service quality and strengthen cooperation on an ongoing basis. The revenue from the domestic telecommunications operator market amounted to RMB77,165 million for the year, representing a year-on-year increase of 4.6%. In the face of the impact of the overseas macro-environment and pandemic, the Group optimized its market deployment and expanded upstream and downstream along the industrial chain to offer integrated services ranging from network construction to maintenance. The revenue from overseas customers amounted to RMB2,998 million, representing a year-on-year increase of 9.3%.

The following charts show the revenue contribution from each customer group:



Domestic Non-Operator Market

In 2022, the Group kept abreast of the digitalization reform of society and tapped into the opportunity of acceleration of digital transformation across the industry. With a focus on key areas such as digital infrastructure, smart city, green and low-carbon, emergency management and security, it continuously forged core capabilities and platforms and leveraged its strength in integrated services to achieve improvement of quality of business and continuous optimization in revenue structure. Revenue from the domestic non-operator market amounted to RMB60,583 million, representing a year-on-year increase of 5.5%.

The Group actively participated in the digital transformation business of the domestic non-operator market



“One Platform Unified Management” City Operation Management Center



Application of BIM digitalization technology

The Group quickly responded to customer needs and provided a comprehensive smart product portfolio that could be disassembled or combined, as well as full-process service capabilities from top-level design to product R&D and operation. In view of the vast opportunities arising from the rapid development of Digital China, the Group has accelerated its deployment in strategic emerging industries, such as digital infrastructure, smart city, green and low-carbon, emergency management and security. For data center business, the Group leveraged its high-end consulting and design capabilities and applied BIM digitalization technology to provide customers with full-profession, integrated and full life cycle specialized services for green and low-carbon digital infrastructure, which included consultation and design, electromechanical installation, application and integration of network platforms, as well as operation and maintenance. The Group actively served the national “East-To-West Computing Resources Transfer” projects, and participated extensively in the construction of national integrated big data centers for the “8 National Computing Hubs and 10 National Data Center Clusters”. In the fields of smart city and digital government, the Group focused on the new urbanization construction and urban renewal, the revitalization of old neighbourhood and community development, and important needs of smart transportation, safe city, smart government services, smart towns, city brains, one platform unified services and digital villages, and provided customers with design, construction, platform development, system integration and full-process consultation and other services. Regarding green and low-carbon sector, the Group offered integrated AI energy-saving and carbon reduction service for new green and low-carbon data centers to different types of customers. Apart from that, the Group provided new energy solutions including photovoltaic energy, wind power and hydropower solutions. Besides, it engaged in platform development and services for the dual carbon management cloud platform, energy consumption monitoring management platform and carbon asset digitalized management platform. It also offered energy management, production and manufacturing equipment disposal management. As for cybersecurity, the Group offered asset surveying and mapping, situational awareness, data security and password application and other cybersecurity products and solutions to customers. In respect of emergency management sector, it developed, maintained and optimized the risk monitoring and alert platform for customers. The Group made achievements in the expansion of key projects. It undertook several benchmark projects such as the Digital Road Intelligentization Project of the Rongdong Area in Xiong’an New Area, Hebei Province, the Phase 5 Intelligentization Project of the Xixi Park in Hangzhou City, Zhejiang Province, and the construction of the Government Affairs Data Brain cum Smart City Intelligent Operations Center (IOC) Project of a city in Guangdong Province. In 2022, the contract amount of the Group’s new contracts related to data centers and smart cities exceeded RMB10 billion, respectively.

The Group undertook benchmark projects in various industries



Digital Road Intelligentization Project of the Rongdong Area in Xiong’an New Area



The EPC general contracting project of distributed photovoltaic power generation facilities of a factory

Capitalizing on its “Consultant + Staff + Housekeeper” service advantages and its superior “Platform + Software + Service” capabilities, the Group established the “Industry + Region” marketing system and built a sound and localized marketing mechanism across the country with over 17,000 sales personnel deployed in the key industries. By constantly strengthening its efforts in group-level product marketing synergy, the Group secured over 1,200 new contracts with the contract amount exceeding RMB10 million each during the year. The Group also accelerated the formation of the technical expert team for its core products, which comprised over 10,000 consulting experts and relevant software talents. Through consistent training and informatization means such as the cloud exhibition hall, the Group enhanced capabilities consolidation and empowering and continuously strengthened the teams of professional talents. Currently, the annual contract value secured by the Group in several industries, including government, construction and real estate, Internet and IT, transportation, electricity, finance, water conservancy, education and medical care, has exceeded RMB1 billion in each sector.

BUSINESS OVERVIEW

The Group undertook various key data center projects



Xiong'an City Supercomputing Cloud Center Project



China Telecom (National) Digital Qinghai Green Big Data Center Project



Digital Government Big Data Dedicated Cloud Machine Room Project



EPC general contracting project of a big data center in a city in Jiangsu

Domestic Telecommunications Operator Market

In 2022, the Group further integrated itself into the ecosystem of operators in the domestic telecommunications operator market and seized the opportunities from traditional businesses and transformation. It persisted in the “CAPEX + OPEX + Smart Applications” development strategy and grasped new opportunities in industrial digitalization, 5G and cloud-network construction, with a view to penetrating traditional CAPEX businesses. The Group explored the market potential of Network Maintenance, Property Management and supply chain services, and strived to increase the OPEX market share. It fully supported operators’ demand for industrial digitalization in the course of transformation by proactively engaging in and expanding the markets of 5G industrial applications, business derived from government and enterprise customers of operators and network information security, and it assisted operators to achieve green and low-carbon by supporting “zero carbon” data center construction, green retrofit of old machine rooms, and dual carbon and energy-saving platform construction, which ultimately stabilized the fundamentals of business from the domestic telecommunications operators. The revenue from this market amounted to RMB77,165 million for the year, representing a year-on-year increase of 4.6%. Of which, the revenue from China Telecom amounted to RMB50,268 million, representing a year-on-year increase of 9.2%.

The Group actively participated in the business development and transformation of domestic telecommunications operators



Overseas Market

In 2022, the Group proactively adapted to the new development paradigm of “dual-circulation with domestic and international development reinforcing each other” and seized the important opportunities in the “Belt and Road” Initiative. Following the principles of safety, compliance, efficiency and high-quality, the Group continuously optimized overseas market deployment and focused on key regions and countries such as the Middle East, and Southeast Asia. Through collaboration with “Go Abroad” Chinese companies and a focus on key businesses such as overseas digital infrastructure, data centers, power and new energy, smart products and services, the Group promoted innovation and transformation of overseas businesses and increased the market share by promoting “EPC+” new model, with a view to enhancing the quality of its development. The revenue from overseas customers amounted to RMB2,998 million, representing a year-on-year increase of 9.3%.

The Group proactively expanded overseas projects



BUSINESS EXPANSION

As a leading service provider in the informatization sector in the PRC that provides integrated comprehensive smart solutions in the informatization and digitalization sectors, the Group offers telecommunications infrastructure services, including design, construction and supervision; business process outsourcing services, including management of infrastructure for information technology (“Network Maintenance”), general facilities management (“Property Management”), supply chain and products distribution; and applications, content and other services, including system integration, software development and system support as well as value-added services, etc.

Telecommunications Infrastructure Services

As the largest telecommunications infrastructure service provider in China, the Group possesses all the highest-grade qualifications in the communications construction industry in China. In 2022, revenue from telecommunications infrastructure services amounted to RMB72,907 million, representing a year-on-year growth of 1.4%.

The Group has the capabilities to provide worldwide telecommunications operators with comprehensive telecommunications infrastructure services including planning, design, construction and project supervision for fixed-line, mobile, broadband networks, data centers and operation supporting systems. In 2022, the Group endeavoured to address the business needs of domestic telecommunications operator customers and supported the construction of the domestic 5G network and data centers. The revenue of telecommunications infrastructure services from domestic telecommunications operator customers amounted to RMB38,913 million for the year, representing a year-on-year slight decline of 1.4%.

The Group also provides various services, including construction services for ancillary communications networks, integrated informatization solutions and industrial intelligentization solutions, to domestic non-operator customers in the government, finance, construction, transportation, emergency management, electricity, and medical care sectors, as well as overseas customers. In 2022, the Group made constant new breakthroughs in the fields of data center, smart city, green and low-carbon, smart transportation and building intelligentization. The Group's revenue of telecommunications infrastructure services from domestic non-operator customers amounted to RMB31,526 million for the year, representing a year-on-year growth of 4.2%.

BUSINESS OVERVIEW

As domestic telecommunications operators continue to accelerate digital transformation, increase their investment in new infrastructure such as data centers, and speed up the transformation of cloud-network integration, the Group will further integrate itself into the ecosystem of operators and enhance its product and service capabilities, so as to cater for the demand of domestic telecommunications operators for integrated network construction services, so that it can maintain the stable development of the business from domestic telecommunications operators. Meanwhile, with the in-depth implementation of the Digital China strategy, the construction of digital information infrastructure will accelerate while industrial digitalization will thrive. The Group will also embrace new growth opportunities in both the domestic non-operator market and overseas market.

The Group endeavoured to support digital information infrastructure construction



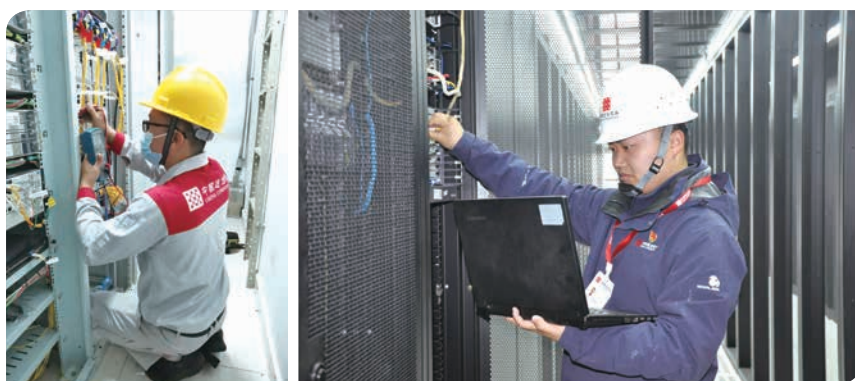
Business Process Outsourcing Services

The Group is the largest integrated provider of business process outsourcing services in the communications industry in China. It keeps extending the business scope from core networks to access networks along the communications business value chain, and provides services including Network Maintenance, Property Management, supply chain and products distribution. The target customers of its services include domestic and overseas telecommunications operator customers, government agencies and enterprise customers. In 2022, the Group's revenue from the business process outsourcing services amounted to RMB43,072 million, representing a year-on-year increase of 6.0%.

The Group provides Network Maintenance and network optimization services for telecommunications operators covering fiber optic cables, electric cables, mobile base stations, network equipment and terminals. In 2022, the Group relied on its proprietary "Maintenance Cloud" digital transformation platform for professional maintenance to facilitate the development of Network Maintenance business with a revenue of RMB18,158 million, representing a year-on-year increase of 8.9%.

The Group provides Property Management services to customers for their data centers, cloud bases, commercial buildings, high-end residential buildings, high-speed railway stations and airports, etc. During the year, the Group established China Comservice Smart Property Development Co., Ltd., which advanced the business consolidation of its property management business, improved synergistic operation capabilities and developed smart service capabilities. In 2022, the Group's revenue from Property Management services amounted to RMB7,740 million, representing a year-on-year growth of 8.6%.

The Group provided operation and maintenance services



The Group penetrates the operators' supply chain business and further expands customers from other sectors. The Group focuses on upstream and downstream customers, and continuously leverages its advantage in the full-process and network-wide synergistic operation of the supply chain to provide integrated and full life cycle supply chain services including logistics and transportation, warehousing and distribution, inspection service and tender agent, digital procurement, repair and disposition to domestic telecommunications operators, government and enterprise customers. In 2022, the Group's revenue from supply chain services amounted to RMB12,849 million, representing a year-on-year growth of 7.4%.

The products distribution business mainly refers to the distribution of communications and information products. The Group provides terminal sales and device distribution services to domestic telecommunications operator customers and offers distribution and procurement services of IT devices, auxiliary machinery and equipment to domestic non-operator customers. In 2022, the Group proactively reduced the business of products distribution with low-efficiency, and the revenue of products distribution business amounted to RMB4,325 million, representing a year-on-year decline of 10.9%.

Given the increasing scale of the 5G network and data centers, the Group believes that the OPEX market of domestic telecommunications operators has favourable room for development, and the domestic non-operator market also sees growing demands for business process outsourcing services. Business process outsourcing services have the features of high customer loyalty, low accounts receivable turnover days and good cash flow. The Group will further consolidate resources for professional operations to pursue more efficient development in this market.

The Group continuously leveraged its advantage in full-process and network-wide synergistic operation in supply chain



BUSINESS OVERVIEW

Applications, Content and Other Services

The Group provides information system integration and project implementation, industrial digitalization application and solutions, proprietary software and platform product development, digitalization business and IT system support as well as value-added services to customers including domestic and overseas telecommunications operators, government agencies and enterprise customers. In 2022, the relevant revenue amounted to RMB24,767 million, representing a year-on-year increase of 15.3%.

The Group advanced on research and development under the leadership of China Comservice General Research Institute. Focusing on “1 Positioning, 4 Roles” in key technology applications and innovation, it further increased research and development investment. The Group has invested a total of RMB25 billion in research and development since the “13th Five-Year Plan”, of which approximately RMB5 billion was invested in 2022. The Group managed relevant resources in a centralised manner to solidify the technological innovation system that comprised “three tiers of research and development management + three tiers of research and development production”. The Group refined technological innovation management through three core functions, which were the strategic management, project management and integrated management of research and development efforts. Special emphasis was put on the deployment in five major aspects, namely the industrial research institute, the digitalization capability middle platform, industrial application products, network information security and emergency management. Currently, the Group has around 20 product research and development centers and over 30 industrial application products have been developed, covering various industries and sectors such as smart city, digital government, cybersecurity, Industrial Internet, smart sport, smart community and intelligent building. It also has a proprietary innovation middle platform, integrated cloud management platform, CCS IoT, maintenance cloud, blockchain platform and other core platforms. The Group insisted on carrying out research and development and innovation independently and accelerated the transformation of research and development results to promote rapid growth of related businesses. In 2022, the contract amount of the Group’s new contracts related to smart city and digital infrastructure exceeded RMB10 billion, respectively, and the revenue from software development and system support recorded a year-on-year growth of over 31%.

The Group continued to upgrade its smart products and core platforms



Emergency management



Smart campus



Cybersecurity platform



Maintenance cloud platform

In 2022, the Group seized opportunities in the New Infrastructure and digital transformation in China by capitalising on its strength in integrated service and capabilities of system integration and software development. Leveraging its proprietary core platforms and a range of industry-leading smart products, it continuously expanded the ecological cooperation scale and vigorously developed the markets including 5G, data centers, smart city, transportation, electricity and emergency management, which effectively satisfied the demand of government and enterprise customers for digital transformation. As the Group gained increasing industry recognition and brand influence, it continued to rank 4th in “100 Most Competitive Software & IT Service Enterprises 2022”, being named in the “China Cybersecurity Industry Panorama” and “China AIoT Industry Panoramic Map”, and winning a total of 28 provincial and ministerial-level or above awards during the year for its technological innovation achievements.

The Group gained increasing industry recognition and brand influence in the area of technological innovation





The Group will seize the opportunities arising from the rapid development of the digital economy, keep upgrading its key products, accelerate the construction of strategic core platforms and businesses, improve the software service capabilities and develop smart products, so as to meet the business demands for industrial digitalization from customers.


The Group actively participated in various exhibitions and carried out ecological cooperation



CONTENTS OF CERTAIN KEY PRODUCTS OF THE GROUP

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Smart City
- Relying on 5G, IoT, big data, cloud computing, AI and other emerging technologies, we provide integrated solutions for top-level planning, consultation and design, product research and development, delivery and implementation, and operation and maintenance of smart city, including but not limited to digital governance platform for smart cities, city operation and management platform, city operation command center, city portal, leadership cockpit and other thematic smart applications that can be assembled and disassembled. Based on the effective integration and collaborative sharing of city data resources, it helps to realize the refinement of city management, the intelligentization of city services and the modernization of city governance, activates the smart industry ecology, enhances the overall competitiveness of the city and promotes the digital transformation and upgrade of the city. It can comprehensively elevate the overall competitiveness of local economy, nurture the industry ecosystem and promote the government's digital transformation and upgrade of governance.
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Digital Government
- With extensive experience in the information and telecommunications industry and the accumulation in technologies of big data, cloud computing, AI and blockchain, the Group provides informatization core platforms and solutions for the government's digital transformation, including the integrated government service platform, the unified management platform in one network and the smart government service hall. The integrated government service platform promotes the in-depth integration of decentralized online and offline service channels, service capabilities and service resources; the unified management platform in one network supports decision-making of governments at all levels; the smart government service hall provides the government with "convenient service window, smart think tank for government policies, innovation square for business collaboration, name card for city image promotion", which becomes the important medium for the government to serve the people and strengthen the close ties between the government and the people.
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CCS Cyber Security Product Portfolio
- CCS Cyber Security Product Portfolio independently builds a cyber security capability matrix with the featured advantages of the Group. It builds security operation products such as cyberspace asset surveying and mapping and security orchestration and response, data security solutions such as data security monitoring and commercial password application modification, security training services such as security service cloud and network security training, and empowerment platforms such as asset surveying and mapping cloud brain and vulnerability response, providing one-stop security guarantee for the construction of national critical information infrastructure, and providing comprehensive security support for the safe operation of smart society and the support of major national events.
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- CCS Emergency Management Product Portfolio
- With the main business line of seven major industries such as emergency management, ecological environment, natural resources, fire-fighting, forestry and grass, water conservancy and human defense, CCS Emergency Management have built a product system based on production safety risk monitoring and early warning platform, emergency rescue command platform, smart park comprehensive supervision platform, Industrial Internet + enterprise production safety cloud platform, smart fire-fighting monitoring and early warning platform, smart forestry and grass comprehensive service platform, smart water conservancy informatization management platform. It has independent intellectual property rights and core technologies, and provides integrated services including consultation and planning, software development, system integration and operation and maintenance. Through scientific and technological means, we promote the transformation of the public security governance model towards prior prevention, and effectively enhance the capacity for disaster prevention, mitigation and relief and the management and support of major public emergencies.
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- Industrial Internet
- Based on the Group's professional service capability and combined with the experience accumulation of exploration and practice in the industry, we create an integrated solutions and products combining Comservice's IoT platform and edge computing platform at the edge access side; on the cloud-network foundation side, Comservice has an innovation middle platform and provides professional services of cloud-network professional planning and design, consultation and development, and implementation supervision based on experience over the years; on the platform service side, Comservice data middle platform provides customers with data management services such as mining, cleaning, classification and application; on the application service side, we have formed multi-dimensional professional products such as security situation, intelligent integration industrial management and industry applications. For customers such as government and industrial enterprises, the Group provides a full process of Industrial Internet service system to help the development of the Industrial Internet industry.
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- Smart Sport
- Smart Sport is designed to build a leading smart sports technological innovation and empowerment middle platform in China to provide comprehensive services of "whole process consultation + product research and development + integrated operation". Driven by high-end consultation, we promote industry research, top-level planning and standard compilation, while providing pan-sports solutions based on customer needs; achieving full coverage of key segments of smart sports for sports authorities, sports industry organizations and enterprises, innovating and building core platforms for sports administration, mass sports, youth sports, athletic sports, sports industry, smart matches, smart venues, and sports-education integration. It promotes the integration of sports business, integration of data and integration of technology, and help improve the comprehensive sports management system and public service system; deeply integrates into the overall deployment of smart city, digital government and smart society development, build the integrated operation service capability of "planning, construction and operation", and realize the transformation from sports informatization constructor to digitalization service provider and operator.

BUSINESS OVERVIEW

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- 7  "Fuju Smart Connection" Smart Community
- According to the four business application platforms, three data governance platforms, four smart foundation, three support systems framework, "Fuju Smart Connection" Smart Community is a new intelligent community platform integrating "security, management, service and visualization". At present, the "Fuju Smart Connection" Smart Community has achieved five levels of SaaS overall management of "city - county - street - community - district".
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- 8  Intelligent Building
- Leveraging the Intelligent Building Management System (CCS-iBMS) as the core, the Group realizes integration and interconnection among self-control system of building equipment, and also automation systems of office, security, fire protection and communications etc, so as to provide visualized management, operation and service.
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- 9  CCS Innovation Middle Platform
- CCS Innovation Middle Platform builds a middle platform for technological innovation with characteristics of the Group, it supports the closed-loop management of talent, management, production and results in the whole process of technological innovation, and commit to realizing the digital operation of technological innovation while improving the research and development management and technological innovation capability. The innovation middle platform contains core functional modules such as enterprise technological innovation management, development workbench and cloud exhibition hall. The enterprise technological innovation module provides R&D management personnel of the Group with whole process management in respect of organization, personnel, R&D project, R&D results with experience accumulation and other functions. The development workbench offers full-process management and the one-stop DevOps tools to the R&D personnel of the Group and incorporates production commercialization guidelines in the R&D process. The cloud exhibition hall provides a showcase for the promotion of solutions, products, cases, atomic capabilities, ecology, enterprise services and other technological innovation achievements through the mini program, aiming to create a window for the promotion of the brand and technological innovation achievements of the Group. The platform aims to support the Company's business innovation to achieve digital transformation.
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- 10  CCS IoT
- The CCS IoT is an all-scenario integrated IoT platform converging different project status including R&D design, project construction, project operation and monitoring and post-project service, and empowering the pre-sales, design, development and operation capabilities of the IoT for all specialised branches. It enables quick connection of devices and easy setting of scenarios; builds component and module market to support rapid development; fully integrates equipment management and operation monitoring; aggregates internal and external ecology to expand AI, BI and digital twin capabilities as well as support the quick implementation for projects. The CCS IoT has accumulated 3500+ device protocols, 100+ scenario modules, 300+ AI, BI and digital twin capabilities components; launches SaaS services, component-based deployment, all-in-one machines and other product forms and derivative hardware products, and continues to provide IoT project supporting services for the Group.
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Blockchain

Based on the principles of self-research, independence and controllability, “China Comservice Blockchain Platform” provides a cloud-native blockchain BaaS trusted service network and application support platform based on the core technology foundation of high performance, scalability, high availability, easy operation and maintenance, and software and hardware integration, to build a trusted value interconnection. Certified as “Trusted Blockchain” by China Academy of Information and Communications Technology, the core products help enterprises to dig deeper into the value of blockchain empowerment from their actual needs, support the implementation of scenarios such as finance, government affairs, public inspection and law, health care, emergency management, cultural tourism, dual carbon and other applications, and derive flagship products such as blockchain + first examination and then issuance, blockchain + tax bill commissioning and collection, blockchain + supply chain finance, blockchain + carbon asset trading, blockchain + IoT, etc. We support the digital transformation of government and enterprises customers as well as promote the “blockchain+” industry integration and serves the real economy.

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Maintenance
Cloud

Maintenance Cloud builds a digital transformation platform for the maintenance profession, helping maintenance innovation and expansion. The digitalization of maintenance capabilities are shown externally; Creates a supply and demand square to realize business matching; The whole process connection of the general agent/territory business to realize the end-to-end transparent management of projects; Innovation of typical maintenance scenarios (safety production, hidden risk management, vehicle monitoring) for quick promotion of special work task.



MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

OVERVIEW

In 2022, by adhering to its overall roadmap of “value-driven, seeking steady yet progressive growth and high-quality development” and positioning itself as a “New Generation Integrated Smart Service Provider”, the Group overcame multiple difficulties and seized the opportunities brought by digital economy, digital information infrastructure construction and industrial digitalization, thus remaining robust in its operating performance. Total revenues for the year amounted to RMB140,746 million, representing an increase of 5.0% as compared to 2021. Profit attributable to the equity shareholders of the Company was RMB3,358 million, representing an increase of 6.4% as compared to 2021, with basic earnings per share amounted to RMB0.485. Free cash flow was RMB4,353 million with cash conversion ratio⁸ being 146.2%, which continued to remain at a healthy and relatively high level.

TOTAL REVENUES

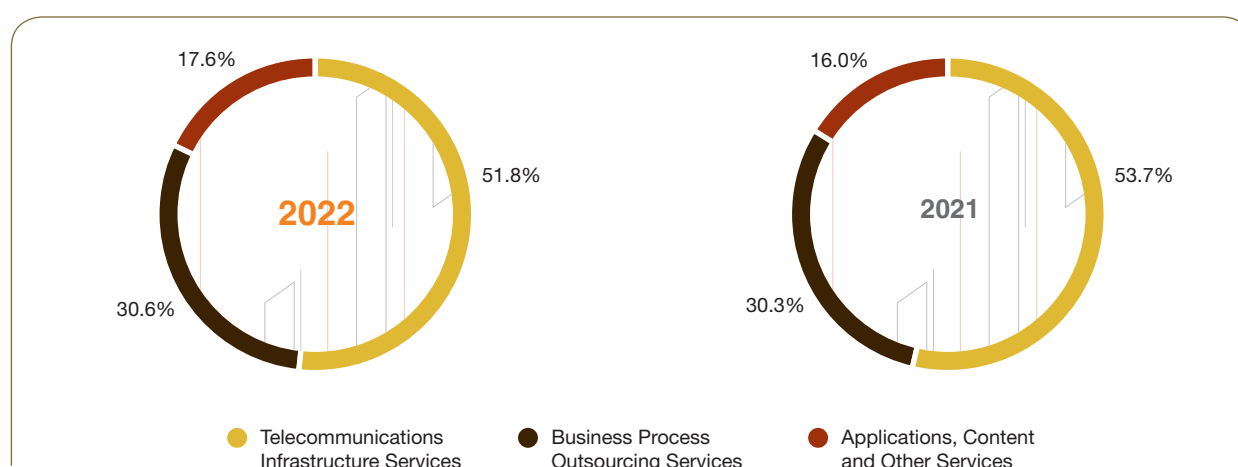
The Group's total revenues in 2022 amounted to RMB140,746 million, representing an increase of 5.0% as compared to 2021. From the business perspective, the revenue from telecommunications infrastructure (“TIS”) services was RMB72,907 million, representing a year-on-year growth of 1.4%; the revenue from business process outsourcing (“BPO”) services was RMB43,072 million, representing a year-on-year increase of 6.0%; the revenue from applications, content and other (“ACO”) services was RMB24,767 million, representing a year-on-year growth of 15.3%. In 2022, the Group seized the opportunities arising from 5G, New Infrastructure and industrial digitalization while enhancing the integrated comprehensive smart service capabilities, thus maintaining the continuous and steady growth of the TIS services. The Group further consolidated its resources and promoted specialized operations, resulting in favourable growth in BPO services that possess attributes such as strong customer loyalty and short cash conversion cycle. Meanwhile, the Group continuously increased investment in technology research, consolidated the capabilities on its research and development as well as product development, and seized opportunities arising from digital transformation of enterprises and informatization construction of emergency management, smart city upgrade, etc. These efforts stimulated the growth of its businesses such as system integration and software development, making the ACO services continue to be the fastest-growing business segment.

From the market perspective, the revenue from the domestic non-operator market amounted to RMB60,583 million, representing a year-on-year increase of 5.5%. Revenue from the domestic telecommunications operator market amounted to RMB77,165 million, representing a year-on-year increase of 4.6%; revenue from the overseas market amounted to RMB2,998 million, representing a year-on-year increase of 9.3%. The Group kept abreast of the trend brought by the transformation from industrial digitalization, seized the development opportunities of the digital transformation across industries and focused on key aspects such as digital infrastructure, smart city, green and low-carbon, emergency management and security, etc. Through continuously forging core capabilities and platforms, leveraging the advantage of integrated service capabilities and striving to expand high-value businesses, the Group achieved high-quality business development and continuous optimization of revenue structure in domestic non-operator market. Meanwhile, the Group seized new opportunities of industrial digitalization, 5G and data center construction, and effectively implemented the development strategy of “CAPEX + OPEX + Smart Applications” in the domestic telecommunications operator market, further developed the traditional CAPEX businesses, endeavored to raise the OPEX market share, took initiative to integrate itself into the whole process of operators' transformation and actively participated in the expansion of 5G industry application, operators' industrial digitalization, network information security and other businesses. The above measures stabilized the fundamentals of the Group's business from the domestic telecommunications operators, allowing such market to continue to maintain relatively stable revenue growth after the 5G investment of domestic telecommunications operators reached its peak, and making such market the main driver for business growth during the year.

⁸ Cash conversion ratio = net cash generated from operating activities/profit attributable to equity shareholders of the Company

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

BUSINESS REVENUE MIX



The following table sets forth a breakdown of our total revenues for 2021 and 2022, together with their respective changes:

	2022 RMB'000	2021 RMB'000	Change
Telecommunications Infrastructure Services			
Design services	9,621,129	10,521,239	-8.6%
Construction services	59,231,390	57,310,463	3.4%
Project supervision and management services	4,053,998	4,057,546	-0.1%
	72,906,517	71,889,248	1.4%
Business Process Outsourcing Services			
Management of infrastructure for information technology (Network Maintenance)	18,157,716	16,677,957	8.9%
General facilities management (Property Management)	7,740,594	7,127,497	8.6%
Supply chain	12,848,890	11,963,560	7.4%
Sub-total of Core BPO Services	38,747,200	35,769,014	8.3%
Products distribution	4,325,246	4,854,569	-10.9%
	43,072,446	40,623,583	6.0%
Applications, Content and Other Services			
System integration	15,210,749	13,278,131	14.6%
Software development and system support	4,781,207	3,634,339	31.6%
Value added services	2,553,557	2,386,280	7.0%
Others	2,221,279	2,179,736	1.9%
	24,766,792	21,478,486	15.3%
Total	140,745,755	133,991,317	5.0%

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

Telecommunications Infrastructure Services

In 2022, the Group's revenue from TIS services amounted to RMB72,907 million, representing an increase of 1.4% as compared to RMB71,889 million in 2021. TIS services was the primary source of revenue of the Group and accounted for 51.8% of the total revenues, representing a decrease of 1.9 percentage points from 53.7% in 2021. As to the customer structure of the TIS services, the Group's TIS revenue from domestic telecommunications operators amounted to RMB38,913 million and accounted for 53.4% of the total TIS revenues, representing a decrease of 1.5 percentage points from 2021. The aggregate TIS revenues from domestic non-operator customers and overseas customers amounted to RMB33,994 million and accounted for 46.6% of the total TIS revenues, representing an increase of 1.5 percentage points from 2021.

In 2022, the aggregate TIS revenues from domestic non-operator customers and overseas customers increased by 4.8% over 2021, in which the TIS revenue from domestic non-operator customers recorded a year-on-year growth of 4.2%, the TIS revenue from overseas customers recorded a year-on-year growth of 13.4%. As a result of the further implementation of Digital China Strategy, the acceleration in the construction of digital information infrastructure and the prosperous development of industrial digitalization, the Group embraced new growth opportunities in the domestic non-operator market and overseas market. The Group's TIS revenue from domestic telecommunications operator customers decreased by 1.4% as compared to 2021. Meanwhile, the Group maintained the market leading position by fully supporting the business demand of domestic telecommunications operator customers and supporting the construction of 5G networks and data centers in China. As domestic telecommunications operators continue to accelerate their digital transformation, increase their investment in new infrastructure such as data centers with a view to accelerating the transformation of cloud-network integration, the Group will further integrate itself into the ecosystem of operators and enhance its product and service capabilities, so as to cater for the integrated network construction services demand of domestic telecommunications operators and continue to maintain the stable development of business from domestic telecommunications operators.

Business Process Outsourcing Services

In 2022, the Group's revenue from BPO services amounted to RMB43,072 million, representing an increase of 6.0% as compared to RMB40,624 million in 2021, accounting for 30.6% of our total revenues, an increase of 0.3 percentage point as compared to 30.3% in 2021. In terms of customer structure of the BPO services, the BPO revenue from domestic telecommunications operators amounted to RMB27,919 million, representing an increase of 7.3% over 2021, and accounting for 64.8% of the total BPO revenues, representing an increase of 0.8 percentage point from 2021. The aggregate BPO revenues from the domestic non-operator customers and overseas customers amounted to RMB15,153 million, representing an increase of 3.7% over 2021, and accounting for 35.2% of the total BPO revenues, representing a decrease of 0.8 percentage point over 2021.

In 2022, among each of the businesses under the Group's BPO services, leveraging its "Maintenance Cloud" professional maintenance digital transformation platform, the revenue from the Network Maintenance business amounted to RMB18,158 million, representing an increase of 8.9% as compared to 2021. The Group set up China Comservice Smart Property Development Co., Ltd., to promote the optimization and consolidation of property management and enhance the capacity of synergistic operation while the revenue from property management business amounted to RMB7,740 million, representing an increase of 8.6% as compared to 2021. Revenue from the supply chain business amounted to RMB12,849 million, representing an increase of 7.4% as compared to 2021. The Group focused on the upstream and downstream customers, continuously leveraged its advantages in full-process and network-wide synergistic operation in supply chain to provide integrated and full life cycle supply chain services to domestic telecommunications operators, government and enterprise customers. In addition, revenue from the products distribution business amounted to RMB4,325 million, representing a decrease of 10.9% as compared to 2021, which was mainly due to the fact that the Group continued to adhere to high-quality development and proactively controlled the business of products distribution with low-efficiency.

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

Applications, Content and Other Services

In 2022, the Group's revenue from ACO services amounted to RMB24,767 million, representing an increase of 15.3% as compared to RMB21,478 million in 2021, making it the fastest-growing business segment and the main driver for the growth of total revenues for the year. The revenue from ACO services accounted for 17.6% of total revenues, representing an increase of 1.6 percentage points from 16.0% in 2021, and this proportion has been increasing consistently for several years. Among which, the system integration business recorded revenue of RMB15,211 million, representing an increase of 14.6% as compared to 2021, being the largest contributor to the growth of the total revenues. In addition, software development and systems support was the fastest growing segment of the Company's overall revenue, representing an increase of 31.6% as compared to 2021. In terms of the customer structure of ACO services, the Group's ACO revenue from domestic telecommunications operators amounted to RMB10,333 million and accounted for 41.7% of the total ACO revenues, representing an increase of 2.9 percentage points as compared to 2021. Aggregate ACO revenues from domestic non-operator customers and overseas customers amounted to RMB14,434 million, accounting for 58.3% of the total ACO revenues, representing a decrease of 2.9 percentage points over 2021.

In 2022, the Group's ACO revenue from domestic telecommunications operator customers and domestic non-operator customers grew rapidly by 23.9% and 10.7% respectively as compared with 2021. The growth was mainly attributable to the Group's efforts in leveraging its capabilities and strength in integrated services, system integration and software development, further expanding the ecological cooperation scale, and seizing the opportunities of digital economy, industrial digitalization and other aspects in China. By utilizing its proprietary core platforms and leading smart product series, the Group effectively satisfied the digitalization demand of its customers through vigorously expanding the businesses including 5G, data centers, smart city, transportation, electricity and emergency management, etc.

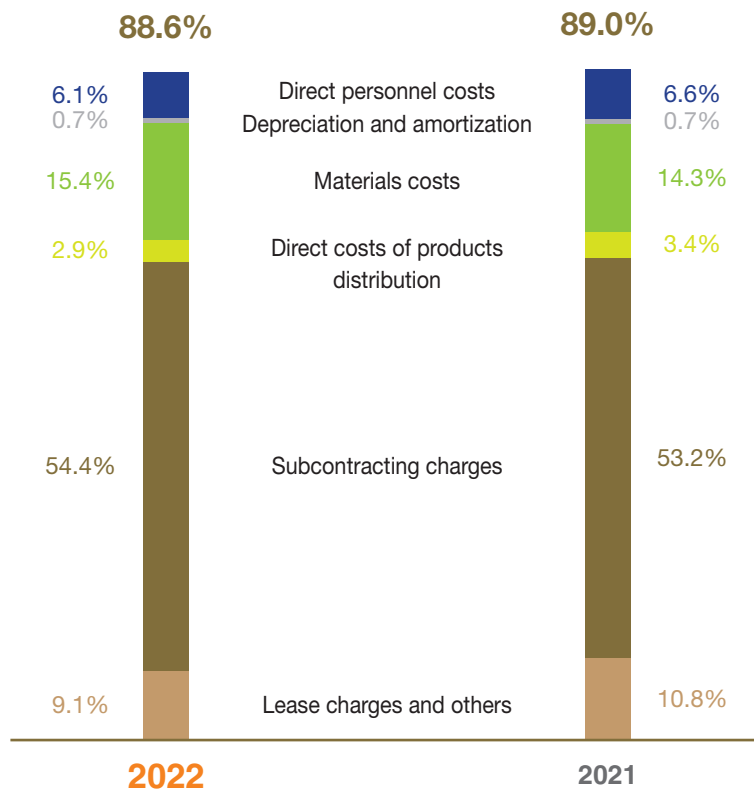
COST OF REVENUES

The Group's cost of revenues in 2022 amounted to RMB124,765 million, representing an increase of 4.7% from 2021 and accounting for 88.6% of the total revenues.

The following table sets out a breakdown of the Group's cost of revenues in 2021 and 2022 and their respective changes:

	2022 RMB'000	2021 RMB'000	Change
Direct personnel costs	8,558,051	8,804,676	-2.8%
Depreciation and amortization	960,995	908,323	5.8%
Materials costs	21,657,339	19,166,225	13.0%
Direct costs of products distribution	4,065,197	4,614,143	-11.9%
Subcontracting charges	76,546,469	71,239,853	7.4%
Lease charges and others	12,977,161	14,473,679	-10.3%
Total cost of revenues	124,765,212	119,206,899	4.7%

COST OF REVENUES AS A % OF TOTAL REVENUES

**Direct Personnel Costs**

In 2022, direct personnel costs amounted to RMB8,558 million, representing a decrease of 2.8% from RMB8,805 million in 2021. Direct personnel costs accounted for 6.1% of our total revenues, representing a decrease of 0.5 percentage point from 2021. The Group kept a reasonable control over its total headcount, continued to optimize the employee structure and strictly controlled staff costs, which resulted in the continuous decrease of the proportion of direct personnel costs to total revenues.

Depreciation and Amortisation

In 2022, depreciation and amortisation amounted to RMB961 million, representing an increase of 5.8% from RMB908 million in 2021. Depreciation and amortisation cost accounted for 0.7% of our total revenues.

Materials Costs

In 2022, materials costs amounted to RMB21,657 million, representing an increase of 13.0% as compared to RMB19,166 million in 2021. Materials costs accounted for 15.4% of our total revenues, representing an increase of 1.1 percentage points from 2021. The increase was because the Group optimized its business model and undertook major projects in general contracting model proactively. In addition, the fast development of system integration business, which involved relatively more materials, also drove up materials costs. The Group further strengthened the management of general contracting projects and enhanced materials cost control by establishing an internal procurement system and carrying out centralized procurement.

Direct Costs of Products Distribution

In 2022, the direct costs of products distribution amounted to RMB4,065 million, representing a decrease of 11.9% as compared to RMB4,614 million in 2021. Direct costs of products distribution accounted for 2.9% of our total revenues, representing a decrease of 0.5 percentage point over 2021. The decrease of direct costs of products distribution was mainly attributable to the Group's initiative to control certain products distribution business with low operation efficiency.

Subcontracting Charges

In 2022, subcontracting charges amounted to RMB76,546 million, representing an increase of 7.4% as compared to RMB71,240 million in 2021. Subcontracting charges accounted for 54.4% of our total revenues, representing an increase of 1.2 percentage points from 2021. The Group continued its transformation towards a management and technology-intensive business model. It focused on the high-end businesses and increased its subcontracting of the low-end businesses. In addition, there was more demand for specialized subcontracting as the Group undertook more general contracting projects in the domestic non-operator market during the reporting period. The Group will continue to strengthen and regulate the management over subcontracting, with a view to maintaining the growth of subcontracting charges at a relatively reasonable level.

Lease Charges and Others

In 2022, lease charges and others were RMB12,978 million, representing a decrease of 10.3% over RMB14,474 million in 2021. Lease charges and others accounted for 9.1% of our total revenues, representing a decrease of 1.7 percentage points from 2021.

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

GROSS PROFIT

In 2022, the Group recorded gross profit of RMB15,981 million, representing an increase of 8.1% over RMB14,784 million in 2021. The Group's gross profit margin in 2022 was 11.4%, representing an increase of 0.4 percentage point from 11.0% in 2021, and the gross profit margin has stabilized and rebounded. During the year, the Group focused on improving quality and efficiency while balancing its development scale, and guided the Group's subsidiaries to strictly select and develop high-margin projects through appraisal. At the same time, the Group continuously strengthened project management and cost control and strived to enhance the value creation capability of its business. As a result of the above measures, gross profit margin reversed the declining trend for more than a decade and achieved significant improvement. With the Group's deepening deployment in digital economy, New Infrastructure and industrial digitalization areas, it is expected that the proportion of high-value businesses will gradually increase and thereby driving the Group's overall gross profit margin.

SELLING, GENERAL AND ADMINISTRATIVE EXPENSES

In 2022, the selling, general and administrative expenses of the Group were RMB13,960 million, representing an increase of 7.8% as compared to RMB12,952 million in 2021. The selling, general and administrative expenses accounted for 9.9% of our total revenues, representing an increase of 0.2 percentage point from 2021. During the year, the Group proactively increased the investment in technology research. In the selling, general and administrative expenses, the research and development costs were RMB4,952 million, representing an increase of 17.0% as compared to RMB4,233 million in 2021, and accounted for 3.5% of our total revenues, representing an increase of 0.3 percentage point from 2021.

FINANCE COSTS

In 2022, the finance costs of the Group were RMB91 million, representing an increase of 15.7% as compared to RMB79 million in 2021. The increase in finance costs was mainly due to the increase in interest expenses as a result of the growth in short-term borrowings required by certain member companies of the Group to carry out their business.

INCOME TAX

In 2022, the income tax of the Group was RMB356 million and its effective tax rate was 9.3%, representing a decrease of 1.7 percentage points from 11.0% in 2021. The decrease in the Group's effective tax rate and the difference between such effective tax rate and the statutory tax rate was mainly due to the increased investment in research and development by the Group. In accordance with the relevant national policies, the Group enjoyed more preferential income tax rate treatments as a high-technology enterprise and the preferential policy of tax deduction before income tax for research and development expenses. In 2022, certain subsidiaries of the Group that fell under the scope of high-technology enterprises were entitled to a preferential income tax rate of 15%. Certain enterprises in Western China benefited from the preferential policies for Western Development Program. Other than that, the Company and other domestic subsidiaries of the Group were mainly subject to an income tax rate of 25%. The overseas subsidiaries of the Group were subject to different tax rates in various countries.

PROFIT ATTRIBUTABLE TO EQUITY SHAREHOLDERS OF THE COMPANY AND BASIC EARNINGS PER SHARE

In 2022, profit attributable to equity shareholders of the Company was RMB3,358 million, representing an increase of 6.4% over RMB3,157 million in 2021. Profit attributable to equity shareholders of the Company accounted for 2.4% of our total revenues, which maintained overall stability while showing improvement as compared to 2021. Basic earnings per share of the Company were RMB0.485 (2021: RMB0.456).

CAPITAL EXPENDITURE

The Group implements stringent budget management over capital expenditure and makes adjustment according to changes in market condition. In 2022, capital expenditure of the Group amounted to RMB921 million, representing a decrease of 14.2% from RMB1,074 million in 2021. The capital expenditure in 2022 accounted for 0.7% of the total revenues, representing a decrease of 0.1 percentage point from 2021. The Group's capital expenditure included the purchase of production equipment and tools, instrumentation, manufacture and office buildings, intangible assets and other operating assets.

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

CASH FLOW

The Group recorded a net cash inflow of RMB875 million in 2022, representing an increase of RMB667 million from RMB208 million in 2021. As at the end of 2022, the balance of cash and cash equivalents of the Group amounted to RMB22,085 million, of which 97.1% was denominated in Renminbi.

The following table sets out our cash flow positions in 2021 and 2022, respectively:

	2022 RMB'000	2021 RMB'000
Net cash generated from operating activities	4,908,283	4,505,957
Net cash used in investing activities	(2,289,201)	(3,669,549)
Net cash used in financing activities	(1,743,877)	(628,351)
Net increase in cash and cash equivalents	875,205	208,057

In 2022, net cash generated from operating activities of the Group was RMB4,908 million, representing an increase of RMB402 million from RMB4,506 million in 2021. The increase in operating cash flow was mainly due to the Group's persistence in value-driven approach, strengthening the integrated management of cash flow and carrying out the clearing and settlement of accounts receivable while developing its businesses.

In 2022, net cash used in investing activities of the Group was RMB2,289 million, representing a decrease of RMB1,381 million from RMB3,670 million in 2021. The decrease was mainly due to the reduction in the purchase of short-term banking wealth management products and the bank structured deposits after the Group's coordination and arrangement of its funds.

In 2022, net cash used in financing activities of the Group was RMB1,744 million, representing an increase of RMB1,116 million from RMB628 million in 2021. The increase was mainly because China Comservice Supply Chain Management Company Ltd. (subsidiary of the Group) introduced strategic investors with the capital injection of RMB900 million from minority shareholders in 2021.

WORKING CAPITAL

As at the end of 2022, the Group's working capital (i.e. current assets net of current liabilities) was RMB17,606 million, representing a decrease of RMB3,356 million from RMB20,962 million as at the end of 2021. The decrease in working capital was mainly due to the Group's strengthening of overall management of working capital to support project operation.

ASSETS AND LIABILITIES

The Group continued to maintain its solid financial position. As at the end of 2022, the Group's total assets was RMB110,264 million, representing an increase of RMB10,236 million from RMB100,028 million as at the end of 2021; and total liabilities was RMB68,641 million, representing an increase of RMB8,223 million from RMB60,418 million as at the end of 2021. The liabilities-to-assets ratio was 62.3%, representing an increase of 1.9 percentage points from 60.4% as at the end of 2021.

MANAGEMENT DISCUSSION AND ANALYSIS OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS

INDEBTEDNESS

As at the end of 2022, total indebtedness of the Group was RMB881 million, representing an increase of RMB68 million from RMB813 million as at the end of 2021. Indebtedness of the Group was mainly denominated in US dollar, of which Renminbi loan accounted for 10.6% and US dollar loan accounted for 79.6%; and of which 39.0% was the loans with a fixed interest rate and 61.0% was those with a floating interest rate.

As at the end of 2022, our gearing ratio⁹ was 2.1%, which was basically the same as at the end of 2021.

CONTRACTUAL OBLIGATIONS

The following table sets out our contractual commitments as at 31 December 2022:

	Total	2023	2024	2025	2026	2027
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	and after RMB'000
Short-term debt	752,001	752,001	–	–	–	–
Long-term debt	129,120	–	20,058	20,058	20,058	68,946
Lease commitments	137,293	53,847	32,427	19,946	14,592	16,481
Contracted for but not provided capital commitments	217,583	217,583	–	–	–	–
Total of contractual obligations	1,235,997	1,023,431	52,485	40,004	34,650	85,427

EXCHANGE RATE

Most of the Group's revenues and expenses are denominated in Renminbi. As at the end of 2022, the balance of the Group's cash and cash equivalents in foreign currencies accounted for 2.9% of the balance of its total cash and cash equivalents, and 1.3% and 0.2% of the balance of its total cash and cash equivalents were denominated in US dollars and Hong Kong dollars, respectively.

⁹ Gearing ratio represents total interest-bearing debts at the end of the financial year divided by the sum of equity attributable to equity shareholders of the Company and interest-bearing debts.

PROFILES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

EXECUTIVE DIRECTORS



Mr. LIU Guiqing

aged 56, is the Chairman and an Executive Director of our Company. Mr. Liu is a professor level senior engineer with a doctorate degree in engineering science from National University of Defense Technology. He currently serves as a Director of China Telecommunications Corporation, an Executive Director and Executive Vice President of China Telecom Corporation Limited. Mr. Liu also serves as a Non-Executive Director of China Tower Corporation Limited, a Deputy Director General of China Institute of Communications and a Director of Global System for Mobile Communications Association (GSMA). Mr. Liu previously served as Deputy General Manager and General Manager of China Unicom Hunan provincial branch, the General Manager of China Unicom Jiangsu provincial branch and a Vice President and General Counsel of China Telecommunications Corporation. Mr. Liu has over 30 years of extensive experience in management and the telecommunications industry.

aged 51, is the President and Executive Director of our Company, responsible for our daily operations and management. Mr. Yan also currently holds positions in the following subsidiaries of the Group, including the Chairman of China Communications Services International Limited, a Director of China Comservice Smart Property Development Co., Ltd. and the Chairman of China Comservice Software Tech. Co., Ltd. Mr. Yan is also a Director of New Guomai Digital Culture Co., Ltd (formerly known as Besttone Holding Co., Ltd). Mr. Yan is a senior economist and graduated from Shandong University in 2002 with an MBA degree. Prior to his appointment as the President of our Company, Mr. Yan served as the Executive Vice President of the Company. In addition, Mr. Yan also served as a Director and the General Manager of Shanghai Communications Services Company Limited, a subsidiary of the Group, the Deputy General Manager and Chief Financial Officer of China International Telecommunication Construction Corporation, a subsidiary of the Group, and the Deputy General Manager of the Sideline Industrial Management Department of China Telecommunications Corporation. Prior to joining the Company, Mr. Yan served as the General Manager of Shandong Luxin Property Investment and Development Co., Ltd. Mr. Yan has extensive experience in corporate operations, enterprise management, financial management and the operations of a listed company.



Mr. YAN Dong



Ms. ZHANG Xu

aged 53, is an Executive Director, Executive Vice President and Chief Financial Officer of our Company. Ms. Zhang graduated from Beijing University of Posts and Telecommunications in 1992 with a bachelor's degree in posts and telecommunications management engineering, and she also received a master's degree in international commerce from The University of New South Wales in 2003. Prior to joining the Company, Ms. Zhang was Divisional Director of General Finance Division of China Telecommunications Corporation's Finance Department. Prior to that, Ms. Zhang served as Divisional Director of Treasury Division of China Telecommunications Corporation's Finance Department, a Director and Vice President of China Telecom (Hong Kong) International Limited and Divisional Director of Headquarter Finance and Accounting Division of China Telecommunications Corporation's Finance Department. Ms. Zhang has over 20 years of experience in telecommunications industry and financial management.

NON-EXECUTIVE DIRECTORS



Mr. GAO Tongqing

aged 59, is a Non-Executive Director of our Company. Mr. Gao is currently a Vice President of China Mobile Communications Group Co., Ltd., a Vice President of the China Mobile Limited, a Director and Vice President of China Mobile Communication Co., Ltd., and principally in charge of legal and regulatory matters, technology R&D, international business, investment and others. Mr. Gao is also a Non-Executive Director of China Tower Corporation Limited and a Director of True Corporation. Mr. Gao graduated from the Changchun Institute of Posts and Telecommunications with a major in telecommunications engineering and received a doctorate degree in business administration from the Hong Kong Polytechnic University. Mr. Gao previously served as Deputy Director General of Xinjiang Uygur Autonomous Region Posts and Telecommunications Administration, Deputy General Manager and General Manager of Xinjiang Uygur Autonomous Region Telecom Company, General Manager of China Telecom Jiangsu branch, Vice President of China Telecommunications Corporation, and Executive Director and Executive Vice President of China Telecom Corporation Limited. Mr. Gao has extensive experience in management and the telecommunications industry.

aged 53, is a Non-Executive Director of our Company. Mr. Huang is currently the Chairman of State Grid Liaoning Electric Power Supply Co., Ltd.. Mr. Huang graduated from Xi'an Jiaotong University with a bachelor's degree in Power System and its Automation, and obtained a master's degree from China Electric Power Research Institute and a doctorate degree from Southwest Jiaotong University. Mr. Huang is a professor-level senior engineer. Mr. Huang previously served as the Chairman of State Grid Information & Telecommunication Technology Group Co., Ltd., the Deputy Director and Chief Engineer of Luzhou Power Bureau of Sichuan Electric Power Company, the Director of Bazhong Power Bureau of Sichuan Electric Power Company, the Divisional Director of Planning Division II of Development & Planning Department of State Grid Corporation of China, the Deputy General Manager of Xinjiang Electric Power Company of State Grid and General Manager of Urumqi Power Supply Company, the Director and General Manager of Ningxia Electric Power Company of State Grid, as well as the General Manager of State Grid Information & Telecommunication Technology Company and Head of Communication Network Construction Preparatory Work Team of State Grid Corporation of China.



Mr. HUANG Zhen

INDEPENDENT NON-EXECUTIVE DIRECTORS



Mr. SIU Wai Keung, Francis

aged 69, is an Independent Non-Executive Director of our Company. Mr. Siu is currently an Independent Non-Executive Director of CITIC Limited, BHG Retail Trust Management Pte. Ltd. and Morgan Stanley Securities (China) Co., Ltd., as well as the Non-Executive Director of the Financial Reporting Council. Mr. Siu graduated from the University of Sheffield, United Kingdom, with a Bachelor of Arts in Economics and Accounting and Financial Management in 1979. He is also a fellow member of the Institute of Chartered Accountants in England and Wales, and a fellow member of the Hong Kong Institute of Certified Public Accountants. He joined KPMG Manchester, UK in 1979, returned to Hong Kong in 1986 and became a partner of KPMG Hong Kong in 1993. Mr. Siu used to serve as an Independent Non-Executive Director of CGN Power Co., Limited, GuocoLand Limited, Beijing Gao Hua Securities Company Limited and China International Capital Corporation Limited. He was also previously a Senior Partner of KPMG Shanghai Office, a Senior Partner of KPMG Beijing Office, as well as a Senior Partner of Northern Region, KPMG China. Mr. Siu has been in the accounting profession for over 30 years.

aged 68, is an Independent Non-Executive Director of our Company. Mr. Lv graduated from Beijing University of Posts and Telecommunications with a master's degree, and obtained a doctorate degree from Kyoto University of Japan. Mr. Lv is currently an Independent Non-executive Director of Beijing Digital Telecom Co., Ltd., and an Independent Director of China Satellite Communications Co., Ltd. Mr. Lv is also a member of the Technology Committee and a member of Telecommunication Economics Expert Committee of the Ministry of Industry and Information Technology, a member of the Technology Committee of China Post Group Corporation, a Standing Director of the International Telecommunications Society and a Standing Vice Chairman of China Information Economics Society. Mr. Lv used to serve as an Independent Non-executive Director of Global Link Communications Holdings Limited, an Independent Director of Gohigh Data Networks Technology Co., Ltd., BOE Technology Group Co., Ltd., China United Network Communications Limited and Shenzhen Aisidi Co., Ltd, and also a consultant for the business management and strategic development in many telecommunication enterprises and provide advice and solutions to their development and reform. Mr. Lv has a deep insight in the development of China's communication industry and the management of telecommunication enterprises with extensive management experience.



Mr. LV Tingjie

PROFILES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

**Mr. WANG Qi**

aged 65, is an Independent Non-Executive Director of our Company. Mr. Wang holds a master's degree in management engineering from Tsinghua University, and he also holds a professional and technical position as a CAS researcher. From 2010 to 2018, Mr. Wang was a Director (until August 2014) and Deputy General Manager of Chinese Academy of Sciences Holdings Co, Ltd. From 2011 to 2020, Mr. Wang was also the Chairman and General Manager of Cash Capital (Beijing) Investment Management Co., Ltd, the Chairman of Beijing RSLaser Opto-Electronics Technology Co. Ltd., the Chairman of Hygon Information Technology Co., Ltd., a Director of China Science Publishing & Media Ltd. and a Supervisor of Legend Holdings Limited. Prior to that, Mr. Wang served as Vice President of Changchun Institute of Optics, Fine Mechanics and Physics, Chinese Academy of Sciences, and a Director and General Manager of Changchun UP Optotech Co., Ltd.; the General Manager and Director of Guangzhou Chemical Co., Ltd, Chinese Academy of Sciences. Mr. Wang has extensive experience in corporate management and capital operation.

aged 66, is an Independent Non-Executive Director of our Company. Mr. Wang holds a doctorate degree in law from Peking University and is a senior economist and enjoys special government allowance of the State Council. Mr. Wang is currently an External Director of Beijing Energy Holdings Co., Ltd., a member of the Expert Committee of the National Corporate Compliance Committee of China Council for the Promotion of International Trade, and is also an arbitrator for several arbitration committees, including the China International Economic and Trade Arbitration Commission. Mr. Wang was the General Counsel, Deputy General Counsel, and General Manager of the Legal Affairs Department of China Merchants Group Limited, and he has been engaged in enterprise legal consulting for many years. Mr. Wang was selected as the "Top Ten Outstanding Legal Counsel of State-owned Enterprises" by the State-owned Assets Supervision and Administration Commission of the State Council in 2006, awarded the "Top Ten Legal Counsel of China's Transportation Enterprises" by the Ministry of Transport of the PRC in 2007, and he was also awarded the "Outstanding Contribution Award for Ten Years of Enterprise Management" by the Ministry of Transport of the PRC in 2012. Mr. Wang has a solid theoretical foundation and practical experience in law and arbitration.

**Mr. WANG Chungge**

SUPERVISORS

Ms. YE Lichun

aged 52, is the Chairperson of our Supervisory Committee. Ms. Ye is currently the Vice President of the Audit Department of China Telecommunications Corporation and the Vice President of the Audit Department of China Telecom Corporation Limited. Ms. Ye graduated from the Shanghai University of Finance and Economics in 1999 with a master's degree in Accounting. Ms. Ye is a certified public accountant in PRC and a senior accountant. Ms. Ye previously worked as the Manager of Finance Department of Zhejiang Branch of China Telecom, the Vice President of China Telecom Global Limited, and the Vice President of International Business Department of China Telecom Corporation Limited. Ms. Ye has over 20 years of finance and audit experience in the telecommunications industry.

Ms. CAI Manli

aged 49, is a Supervisor of our Company. Ms. Cai is a Certified Public Accountant of the PRC and a Certified Tax Agent of the PRC. Ms. Cai obtained a bachelor's degree in economics from Renmin University of China in 1998 and obtained a master's degree in management from Central University of Finance and Economics in 2006. Ms. Cai is currently a Senior Advisor at Beijing King & Wood Mallesons, an External Supervisor of Sichuan Xinwang Bank Co., Ltd., as well as an Independent Director of Shanghai Flyco Electrical Appliance Co., Ltd., New Hope Liuhe Co., Ltd., Megvii Technology Limited, Guangzhou Xaircraft Technology Co., Ltd., and Allmed Medical Products Co., Ltd., and an Independent Non-Executive Director of ZTE Corporation. Ms. Cai previously served a Deputy Chief of the M&A Governance Office II and Chief of the M&A Governance Office I and the Leader of the Accounting and Evaluation Team at the Department for the Governance of Listed Companies at China Securities Regulatory Commission. Ms. Cai previously also acted as the General Manager of HEYI Rising Assets Management Co., Ltd., and was an Independent Director of SF Diamond Co., Ltd., Hubei Radio & Television Information Network Co., Ltd. and Beijing Yadi Media Information Group Co., Ltd. Ms. Cai is well versed in capital market operations and regulations and has extensive experience in consultation and equity investments relating to capital markets.

Ms. LIU Lian

aged 48, is an Employee Representative Supervisor of the Company. Ms. Liu is a Supervisor of the Leading Group Office of the Inspection Work of the Party Committee of the Company. Ms. Liu graduated from Southwest University of Science and Technology in 2004. Ms. Liu used to serve different positions with Mianyang Telecom Industry Group Co., Ltd of Sichuan Telecom Industry Group Corporation, including the Deputy Manager of Property Company, Deputy Manager of the Installation and Maintenance Department, Director of the Marketing and Operation Department and Deputy General Manager. She was also the Deputy General Manager, Chairman of the Labor Union and the General Manager of Mianyang Branch of Sichuan Communications Services Company Limited, the Deputy Chairman of the Labor Union, Director of the Party affairs Department and Employee Representative Supervisor of Sichuan Communications Services Company Limited. Ms. Liu has over 20 years of working experience in telecommunications industry.

MANAGEMENT

Mr. LIU Guiqing

(Please refer to the “Executive Directors” section)

Mr. YAN Dong

(Please refer to the “Executive Directors” section)

Ms. ZHANG Xu

(Please refer to the “Executive Directors” section)

Mr. LIANG Hongzhi

aged 47, is an Executive Vice President of our Company. Mr. Liang received a bachelor's degree in computer communications from Beijing University of Posts and Telecommunications in 1998 and received a master's degree in computer technology from Beijing University of Posts and Telecommunications in 2005. Prior to joining the Company, Mr. Liang was the Vice President of Government and Enterprise Customers Department of China Telecommunications Corporation. Mr. Liang previously also served as a Director of Government and Enterprise Customers Department of Liaoning Branch of China Telecom, the General Manager of Benxi Branch of China Telecom, and he also served as a Member of the Standing Committee in Liangshan Prefecture and a Deputy Head of the People's Government of Liangshan Prefecture (took a temporary post and received on-the-job training). Mr. Liang has over 20 years of management experience in the telecommunications industry.

Mr. LIANG Shiping

aged 53, is an Executive Vice President of our Company. Mr. Liang is also the Director and General Manager of China Communications Services International Limited, a subsidiary of the Group, and a Director and the Chairman of China Comservice Smart Property Development Co., Ltd., a subsidiary of the Group. Mr. Liang joined the Company in August 2008 and served as Director of the Marketing Department of the Company. Mr. Liang received a bachelor's degree in Computer Engineering from the Computer Science Department of Jilin University in 1992 and master's degree in Computer Application from the Sixth Research Institute of the Ministry of Machinery and Electronics Industry in 1996. Prior to joining the Company, Mr. Liang served at the Data Communication Bureau of the Ministry of Posts and Telecommunications, the Multimedia Bureau of the Telecom Administration of the Ministry of Posts and Telecommunications and the Technology Development Department of China Telecom Data Communication Bureau. From October 2000 to August 2008, Mr. Liang served as a Divisional Director of the Planning Division of the Data Communication Bureau and the Application Development Division of the Corporate Informatization Department of China Telecommunications Corporation. Mr. Liang has over 20 years of experience in telecommunications and IT industry.



PROFILES OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

Mr. ZHAO Xu

aged 48, is an Executive Vice President of our Company. Mr. Zhao also currently serves as a Director and General Manager of Zhejiang Communications Services Holdings Group Company Limited, a wholly-owned subsidiary of the Group. Mr. Zhao joined the Company in September 2007 and used to serve as Divisional Director of the Business Innovation Division of the Company's Domestic Non-telecom Operator Business Department. Mr. Zhao received a master's degree in Management Science and Engineering from the Beijing University of Posts and Telecommunications in 2000, and Mr. Zhao is also a CFA charterholder. Prior to joining the Company, Mr. Zhao served in the Finance Department and the Office of the Board of China Telecommunications Corporation. Mr. Zhao has over 20 years of experience in the telecommunications and IT industry.

Mr. LI Dong

aged 43, a member of the senior management of the Company. Mr. Li is an intermediate economist and received a bachelor's degree in Labour Economics from Renmin University of China in 2002, and a master's degree in Public Administration from Peking University in 2011. Prior to joining the Company, Mr. Li served as an Director of Discipline Inspection and Supervision Office of China Telecommunications Corporation. Prior to that, Mr. Li worked in the Human Resources Department and Corporate Affairs Department of China United Network Communications Corporation Limited, the General Affairs Office and Discipline Inspection and Supervision Department of China Telecommunications Corporation. Mr. Li has near 20 years of management experience in the telecommunications industry in China.

COMPANY SECRETARY

Mr. CHUNG Wai Cheung, Terence

aged 49, is the Company Secretary and Deputy Chief Financial Officer of our Company. Mr. Chung joined the Company in October 2006. Mr. Chung graduated from Melbourne University, Australia in 1996, with a bachelor of commerce degree and received a master's degree in business administration from the Australian Graduate School of Management in 2005. Mr. Chung is a member of the Hong Kong Institute of Certified Public Accountants and the CPA Australia. Mr. Chung previously worked in an international accounting firm, China Mobile Limited and China Telecom Corporation Limited, and has over 20 years of extensive experience in auditing, company secretary and financial management of listed companies.

REPORT OF THE DIRECTORS

The board of directors (the “Board”) of China Communications Services Corporation Limited (the “Company”) is pleased to present the Report of the Directors of the Company, together with the audited financial statements of the Company and its subsidiaries (the “Group”) prepared in accordance with International Financial Reporting Standards for the year ended 31 December 2022.

PRINCIPAL BUSINESSES

The Group is a leading service provider in the informatization sector in the PRC, positioned as “New Generation Integrated Smart Service Provider”, which provides integrated comprehensive smart solutions in the field of informatization and digitalization. We offer telecommunications infrastructure services, including design, construction and project supervision and management; business process outsourcing services, including management of infrastructure for information technology (“Network Maintenance”), general facilities management (“Property Management”), supply chain and products distribution; and applications, content and other services, including system integration, software development and system support, and value-added services. The major customers of the Group include domestic telecommunications operator customers, domestic non-telecom operator customers such as government agencies, industrial customers and small and medium enterprises, and overseas customers.

RESULTS

Results of the Group for the year ended 31 December 2022 and the financial position of the Group as at that date are set out in the audited financial statements on page 157 to page 239 in this annual report.

BUSINESS REVIEW

A fair review of the business, business outlook and the key financial performance indicators of the Group are provided in the “Chairman’s Statement”, “Business Overview” and “Management Discussion and Analysis of Financial Conditions and Results of Operations” of this annual report. Description of the principal risks and uncertainties faced by the Group is disclosed in this section. Particulars of important events affecting the Group that have occurred since the end of the financial year of 2022, if applicable, can also be found in the aforesaid sections.

In addition, more details regarding the Group’s performance in relation to environmental and social-related policies, an account of the Group’s relationships with its key stakeholders, as well as compliance with relevant laws and regulations which have a significant impact on the Group, are provided in the “Environmental, Social and Governance Report” of this annual report.

The above discussion forms part of this “Report of the Directors”.

DIVIDEND POLICY

The Company attaches great importance to the returns of shareholders. Taking into the consideration of the long-term interest and sustainable development of the Company, and with the support of the Group's profitability, the Company strives to maintain the continuity and stability of the dividend policy. The factors to be considered by the Company when formulating the dividend distribution plan are as follows:

1. current and expected operating results and cash flow performance;
2. future business development strategies and operating position, as well as future capital needs;
3. daily working capital needs;
4. expectations of shareholders and investors; and
5. other factors that the Board deems appropriate.

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 before proceeding with the distribution.

DIVIDENDS

The Board proposes a final dividend of RMB0.1939 per share (pre-tax) for the year ended 31 December 2022. The dividend proposal will be submitted for consideration at the annual general meeting to be held on 16 June 2023 (the "AGM").

Dividends will be denominated and declared in Renminbi. Dividends will be paid in Renminbi for domestic share shareholders and H share shareholders (including enterprises and individuals) who invest in the H shares of the Company listed on The Stock Exchange of Hong Kong Limited (the "Stock Exchange") through the Shanghai Stock Exchange or Shenzhen Stock Exchange (the "Southbound Trading") (the "Southbound Shareholders"), and dividends for H share shareholders other than the Southbound Shareholders will be paid in Hong Kong dollars. The relevant exchange rate will be the average of the mid-point rates of Renminbi to Hong Kong dollars as announced by the People's Bank of China for the week prior to the date of approval of declaration of dividends by the AGM. The record date for entitlement to the shareholders' rights and the relevant arrangements of dividend distribution for Southbound Shareholders are the same as those for the Company's H share shareholders. The proposed dividends are expected to be paid on or about Friday, 18 August 2023 upon approval at the AGM.

Further details in respect of the dividends and distribution by the Company are set out in note 14 of the audited financial statements on page 195 of this annual report.

For the overseas resident individual shareholders of the Company, pursuant to relevant laws and regulations including the Law of the People's Republic of China on Individual Income Tax, the Regulations for the Implementation of the Law of the People's Republic of China on Individual Income Tax, and the letter dated 28 June 2011 from the State Administration of Taxation to the Inland Revenue Department of Hong Kong, for individual H share shareholders receiving dividends who are Hong Kong or Macau residents or whose country of domicile is a country which has entered into a tax treaty with the PRC stipulating a dividend tax rate of 10%, the Company, as a withholding agent, is required to withhold and pay individual income tax at the rate of 10%. For individual H share shareholders receiving dividends whose country of domicile is a country which has entered into a tax treaty with the PRC stipulating a dividend tax rate lower than 10%, the Company will withhold the individual income tax at a tax rate of 10%. The Company can process applications on behalf of those shareholders to seek entitlement of the relevant agreed preferential treatments pursuant to relevant regulations, and upon approval by the tax authorities, the extra amount of tax withheld will be refunded. For individual H share shareholders receiving dividends whose country of domicile is a country which has entered into a tax treaty with the PRC stipulating a dividend tax rate higher than 10% but lower than 20%, the Company will withhold the individual income tax at the agreed-upon effective tax rate when distributing dividends and no application procedures will be necessary. For individual H share shareholders receiving dividends whose country of domicile is a country which has not entered into any tax treaty with the PRC or are under other situations, the Company will withhold the individual income tax at a tax rate of 20% when distributing dividends.

For the overseas non-resident enterprise shareholders of the Company (including HKSCC Nominees Limited, corporate nominees or trustees, or other organizations or entities that are considered non-resident enterprise shareholders), pursuant to the Law of the People's Republic of China on Enterprise Income Tax, the Regulations for the Implementation of the Law of the People's Republic of China on Enterprise Income Tax and relevant rules and regulations, as a withholding agent, the Company is required to withhold and pay the enterprise income tax at the tax rate of 10% on behalf of the overseas non-resident enterprise shareholders.

For the Southbound Shareholders of the Company, 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 Southbound Shareholders, will receive all dividends distributed by the Company and will distribute the dividends to the Southbound Shareholders through its depository and clearing system. According to the relevant provisions under the "Notice on Tax Policies for Shanghai-Hong Kong Stock Connect Pilot Programme (Cai Shui [2014] No. 81)" and "Notice on Tax Policies for Shenzhen-Hong Kong Stock Connect Pilot Programme (Cai Shui [2016] No. 127)", the Company shall withhold 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 Stock Exchange through the Southbound Trading. In respect of the dividends for the investment of Mainland securities investment funds investing in the H shares of the Company listed on Stock Exchange through the Southbound Trading, the tax levied on dividends derived from such investment shall be ascertained by reference to the rules applicable to the treatment of individual income tax. The Company is not required to withhold income tax on dividends derived by the Mainland enterprise investors under the Southbound Trading, and such enterprises shall report the income and make tax payment by themselves.

Should the H share shareholders of the Company have any doubt in relation to the aforesaid arrangements, they are recommended to consult their tax advisors for relevant tax impact in mainland China, Hong Kong and other countries (regions) on the possession and disposal of the H shares of the Company.

REPORT OF THE DIRECTORS

DIRECTORS OF THE COMPANY

The following table sets out information concerning the directors of the Company as at the date of this report:

Name	Position in the Company	Date of the first appointment
Liu Guiqing	Executive Director	17 June 2022
	Chairman	17 June 2022
Yan Dong	Executive Director	10 February 2023
	President	11 January 2023
Zhang Xu	Executive Director	13 December 2018
	Chief Financial Officer	14 November 2018
	Executive Vice President	14 November 2018
Gao Tongqing	Non-executive Director	15 June 2020
Huang Zhen	Non-executive Director	25 February 2022
Siu Wai Keung, Francis	Independent Non-executive Director	28 June 2012
Lv Tingjie	Independent Non-executive Director	26 June 2015
Wang Qi	Independent Non-executive Director	17 June 2022
Wang Chungue	Independent Non-executive Director	17 June 2022

On 30 May 2022, Mr. Mai Yanzhou resigned as a Non-executive Director of the Company. On 17 June 2022, the fifth session of the Board, except Mr. Wu Taishi and Mr. Liu Linfei who retired as Independent Non-executive Directors of the Company, were re-elected as directors of the sixth session of the Board at the annual general meeting of the Company held on that date, and Mr. Liu Guiqing was newly appointed as an Executive Director of the Company, Mr. Wang Qi and Mr. Wang Chungue were newly appointed as Independent Non-executive Directors of the Company. Mr. Liu Guiqing was elected as the Chairman of the Company at the Board meeting held on the same date.

On 11 January 2023, Mr. Huang Xiaoqing resigned as President of the Company and resigned as an Executive Director of the Company on 10 February 2023. On 11 January 2023, Mr. Yan Dong was appointed as the President of the Company and was appointed as an Executive Director of the Company on 10 February 2023.

The Company has received from each of the Independent Non-executive Directors, an annual confirmation of his independence pursuant to Rule 3.13 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules"). The Company considers that all of the Independent Non-executive Directors are independent.

SUPERVISORS OF THE COMPANY

The following table sets out information concerning the supervisors of the Company as at the date of this report:

Name	Position in the Company	Date of the first appointment
Ye Lichun	Chairperson of the Supervisory Committee	25 February 2022
Cai Manli	Independent Supervisor	17 June 2022
Liu Lian	Employee Representative Supervisor	17 June 2022

On 17 June 2022, Mr. Hai Liancheng, a Supervisor of the fifth session of the Supervisory Committee of the Company, retired as a Supervisor, Ms. Ye Lichun was re-elected as a Supervisor of the sixth session of the Supervisory Committee at the annual general meeting held on that date and was elected as the Chairperson of the Supervisory Committee at the Supervisory Committee meeting held on the same date, and Ms. Cai Manli was newly appointed by the shareholders of the Company as a Supervisor of the sixth session of the Supervisory Committee. On 17 June 2022, Mr. Si Jianfei resigned as an Employee Representative Supervisor of the Company, and on the same day, Ms. Liu Lian was newly appointed as the Employee Representative Supervisor of the sixth session of the Supervisory Committee upon election at the Employee Representative Meeting of the Company.

Profiles of directors, supervisors and senior management of the Company are set out in the “Profiles of Directors, Supervisors and Senior Management” section of this annual report.

SHARE CAPITAL

The Company was incorporated on 30 August 2006. In December 2006, by way of an initial public offering (the “IPO”), the Company issued 1,484,986,000 H shares with a nominal value of RMB1.00 each at a price of HK\$2.20 per share. At the same time, the promoters of the Company transferred 148,498,600 domestic state-owned shares with a nominal value of RMB1.00 each to the National Council for Social Security Fund of the PRC (the “NSSF”) and converted them into H shares on the basis of one domestic share to one H share. Immediately after the IPO, the registered capital of the Company amounted to RMB5,444,986,000, of which 1,633,484,600 H shares of the Company were listed and traded on the Stock Exchange.

On 9 April 2008, the Company announced the completion of placing a total of 359,365,600 H shares, including an issue of 326,696,000 new H shares and a placement of 32,669,600 H shares on behalf of NSSF upon conversion of the same number of existing domestic shares of the Company allocated to NSSF by China Telecommunications Corporation (“China Telecom”). After the completion of placing, the total issued shares of the Company increased to 5,771,682,000 shares, of which 1,992,850,200 shares were H shares.

As disclosed in the prospectus of the Company dated 27 November 2006, China Telecom entered into equity transfer arrangements with China Mobile Communications Corporation (now known as China Mobile Communications Group Co., Ltd. (“China Mobile”)) and China United Telecommunications Corporation (now known as China United Network Communications Group Company Limited (“China Unicom”)), respectively. Pursuant to the arrangements, China Telecom agreed to transfer 506,880,000 and 236,300,000 domestic shares to China Mobile and China Unicom, respectively. On 24 March 2009, the equity transfers were formally completed and became effective. On the same date, Guangdong Telecom Industry Group Corporation and Zhejiang Telecom Industry Corporation completed the transfers of 236,313,086 and 87,664,532 domestic shares, respectively, to China Telecom.

REPORT OF THE DIRECTORS

According to the equity transfer agreement between China Telecom and China National Postal and Telecommunications Appliances Corporation (now known as China National Postal and Telecommunications Appliances Co., Ltd.) on 28 May 2010, China Telecom agreed to transfer 108,899,720 domestic shares of the Company to China National Postal and Telecommunications Appliances Corporation. On 21 June 2011, the equity transfer was formally completed.

Pursuant to the resolutions passed at the extraordinary general meeting, H shareholders class meeting and the domestic shareholders class meeting of the Company held on 28 June 2011 and as approved by domestic and overseas regulatory authorities, the Company announced the launch of H share and domestic share rights issue plan of an aggregate of 1,154,336,400 new shares, including 398,570,040 H rights shares and 755,766,360 domestic rights shares on the basis of 2 rights shares for every 10 existing shares on 30 December 2011 at the price of HK\$3.19 per H rights share and RMB2.59 per domestic rights share, respectively. On 10 February 2012, dealings in the H rights shares commenced on the Stock Exchange. After completion of the rights issue, the total number of issued shares of the Company was increased to 6,926,018,400 shares, including 2,391,420,240 H shares and 4,534,598,160 domestic shares.

According to the share transfer agreement between China Telecom and State Grid Information & Telecommunication Technology Group Co., Ltd. on 25 June 2021, China Telecom agreed to transfer 166,000,000 domestic shares of the Company (representing 2.40% of the total issued share capital of the Company) to State Grid Information & Telecommunication Technology Group Co., Ltd. In November 2021, the share transfer had formally completed, and the Company made the relevant announcement on 26 November 2021. Upon the completion of the share transfer, the percentage of shareholding of China Telecom in the total issued share capital of the Company was adjusted from 51.39% to 48.99%.

As at 31 December 2022, the share capital of the Company was RMB6,926,018,400 divided into 6,926,018,400 shares with a nominal value of RMB1.00 each. The share capital of the Company was comprised of the following:

Shares	Number of shares	Approximate percentage of issued share capital (%)
Domestic shares (Total)	4,534,598,160	65.47
Domestic shares held by:		
China Telecommunications Corporation	3,393,362,496	48.99
China Mobile Communications Group Co., Ltd.	608,256,000	8.78
China United Network Communications Group Company Limited	236,300,000	3.41
State Grid Information & Telecommunication Technology Group Co., Ltd.	166,000,000	2.40
China National Postal and Telecommunications Appliances Co., Ltd.	130,679,664	1.89
H shares (Total)	2,391,420,240	34.53
Total	6,926,018,400	100.00

MATERIAL INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES OF THE COMPANY

As at 31 December 2022, the interests or short positions of persons who at any of the Company's general meetings (excluding the directors and supervisors of the Company) are entitled to exercise or control the exercise of 5% or more of the voting power in the shares and underlying shares of equity derivatives of the Company in each class as recorded in the register required to be maintained under Part XV of Section 336 of the Securities and Futures Ordinance (Cap 571 of the Laws of Hong Kong) (the "SFO") were as follows:

Name of shareholder	Class of shares	Capacity	Number of shares held	Percentage of the respective class of share (%)	Percentage of the total number of shares in issue (%)
China Telecommunications Corporation	Domestic shares	Beneficial owner	3,393,362,496 (L)	74.83	48.99
China Mobile Communications Group Co., Ltd.	Domestic shares	Beneficial owner	608,256,000 (L)	13.41	8.78
China United Network Communications Group Company Limited	Domestic shares	Beneficial owner	236,300,000 (L)	5.21	3.41
Citigroup Inc.	H shares	975,097 shares as interests of controlled corporations and 143,418,562 shares as approved lending agent	144,393,659 (L)	6.03	2.08
	H shares	Interests of controlled corporations	1,190,376 (S)	0.04	0.02
	H shares	Approved lending agent	143,418,562 (P)	5.99	2.07
BlackRock, Inc.	H shares	Interests of controlled corporations	144,007,236 (L)	6.02	2.08
FMR LLC	H shares	Interests of controlled corporations	119,776,004 (L)	5.01	1.73
Kopernik Global Investors LLC	H shares	Investment manager	119,678,000 (L)	5.00	1.73

Note: (L) – Long Position
(S) – Short Position
(P) – Lending Pool

Save as stated above, as at 31 December 2022, in the register required to be maintained under Part XV of Section 336 of the SFO, no other persons were recorded as holding any interests or short positions in the shares or underlying shares of the equity derivatives of the Company.

REPORT OF THE DIRECTORS

DIRECTORS' AND SUPERVISORS' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2022, none of the directors and supervisors of the Company had any interests or short positions in the shares, underlying shares of equity derivatives or debentures of the Company or its associated corporations (within the meaning of 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 Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers. As at 31 December 2022, the Company had not granted its directors or supervisors, or their respective spouses or children below the age of 18 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 shares or debentures.

PUBLIC FLOAT

As at the date of this annual report, based on information that is publicly available to the Company and within the knowledge of the directors, the Company has maintained the prescribed public float under the Listing Rules.

DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS

Each of the directors and supervisors has entered into a service contract with the Company. According to the service contract, each of the contracts has an initial term of three years and is renewable in accordance with the Articles of Association of the Company when the initial term expires. These contracts are terminable at the option of either party by giving three months' notice in writing or according to the terms of the contract prior to the expiry of the contract. No such service contract is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

PERMITTED INDEMNITY PROVISION

The Company has maintained appropriate directors and officers liability insurance coverage for the directors, supervisors and senior management of the Company during the course of the financial year ended 31 December 2022 and such insurance remained in force as of the date of this report.

DIRECTORS' AND SUPERVISORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS

Save for the transactions, arrangements or contracts set out in the "Management Discussion and Analysis of Financial Conditions and Results of Operations" section and "Directors' and Supervisors' Service Contracts", "Major Customers and Suppliers", "Preferential Treatment and Non-competition Arrangement with China Tower Corporation Limited" and "Continuing Connected Transactions" in the "Report of the Directors" section of this annual report and note 46 to the Consolidated Financial Statements, no other transaction, arrangement or contract that is significant in relation to the Group's business to which the Company or any of its subsidiaries was a party and in which a person who was a Director or Supervisor of the Company or his or her connected entity had, directly or indirectly, a material interest subsisted at any time during the year ended 31 December 2022.

EMOLUMENTS OF THE DIRECTORS AND SUPERVISORS

Based on the overall remuneration policy of the Company and with reference to the payroll standard of the same industry companies in the market, the remuneration of directors and supervisors is determined after taking into account the scope and complexities of their duties. Please refer to note 12 to the audited financial statements for details of the emoluments of the directors and supervisors of the Company in 2022.

PURCHASE, SALE AND REDEMPTION OF SHARES

Neither the Company nor any of its subsidiaries has purchased, sold or redeemed any securities of the Company during the reporting period.

SUMMARY OF FINANCIAL INFORMATION

Please refer to pages 240 to 241 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 2022.

BANK LOANS AND OTHER BORROWINGS

Please refer to note 34 to the audited financial statements for details of bank loans and other borrowings of the Group as at 31 December 2022.

PROPERTY, PLANT AND EQUIPMENT

Please refer to note 16 to the audited financial statements for movements in the fixed assets of the Group for the year ended 31 December 2022.

DISTRIBUTABLE RESERVES

Please refer to note 49 to the audited financial statements for details of the movements in the reserves of the Company for the year ended 31 December 2022.

DONATIONS

For the year ended 31 December 2022, the Group made charitable and other donations of a total amount of RMB2.78 million.

SUBSIDIARIES, ASSOCIATED COMPANIES AND JOINT VENTURES

Please refer to note 48 and note 22 to the audited financial statements for details of the Company's subsidiaries, the Company's associated companies and joint ventures as at 31 December 2022.

CHANGES IN EQUITY

Please refer to the consolidated statement of changes in equity contained in the audited financial statements (page 161 of this annual report).

REPORT OF THE DIRECTORS

PLAN OF EMPLOYEES' RETIREMENT BENEFITS

Please refer to note 41 to the audited financial statements for details of the retirement benefits provided by the Group.

SHARE APPRECIATION RIGHTS INCENTIVE SCHEME

At the extraordinary general meeting held by the Company on 22 December 2021, the adoption of the Share Appreciation Rights Incentive Scheme (the "Scheme") was approved by the shareholders of the Company. The Board is of the opinion that the Scheme can further improve the corporate governance structure of the Company, refine the establishment of the mid- to long-term incentive mechanism of the Company, optimize the remuneration system of the Company as a whole, and cope with the fierce industry competition and support the Company's long-term development. In addition, the Scheme is beneficial for the Company to attract, retain and motivate outstanding management and core technical personnel, promote the concept of joint sustainable development between the Company and employees, fully motivate the core management and key personnel of the Company, and support the realization of the corporate strategy. For details of the Scheme, please refer to the Company's circular dated 1 December 2021 in relation to, among other things, "Proposed Adoption of Share Appreciation Rights Incentive Scheme and Proposed Initial Grant".

On 22 December 2021, the Board considered and approved the resolution on the implementation of the Initial Grant of the Share Appreciation Rights. The total number of the Share Appreciation Rights granted under the Initial Grant is approximately 207.27 million shares, representing 2.993% of the total issued share capital of the Company. The exercise price of each of the Share Appreciation Rights granted under the Scheme was HK\$3.68. For details of the Initial Grant, please refer to the Company's announcement dated 22 December 2021 in relation to the "Initial Grant of the Share Appreciation Rights". Upon the review and approval by the Board and Remuneration Committee on 11 January 2023, the total number of person under the Initial Grant was 826. The incentive recipients include the management of the Company, the operational management of provincial companies and professional companies of the Group, as well as professional talents, and core management, technical and business personnel, etc. who contributed prominently to the Company's operating results and sustainable development.

The Scheme would not involve the grant of share options in respect of new shares or other new securities to be issued by the Company (or any of its subsidiaries) and therefore, it does not fall within the ambit of, and is not subject to the requirements under Chapter 17 of the Listing Rules.

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.

MAJOR CUSTOMERS AND SUPPLIERS

For the reporting period, the revenue from sales of goods or rendering of services to the five largest customers (including China Telecom, China Mobile, China Unicom and China Tower) of the Group represented 55.1% of the total revenues of the Group; of which, the revenue from the largest customer of the Group represented 35.7% of the total revenues of the Group. The purchases from the five largest suppliers of the Group accounted for less than 8.1 % of the total annual purchases of the Group.

To the knowledge of the Board, other than China Telecom and China Mobile (both of them being the shareholders holding more than 5% of the issued share capital of the Company), Mr. Liu Guiqing, Mr. Yan Dong and Mr. Gao Tongqing (positions of them setting out in the "Profiles of Directors, Supervisors and Senior Management" section of this annual report), none of the directors of the Company, their close associates, or any shareholder (holding more than 5% of the issued share capital of the Company) has any interests in such suppliers or customers.

PREFERENTIAL TREATMENT AND NON-COMPETITION ARRANGEMENT WITH CHINA TOWER CORPORATION LIMITED (“CHINA TOWER”)

In July 2014, China Telecom Corporation Limited, a subsidiary of China Telecom, jointly established China Tower with China Mobile and China Unicom. Pursuant to the relevant arrangements for the establishment of China Tower, China Tower has indicated to the Company that:

1. on condition that it will not result in a breach by China Telecom and the Company of the Non-Competition Agreement signed between them, when China Tower invites public tender for the design, construction, supervision and maintenance of its telecommunications towers and related ancillary facilities, China Tower will select the Company on a preferential basis, provided that the terms are the same;
2. in the event of an injection of telecommunications assets into China Tower (acquisition by China Tower), the existing maintenance agreements entered into between the Company and the respective promoters of China Tower will remain valid. Upon the expiration of such maintenance agreements and when China Tower invites tender for the maintenance services, China Tower will consider the Company on a preferential basis, provided that the terms are the same; and
3. China Tower will not compete in contravention of the contents of the Non-Competition Agreement.

CONTINUING CONNECTED TRANSACTIONS

China Telecom is the controlling shareholder of the Company. Pursuant to Chapter 14A of the Listing Rules, the transactions between the Group and China Telecom and its subsidiaries (excluding the Group and including China Telecom Corporation Limited, collectively the “China Telecom Group”) constitute connected transactions of the Group. The Group has entered into several connected transaction agreements with certain connected persons of the Group as described in the paragraphs below. The Company has complied with the disclosure requirements of the connected transactions under Chapter 14A of the Listing Rules.

CONTINUING CONNECTED TRANSACTIONS BETWEEN THE COMPANY AND CHINA TELECOM

The Company and China Telecom entered into seven continuing connected transactions agreements on 29 September 2015 to govern the continuing connected transactions between the Group and China Telecom Group. These agreements include the Engineering Framework Agreement, the Ancillary Telecommunications Services Framework Agreement, the Operation Support Services Framework Agreement, the IT Application Services Framework Agreement, the Centralized Services Agreement, the Property Leasing Framework Agreement and the Supplies Procurement Services Framework Agreement (the “2015 Agreements”). Each of the 2015 Agreements had an initial term expired on 31 December 2018 and, subject to approval from the shareholders (if applicable), the 2015 Agreements would be automatically renewed for a further period of no more than three years each time, unless terminated by either party by giving a written notice three months in advance. All of the 2015 Agreements (excluding the Centralized Services Agreement and the Property Leasing Framework Agreement that did not require independent shareholders’ approval under the Listing Rules) were approved by the independent shareholders of the Company at the extraordinary general meeting held on 11 December 2015.

On 28 September 2018, the Company based on the 2015 Agreements and entered into supplemental agreements with China Telecom in respect of the aforementioned seven agreements (the “2018 Supplemental Agreements”) to, among other things, renew each of the 2015 Agreements for a further term of three years from 1 January 2019 to 31 December 2021, change contact information of China Telecom and adjust the terms related to tender process of the Engineering Framework Agreement pursuant to the applicable PRC regulations. Other key terms of each of the 2015 Agreements remain unchanged.

REPORT OF THE DIRECTORS

Subject to approval from the shareholders (if applicable), the aforementioned seven amended continuing connected transactions agreements will be automatically renewed for a further period of no more than three years each time, unless terminated by either party by giving a written notice three months in advance. In connection with the entering into the 2018 Supplemental Agreements, the Company also set new annual caps for the three years ending 31 December 2021 in respect of the transactions contemplated under the seven continuing connected transactions agreements. The 2018 Supplemental Agreements and the new annual caps (excluding the new annual caps for the Centralized Services Agreement and the Property Leasing Framework Agreement that did not require any independent shareholders' approval under the Listing Rules) were approved by the independent shareholders of the Company at the extraordinary general meeting held on 13 December 2018.

As each of the 2015 Agreements and the 2018 Supplemental Agreements (the "2018 Agreements") had expired on 31 December 2021, the Company entered into the 2021 Supplemental Agreements (the "2021 Supplemental Agreements") with China Telecom on 22 October 2021 to, among other things, extend the term for three years from 1 January 2022 to 31 December 2024. Other key terms of each of the 2018 Agreements remain unchanged. The 2021 Supplemental Agreements and the new annual caps (excluding the new annual caps for the Centralized Services Agreement and Property Leasing Framework Agreement that did not require any independent shareholders' approval under the Listing Rules) were approved by the independent shareholders of the Company at the extraordinary general meeting held on 22 December 2021.

The Board considers that it is in the interest of the Company to enter into the 2021 Supplemental Agreements and cooperate with China Telecom Group to ensure a stable revenue source from one of the largest telecommunications operators in the PRC so as to benefit the Company's future growth and development.

Details of each of such Agreements are set out below.

ENGINEERING FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

Pursuant to the Engineering Framework Agreement, the Company agreed to provide certain engineering related services, such as design, construction, project supervision and management for telecommunications infrastructure projects undertaken by China Telecom Group.

The charges for engineering services rendered under the Engineering Framework Agreement shall be determined at market price or prices obtained through tender process. According to the supplemental agreement to the Engineering Framework Agreement entered into between the Company and China Telecom, the thresholds which the project must be determined through tender process under the Engineering Framework Agreement include: whenever the value of any design or project supervision and management project exceeds RMB1 million, or the value of any construction project exceeds RMB4 million, the award of the relevant project must be subject to a tender process (with a minimum of three parties tendering bids) in accordance with the Bidding Law of the PRC and Regulation on the Implementation of the Bidding Law of the PRC, except as otherwise provided by other related laws and regulations. In determining the market price, the business and financial department of the relevant subsidiary of the Company shall collect the relevant market information (including but not limited to the change in price for the same or similar type of services), review and compare the costs and profits of transactions conducted in the most recent year of the same or similar type entered into with China Telecom Group or independent third parties, and prepare fee quotes for review by the marketing department of the relevant subsidiary of the Company. The marketing department or management of the relevant subsidiary of the Company shall primarily consider the following factors: (i) cost of service; (ii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group by other service providers in the market; (iii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group and independent third parties previously by the Company.

The Company will be given priority by China Telecom Group in the provision of the engineering services except in the tender process, provided that the terms and conditions offered by independent third parties to China Telecom Group are no more favorable than those offered by the Company for the same type of services, and in return, the Company has undertaken to China Telecom Group that the Company shall not provide services to it on terms which are less favorable than those offered by the Company to independent third parties. The payment for engineering services provided by the Company under the Engineering Framework Agreement is normally made in accordance with the work progress of practical work following the general market practice in the industry.

ANCILLARY TELECOMMUNICATIONS SERVICES FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

Pursuant to the Ancillary Telecommunications Services Framework Agreement, the Company agreed to provide to China Telecom Group certain ancillary telecommunications services such as maintenance of network facilities including equipment, ducts and cables, server rooms and base stations; distribution of telecommunications products and services; provision of comprehensive logistics services, including purchasing agent, warehousing, transportation, delivery, testing and inspection, logistics information management and distribution; provision of application, content and other services such as fixed-line value added services, wireless value added services, Internet value added services, and electronic authentication.

The Ancillary Telecommunications Services Framework Agreement stipulates that the Ancillary Telecommunications Services shall be provided at:

- (a) market price. In determining the market price, the business and financial department of the relevant subsidiary of the Company shall collect the relevant market information (including but not limited to the change in price for the same or similar type of services), review and compare the costs and profits of transactions conducted in the most recent year of the same or similar type entered into with China Telecom Group or independent third parties, and prepare fee quotes for review by the marketing department of the relevant subsidiary of the Company. The marketing department or management of the relevant subsidiary of the Company shall primarily consider the following factors: (i) cost of service; (ii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group by other service providers in the market; (iii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group and independent third parties previously by the Company;
- (b) in the absence of market price or where the market price cannot be determined, the price shall be agreed between both parties, which shall be the aggregate amount of reasonable costs, the relevant taxes in sales and reasonable profits. In determining such cost and profits, the business and financial department of the relevant subsidiary of the Company will (i) review and compare the costs and profit margins of similar and comparable transactions conducted in the most recent year entered into with China Telecom Group or independent third parties, or (ii) where such comparison is not practicable, consider for reference the recent profit margins of comparable enterprises engaging in providing similar services in the relevant industry. Factors considered would also include, but not limited to, the scale of the comparable enterprises, quality of services, transaction size, supply and demand, labor cost, local commodity prices and economic development levels.

The Company will be given priority by China Telecom Group in the provision of the ancillary telecommunications services, provided that the terms and conditions offered by independent third parties to China Telecom Group are no more favorable than those offered by the Company for the same services. In return, the Company has undertaken to China Telecom Group that the Company and its subsidiaries shall not provide ancillary telecommunications services to it on terms which are less favorable than those offered by the Company to independent third parties. Subject to the terms and conditions set out above, the payment for the ancillary telecommunications services is made in the manner provided for in each specific contract entered into between the parties with reference to the market practices.

OPERATION SUPPORT SERVICES FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

The Operation Support Services Framework Agreement governs the arrangements between the Group and China Telecom Group with respect to mutual provision of operation support services. Pursuant to this agreement, the Company agreed to provide to China Telecom Group operation support services, including but not limited to facilities management and renovation, network facilities management in relation to buildings used for telecommunications purposes, human resources management, equipment maintenance, advertisement, conferencing services, vehicles, and certain repair and leasing of equipment. China Telecom Group also agreed to provide operation support services such as logistics services, warehousing, medical care, food and beverages, education, hotel and travelling services, labor services and so on to the Company.

The Operation Support Services Framework Agreement shall adopt the same pricing policy as the Ancillary Telecommunications Services Framework Agreement. In addition, in determining the market price of the operation support services provided to the Company by the China Telecom Group, the Company primarily considered the following factors: (i) prices of at least two comparable transactions of the same or similar type of services provided to the Company by other service providers in the market; (ii) prices of at least two comparable transactions of the same or similar type of services provided to the Company by China Telecom Group and independent third parties previously. Subject to the terms and conditions set out above, the payment for the operation support services is made in the manner provided for in each specific contract entered into between the parties with reference to the market practices.

Each of the parties to the Operation Support Services Framework Agreement will accord priority to the other party in the provision of the operation support services, provided that the terms and conditions offered by independent third parties to the relevant party are no more favorable than those offered by the other party for the same services, and in return, each of the parties has undertaken to the other that it shall not provide services to the other on terms which are less favorable than those offered to independent third parties.

IT APPLICATION SERVICES FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

The IT Application Services Framework Agreement governs the arrangements between the Group and China Telecom Group with respect to mutual provision of IT application services. Pursuant to this agreement, the Company agreed to provide China Telecom Group with telecommunications network support services, software and hardware development and other related IT services. China Telecom Group also agreed to provide to the Company certain IT application services including voice and data, value added services and information application services.

The IT Application Services Framework Agreement shall adopt the same pricing policy as the Engineering Framework Agreement. In addition, in determining the market price of the IT application services provided to the Company by the China Telecom Group, the Company primarily considers the following factors: (i) prices of at least three comparable transactions of the same or similar type of services provided to the Company by other service providers in the market; (ii) prices of at least three comparable transactions of the same or similar type of services provided to the Company by China Telecom Group and independent third parties previously. Subject to the terms and conditions set out above, the payment for the IT application service is made in the manner provided for in each specific contract entered into between the parties with reference to the market practices.

Each of the parties to the IT Application Services Framework Agreement will accord priority to the other party in the provision of the IT application services, provided that the terms and conditions offered by independent third parties to the relevant party are no more favorable than those offered by the other party for the same services, and in return, each of the parties has undertaken to the other that it shall not provide services to the other on terms which are less favorable than those offered to independent third parties.

CENTRALIZED SERVICES AGREEMENT AND SUPPLEMENTAL AGREEMENT

Pursuant to the Centralized Services Agreement, the centralized services to be provided by the Company to China Telecom Group include:

- (a) the corporate headquarters management function to manage assets of China Telecom's certain retained specialized telecommunications support businesses in the PRC (other than the Group) and any remaining assets, such as hotels, manufacturing plants, schools and hospitals which are not in association with the specialized telecommunications support businesses in the primary service areas of the Group; and
- (b) the provincial headquarters management function to manage remaining assets of China Telecom in the primary service areas of the Group.

Except as otherwise agreed by the parties, the aggregate administrative expenses incurred by the Company for the provision of the centralized services referred to above (all expenses incurred in connection with the abovementioned headquarters management functions excluding remuneration for the Directors, share appreciation rights and provision of bad debts) will be apportioned pro rata between the Company and China Telecom Group according to the proportional net asset value of each of the relevant parties.

PROPERTY LEASING FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

The Property Leasing Framework Agreement governs the arrangements with respect to the mutual leasing of properties between the Group and China Telecom Group. China Telecom Group currently lease from the Company and its subsidiaries certain properties for use as business premises, offices, equipment storage facilities and sites for network equipment. The Company and its subsidiaries also lease from China Telecom Group certain properties for use as business premises, offices and equipment storage facilities. These arrangements fall within the Property Leasing Framework Agreement.

The rental charges in respect of each property are determined at market price. In determining the market price, the business and financial department of the relevant subsidiary of the Company shall collect the relevant market information (including but not limited to the change in price for the same or similar type of services), review and compare the costs and profits of transactions conducted in the most recent year of the same or similar type entered into with China Telecom Group or independent third parties, and prepare fee quotes for review by the marketing department of the relevant subsidiary of the Company. The marketing department or management of the relevant subsidiary of the Company shall primarily consider the following factors: (i) cost of property depreciation; (ii) rental charges of at least three comparable transactions of the same or similar type of property provided to China Telecom Group and the Company by independent third parties in the market; (iii) rental charges of at least three comparable transactions of the same or similar type of property provided to China Telecom Group and independent third parties by the Company previously, or rental charges of the same or similar type of property provided to the Company by China Telecom Group and independent third parties previously. Rental charges are payable monthly in arrears, except as otherwise agreed by the parties. Both parties will review the rental every three years and decide, after negotiation, on whether to adjust the rental charges and the amount of such adjustment.

REPORT OF THE DIRECTORS

SUPPLIES PROCUREMENT SERVICES FRAMEWORK AGREEMENT AND SUPPLEMENTAL AGREEMENT

Pursuant to the Supplies Procurement Services Framework Agreement, the Company agreed to provide to China Telecom Group with comprehensive supplies procurement services, including, among others, (i) procurement of imported telecommunications supplies, domestic telecommunications supplies and domestic non-telecommunications supplies; (ii) agency services of supplies procurement; (iii) sales of telecommunications supplies manufactured by the Group; (iv) resale of supplies purchased from independent third parties; and (v) management of biddings, verification of technical specifications, warehousing, transportation and installation services. According to the same agreement, China Telecom agreed to provide to the Group with comprehensive supplies procurement services, including, among others, (i) sales of telecommunications supplies manufactured by China Telecom Group, (ii) resale of supplies purchased from independent third parties; (iii) agency services of supplies procurement; and (iv) warehousing, transportation and installation services.

The price for the provision of comprehensive supplies procurement services under the Supplies Procurement Services Framework Agreement is determined as follows:

- (a) 1% of the contract value at the maximum for procurement services relating to imported telecommunications supplies;
- (b) 3% of the contract value at the maximum for procurement services relating to domestic telecommunications supplies and other domestic non-telecommunications materials;
- (c) for other services:
 - (i) market price. In determining the market price, the business and financial department of the relevant subsidiary of the Company shall collect the relevant market information (including but not limited to the change in price for the same or similar type of services), review and compare the costs and profits of transactions conducted in the most recent year of the same or similar type entered into with China Telecom Group or independent third parties, and prepare fee quotes for review by the marketing department of the relevant subsidiary of the Company. The marketing department or management of the relevant subsidiary of the Company shall primarily consider the following factors: (i) cost of service; (ii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group or the Company by other service providers in the market; (iii) prices of at least three comparable transactions of the same or similar type of services provided to China Telecom Group and independent third parties by the Company, or prices of at least three comparable transactions of the same or similar type of services provided to the Company by China Telecom Group and independent third parties;
 - (ii) in the absence of market price or where the market price cannot be determined, the price shall be agreed between both parties, which shall be the aggregate amount of reasonable costs, the taxes in sales and reasonable profits. In determining such price, the business and financial department of the relevant subsidiary of the Company will review and compare the costs and profits of transactions conducted in the most recent year of the same or similar type entered into with China Telecom Group or independent third parties, take into account factors such as historical price, transaction size, average profit ratio within the relevant industry, supply and demand, labor cost, local commodity prices and economic development levels, and prepare fee proposals for review by the marketing department of the relevant subsidiary of the Company.

The Group will be given priority by China Telecom Group in the provision of comprehensive logistics services, provided that the terms and conditions offered by independent third parties to China Telecom Group are no more favorable than those offered by the Company for the same services, and in return, the Company has undertaken to China Telecom that the Company and its subsidiaries shall not provide supplies procurement related comprehensive logistic services to it on terms which are less favorable than those offered by the Company and its subsidiaries to independent third parties.

CONTINUING CONNECTED TRANSACTIONS BETWEEN THE COMPANY AND CHINA TELECOM GROUP FINANCE CO., LTD. (“CHINA TELECOM FINANCE”)

On 1 February 2019, the Company and China Telecom Finance entered into the Financial Services Framework Agreement (“2019 Financial Services Framework Agreement”). The 2019 Financial Services Framework Agreement was with effect from 1 February 2019 until 31 December 2021. Subject to the compliance with relevant laws and regulations and relevant regulatory requirements, both parties shall negotiate and agree on the renewal arrangement. Upon the 2019 Financial Services Framework Agreement becoming effective, each of the services under the Financial Services Framework Agreement, except the deposit services, can be provided by China Telecom Finance to the Group immediately in accordance with the business scope of China Telecom Finance as approved by the China Banking and Insurance Regulatory Committee (“CBIRC”). The deposit services under the 2019 Financial Services Framework Agreement and the annual cap were approved by the independent shareholders of the Company at the extraordinary general meeting held on 18 April 2019.

China Telecom Finance was jointly established by China Telecom, China Telecom Corporation Limited (“China Telecom Corporation”) and the Company, representing 15%, 70% and 15% of the total registered capital of China Telecom Finance, respectively. Given China Telecom is the controlling shareholder of the Company, China Telecom Corporation is a subsidiary of China Telecom, and thus China Telecom Finance is a connected person of the Company under Chapter 14A of the Listing Rules as an associate of the Company’s substantial shareholder. Accordingly, the transaction under the Financial Services Framework Agreement constitutes a continuing connected transaction of the Company.

As the 2019 Financial Services Framework Agreement had expired on 31 December 2021, the Company entered into the 2021 Financial Services Framework Agreement with China Telecom Finance on 22 October 2021 to extend the term of 2019 Financial Services Framework Agreement for three years from 1 January 2022 to 31 December 2024. The deposit services under the 2021 Financial Services Framework Agreement and the annual caps were approved by the independent shareholders of the Company at the extraordinary general meeting held on 22 December 2021.

Details of the Financial Services Framework Agreements are set out below.

FINANCIAL SERVICES FRAMEWORK AGREEMENT

Pursuant to the 2021 Financial Services Framework Agreement, China Telecom Finance has agreed to provide financial services to the Group, including deposit services, loan and bill discounting services and other financial services. The Group and China Telecom Finance will cooperate on a non-exclusive basis, and the Group may select at its discretion other financial institutions to provide the relevant financial services. The terms of the financial services offered to the Group by China Telecom Finance shall be equivalent to or more favorable than those offered to the Group by the major cooperative commercial banks of the Group for the financial services in the same period and of the same type. China Telecom Finance shall provide the following financial services to the Group in accordance with the major terms set out above, with relevant pricing policies as below:

(i) Deposit Services

The deposit interest rates offered by China Telecom Finance to the Group shall comply with the relevant requirements of the People’s Bank of China and be with reference to the deposit benchmark interest rates promulgated by the People’s Bank of China from time to time (if any) and the deposit interest rates offered by the major cooperative commercial banks of the Group for the deposit services in the same period and of the same type, and the deposit services shall be conducted on normal commercial terms or better. The deposit interest rates offered by China Telecom Finance shall be equivalent to or higher than those provided by the major cooperative commercial banks of the Group. Under the same conditions, the interest rates of the deposits services provided by China Telecom Finance to the Group shall be the same as those offered by China Telecom Finance to other member companies of China Telecom for the deposit services in the same period and of the same type.

(ii) Loan and Bill Discounting Services

The interest rates for loan and bill discounting offered by China Telecom Finance to the Group shall comply with the relevant requirements of the People's Bank of China and be with reference to the loan benchmark interest rates promulgated by the People's Bank of China from time to time (if any) and the interest rates offered by the major cooperative commercial banks of the Group for the loan services in the same period and of the same type and bill discounting services in the same period and of the same type and amount, and the loan and bill discounting services shall be conducted on normal commercial terms or better. The interest rates for loan and bill discounting offered by China Telecom Finance shall be equivalent to or lower than those provided by the major cooperative commercial banks of the Group. Under the same conditions, the interest rates for loan and bill discounting provided by China Telecom Finance to the Group shall be the same as those offered by China Telecom Finance to other member companies of China Telecom for the loan services in the same period and of the same type and bill discounting services in the same period and of same type and amount.

China Telecom Finance offers loan and bill discounting services conducted on normal commercial terms or better to the Group. The Group will not be required by China Telecom Finance to provide guarantee by any of the Group's assets or through other means for the loan and bill discounting services provided to the Group.

(iii) Other Financial Services

Save as the deposit, loan and bill discounting services, China Telecom Finance will provide other financial services, including financial and financing advice, credit authentication, bill acceptance, fund transfer and settlement and designs of relevant settlement and clearance arrangement to the Group under the 2021 Financial Services Framework Agreement.

The fees charged for providing the other financial services mentioned above by China Telecom Finance to the Group shall comply with the fees standard promulgated by regulatory authorities including the People's Bank of China or the CBIRC (if applicable), and with reference to the handling fees standard charged by the major cooperative commercial banks of the Group for the other financial services of the same type, and the other financial services shall be conducted on normal commercial terms or better. The handling fees standard shall be equivalent to or lower than those charged by the major cooperative commercial banks of the Group. Under the same conditions, the fees standard charged to the Group by China Telecom Finance shall be the same as those charged to other member companies of China Telecom by China Telecom Finance for the other financial services of the same type.

For each of the specific transactions with China Telecom Finance under the 2021 Financial Services Framework Agreement, China Telecom Finance has been appointed as one of the financial institutions to provide financial services to the Group under the terms and conditions of the 2021 Financial Services Framework Agreement. Prior to entering into any specific agreements with China Telecom Finance in respect of the transactions under the 2021 Financial Services Framework Agreement, the Group will compare the rates or fees and the other relevant transaction terms (e.g. transaction approval conditions, procedures or time limit) offered by China Telecom Finance with those offered by the major cooperative commercial banks of the Group for the deposits, loans or other financial services in the same period and of the same type. Only when the rates or fees or the other relevant transaction terms offered by China Telecom Finance are equivalent to or more favorable than those offered by the major cooperative commercial banks of the Group, the Group may enter into transactions with China Telecom Finance at its discretion. Under the circumstances which the Group considers appropriate, the Group may engage additional or other financial institutions other than China Telecom Finance to provide financial services.

The following table sets out the annual caps and actual amounts of the above-mentioned continuing connected transactions of the Group during the year ended 31 December 2022 and its new annual caps:

Unit: RMB million

	Year ended 31 December 2022		Year ending 31 December 2023	Year ending 31 December 2024
	Existing Annual Cap	Actual Amounts	New Annual Cap	New Annual Cap
Transactions with China Telecom Group				
Engineering services provided to China Telecom Group	24,000	18,934	26,000	28,000
Ancillary telecommunications services provided to China Telecom Group	23,000	17,825	26,000	28,000
Operation support services provided to/ by China Telecom Group				
Revenue	5,000	4,378	5,500	6,000
Expenditure	1,000	970	1,100	1,200
IT application services provided to/ by China Telecom Group				
Revenue	6,500	5,823	8,000	9,500
Expenditure	1,000	331	1,500	2,000
Centralized services provided to China Telecom Group	550	387	550	550
Property leasing provided to/ by China Telecom Group				
Revenue	330	187	350	370
Expenditure				
Right-of-use Assets	650	119	650	650
Leasing Charges	350	155	350	350
Supplies procurement services provided to/ by China Telecom Group				
Revenue	6,800	3,122	7,500	8,500
Expenditure	4,000	2,636	5,000	6,000
Transactions with China Telecom Finance				
Maximum daily balance of deposits under the deposit services provided by China Telecom Finance (including the interest accrued thereon)	8,500	7,082	8,500	8,500

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The independent non-executive directors of the Company have confirmed that all the continuing connected transactions for the year ended 31 December 2022 to which the Group was a party:

1. had been entered into by the Group in the ordinary and usual course of business;
2. had been entered into on normal commercial terms or better; and
3. had been entered into according to the agreements governing them on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole.

The independent non-executive directors have further confirmed that:

The values of the continuing connected transactions entered into between the Group and its connected persons which are subject to annual caps have not exceeded their respective annual caps or revised annual caps.

The auditors of the Company have performed procedures in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 (Revised) "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants on the continuing connected transactions and issued a letter to the Board to advise that:

1. nothing has come to their attention that causes them to believe that the continuing connected transactions disclosed above have not been approved by the Board;
2. for transactions involving the provision of goods or services by the Group, nothing has come to their attention that causes them to believe that the transactions were not, in all material respects, in accordance with the pricing policies of the Company;
3. nothing has come to their attention that causes them to believe that the transactions were not entered into, in all material respects, in accordance with the relevant agreements governing such transactions;
4. with respect to the actual amount of each of the continuing connected transactions, nothing has come to their attention that causes them to believe that those actual amounts have exceeded the annual caps.

Save as disclosed above, none of other related-party transactions set out in the note 46 of the consolidated financial statements constitute connected transactions or continuing connected transactions that are required to be disclosed under the Listing Rules.

COMPLIANCE WITH CORPORATE GOVERNANCE CODE

Please see the "Corporate Governance Report" set out in this annual report for details of our compliance with the Corporate Governance Code.

MATERIAL LEGAL PROCEEDINGS

Except for the disclosure in this annual report, as at 31 December 2022, so far as the directors are aware, the Company was not involved in any material litigation or arbitration and no material litigation or claims had been made against, or were pending or threatened against the Company.

RISK FACTORS

The following section lists out the principal risks and uncertainties faced by the Group. It is a non-exhaustive list and there may be other risks and uncertainties further to the key risk areas outlined below.

1. The business of the Group may be affected by the economic, political and social conditions as well as government policies in China

As substantially all businesses, assets and operations of the Group are located in China, the Group's operating results, financial status and business prospect depend on the economic, political and social developments of China to a large extent.

In recent years, China is one of the countries with the fastest pace of economic growth around the globe in terms of GDP. However, the current growth rate may not be sustainable. Moreover, any future disaster, such as natural disaster and outbreak of epidemics would potentially slow down the level of economic activities, and in turn affect the economic growth of China, Asia and even the world. If any of the above mentioned reasons causes serious economic downturn in China, or causes the Group could not carry out and deliver its businesses normally, the Group's financial status, operating results and prospect may be adversely affected.

2. The business of the Group is closely related to the investment and operating conditions in the Chinese telecommunications sector

Demands in the Group's services will be affected by the level of capital expenditures of telecommunications infrastructure of the telecommunications operators in China. Such decreases in capital expenditures may have adverse effect to the Group's revenue and profits.

Moreover, in the event that the competition in the Chinese telecommunications sector continues to intensify, the telecommunications operator customers of the Group may be under the pressure to reduce prices of their products or services, thus leading to the decrease in their revenue. If that happens, such telecommunications customers may reduce the service fees to our Company in relation to certain businesses for cost cutting, with a view to maintaining their profitability.

3. The business of the Group is working capital intensive in respect of services offered to customers

During our course of business, the Group shall incur considerable working capital expenditures to make procurements for goods and services required for the provision of services to the clients of the Group and for the completion of projects. In the past, the Company has satisfied the working capital needs primarily by cash from operating activities and its own fund. A deficiency in working capital may affect the Group's business, financial status and operating results. Moreover, the Group's customers may delay payment or default in accounts receivables, which may have adverse effect on the cash flows, working capital, financial status and operating results of the Company.

4. The Group is under certain risks in relation to international business and operation

The Group is dedicated in expanding into overseas market and strategically expanding overseas operations. The expansion into markets outside China will subject us to considerable risks, including the changes of the international political situation, differences in business environment, high entry barrier imposed on foreign enterprises, existing market players, exchange rate fluctuations, legal and regulatory requirements, potentially unfavorable tax liabilities, inexperience in new markets, competition in the local markets and protectionism.

Part of our business is conducted overseas and mainly located in developing countries and regions, where the local political and economic conditions are often unstable and such factors are beyond our control. As we have engaged in overseas business, we are subject to various risks related to the countries and regions where we operate.

AUDITORS

Pursuant to the relevant regulations issued by the Ministry of Finance of the People's Republic of China and the State-owned Assets Supervision and Administration Commission of the State Council in respect of the restrictions on the term of the years of audit services that an accounting firm can provide, Deloitte Touche Tohmatsu and Deloitte Touche Tohmatsu Certified Public Accountants LLP retired as the auditors of the Company effective upon the conclusion of the 2020 AGM. The Board, as recommended by the Audit Committee of the Company, resolved to propose to the shareholders of the Company at the 2020 AGM to approve the appointments of PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP as the Company's international auditor and domestic auditor, respectively, for the year ended 31 December 2021, and such proposal was approved by the shareholders of the Company.

At the 2021 AGM, the shareholders of the Company approved the appointments of PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP as the international and domestic auditors of the Company respectively for the year ended 31 December 2022. PricewaterhouseCoopers has audited the accompanying financial statements, which were prepared in accordance with International Financial Reporting Standards. A resolution for the reappointment of PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP as the international and domestic auditor of the Company for the year ending 31 December 2023 will be proposed at the upcoming 2022 AGM.

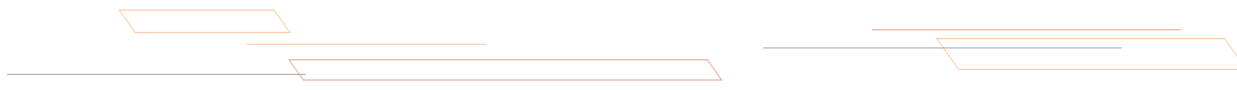


By order of the Board

Liu Guiqing

Executive Director and Chairman

Beijing, PRC
29 March 2023



REPORT OF THE SUPERVISORY COMMITTEE

Dear Shareholders,

During the reporting period, all members of the Supervisory Committee conscientiously performed their supervisory duties and earnestly safeguarded the interests of the shareholders and the Company in accordance with the relevant requirements including the PRC Company Law and the Articles of Association of the Company.

During the reporting period, the Supervisory Committee convened five meetings. At the eighth meeting of the fifth session of the Supervisory Committee convened on 25 February 2022, we elected the new chairperson of the Supervisory Committee and formed a resolution. At the ninth meeting of the fifth session of the Supervisory Committee convened on 24 March 2022, we reviewed and approved proposals such as the Company's 2021 financial report, 2021 auditors' report issued by the external auditors, profit allocation and dividend distribution plan for 2021, the Company's work report on risk management and internal control for 2021, the report of the Supervisory Committee for 2021, the work plan of the Supervisory Committee for 2022 and Rules of Procedure for the Supervisory Committee and formed resolutions. Such meeting made relevant management suggestions to the enhancement of internal management and risk prevention of the Group. At the tenth meeting of the fifth session of the Supervisory Committee convened on 20 May 2022, we reviewed and approved proposal on the re-election of the Supervisory Committee and formed a resolution. At the first meeting of the sixth session of the Supervisory Committee convened on 17 June 2022, we elected the chairperson of the sixth session of the Supervisory Committee and formed a resolution. At the second meeting of the sixth session of the Supervisory Committee convened on 18 August 2022, we reviewed and approved proposals such as the Interim Financial Report for 2022, the Report on the Review of the Interim Financial Report for 2022 issued by the external auditors and the Company's work report on risk management and internal control for the first half of 2022 and formed resolutions. During the reporting period, the members of the Supervisory Committee attended the board meetings and general meetings of the Company for 2022. By attending these meetings, the Supervisory Committee supervised significant decision making of the Company and the duty performance of the members of the Board and senior management.

The Supervisory Committee is of the opinion that during the reporting period, the Company seized the opportunities of digital transformation, continued to innovate and transform, and adhered to market-oriented allocation of resources while strengthening corporate management as well as fulfilling social responsibility. In 2022, the Company's total revenues maintained a positive growth and amounted to RMB140,746 million and net profit amounted to RMB3,358 million. The Company's revenue structure was further optimized, its financial position remained stable and operating results continued to improve, resulting in a continuous increase in the corporate value.

The Supervisory Committee is of the opinion that, in 2022, all members of the Board and senior management of the Company complied with applicable laws and regulations, and performed their duties in accordance with the Articles of Association of the Company. They also safeguarded the legitimate interests of the shareholders, the Company and its employees, earnestly implemented various resolutions of the general meetings and the board meetings, and operated strictly in accordance with the regulatory requirements for a listed company. The Supervisory Committee was not aware of any violation of relevant PRC laws and regulations and the Articles of Association, or any acts which would prejudice the interests of the Company.

The Supervisory Committee carefully reviewed the information intended to be submitted by the Board to the general meeting such as the Financial Report for 2022 which was prepared according to relevant requirements and issued with unqualified opinion by the external auditors. The Supervisory Committee is of the opinion that the financial report gives an objective and true view of the Company's financial position and operating results.

In 2023, the Supervisory Committee will continue to comply with the relevant requirements of the PRC Company Law and the Articles of Association of the Company strictly and assume the responsibilities of safeguarding the interests of the shareholders and the benefits of the Company, to focus on the supervision of the Company's implementation of its commitment to shareholders and to expand our scope of work approach, with a view to enhancing our supervision and inspection efforts in major adjustments and important operating activities and duly perform our duties in a thoughtful manner.

By order of the Supervisory Committee

Ye Lichun

Chairperson of the Supervisory Committee

Beijing, PRC
23 March 2023

CORPORATE GOVERNANCE REPORT

The Company is committed to maintaining sound corporate governance standards and procedures to ensure the completeness, transparency and quality of its information disclosure, and strives to achieve more standardized operational procedures and effective management, so as to safeguard shareholders' interests to the greatest extent.

CORPORATE GOVERNANCE PRACTICES

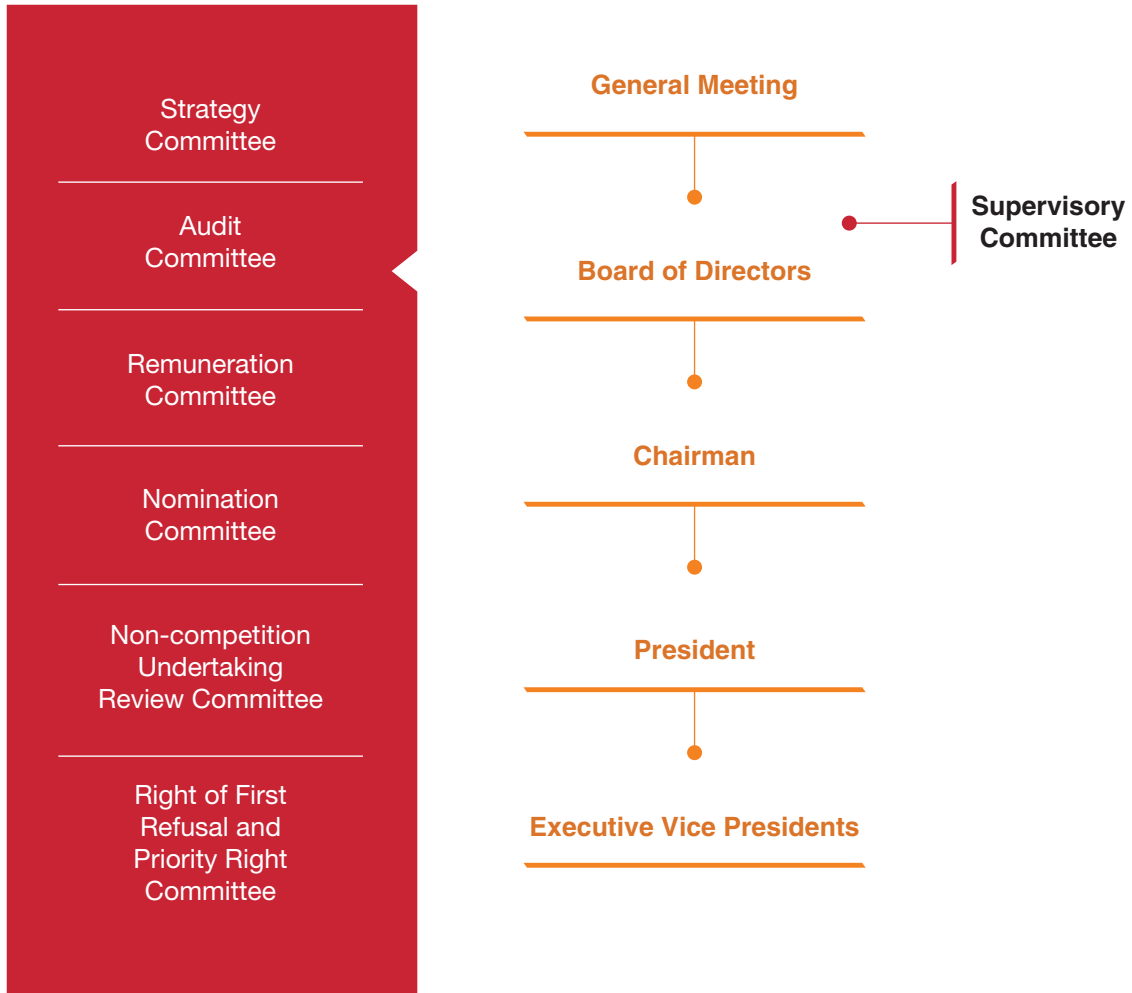
As a joint stock limited company incorporated in the PRC with limited liability and listed on The Stock Exchange of Hong Kong Limited (the "Stock Exchange"), the Company has not only complied with the relevant provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules"), but also abided by the Company Law of the People's Republic of China ("PRC Company Law") and other applicable laws, regulations and regulatory requirements of Hong Kong and the PRC as basic guidelines for the Company's corporate governance. While strictly complying with relevant laws and regulations and also referencing good corporate governance practices, the Group is continually striving to further strengthen its internal control and risk management systems in order to improve its corporate governance standards and transparency.

The Company has been recognized by the capital market for its sound corporate governance over the years. In 2022, the Company continued to receive accolades in respect of its corporate management and ESG performance by international institutions such as *FORTUNE*, *The Asset* and *Corporate Governance Asia*.

The Board is responsible for performing corporate governance duties, including developing and reviewing the Company's policies and practices on corporate governance; reviewing and monitoring the training and continuous professional development of directors and senior management as well as the Company's policies and practices in compliance with legal and regulatory requirements; developing, reviewing and monitoring the code of conduct and compliance manual applicable to employees and directors; and reviewing the Company's compliance with the Corporate Governance Code and disclosure in the Corporate Governance Report.

The Board believes that the Company complied with all code provisions as set out in the Corporate Governance Code in Appendix 14 to the Listing Rules for the year ended 31 December 2022.

CORPORATE STRUCTURE OF THE COMPANY



GENERAL MEETING

Pursuant to the Company's Articles of Association, the general meetings are classified as annual general meeting (the "AGM") and extraordinary general meeting (the "EGM"). The AGM is convened once a year and within six months after the end of a financial year. A resolution will be proposed for consideration in respect of each independent matter. The details of the voting procedures will be set out in the notices of the general meetings in accordance with the provisions of the Articles of Association and the Listing Rules. In accordance with the relevant provisions of the Listing Rules and the PRC Company Law, notices and circulars of general meetings are given to shareholders promptly, providing shareholders sufficient notice and time to consider the matters to be considered at the meeting, with details of the voting procedures set out in the notices of the general meetings. The Chairman of the Company should attend and chair the general meetings, and all the directors of the Company (in particular, the chairman of the committees of the Board) shall be invited to attend the general meetings to address any questions that may be raised by the shareholders at the general meetings. In addition, the Company has formulated the Rules of Procedure for the General Meeting which sets out the appropriate arrangements for convening, shareholders' proposing, attending and voting at the general meetings. In accordance with the Listing Rules, all the resolutions were voted by poll in the general meetings held in 2022.

For the 2022 EGM, a physical meeting was held in Beijing on 25 February 2022, at which the resolutions, including the appointment of director and supervisor, adoption of the Rules of Procedure for the General Meeting and the Rules of Procedure for the Board and amendments to the Articles of Association were considered and approved. Shareholders and authorized proxies representing 84.54% of the total voting shares of the Company were present at the EGM, and the percentage of votes cast in favor of each resolution was over 80%.

For the 2021 AGM, a physical meeting was held in Beijing on 17 June 2022, at which the resolutions, including the 2021 financial statements, profit distribution and dividend declaration proposal, reappointment of auditors, report of the directors, report of the supervisory committee, re-election of the Board and the Supervisory Committee as well as the amendments to the Rules of Procedure for the Supervisory Committee, were considered and approved. Shareholders and authorized proxies representing 84.89% of the total voting shares of the Company were present at the AGM, and the percentage of votes cast in favour of each resolution was over 80%.

The above resolutions at the general meetings were approved and passed by shareholders, and details of the relevant poll results were published on the websites of the Company and "HKExnews" of the Stock Exchange.

SHAREHOLDERS' RIGHTS TO CONVENE GENERAL MEETINGS AND SUBMIT PROPOSALS AT GENERAL MEETINGS

Pursuant to Article 8.24 of the Company's Articles of Association, shareholders who request for convening an EGM or a class meeting shall comply with the following procedures:

- (1) Two (2) or more shareholders holding in aggregate 10% or more of the shares carrying the right to vote at the meeting sought to be held shall sign one (1) or more counterpart requisition(s) stating the object of the meeting and requiring the Board to convene an extraordinary general meeting or a class meeting thereof. The Board shall as soon as possible proceed to convene an extraordinary general meeting or a class meeting thereof after receipt of such requisition(s). The amount of shareholdings referred to above shall be calculated as at the date of deposit of the requisition(s).
- (2) If the Board fails to issue a notice of such a meeting within thirty (30) days from the date of receipt of the requisition(s), the requisitionists may themselves convene such a meeting (in a manner as similar as possible to the manner in which general meetings are convened by the Board) within four (4) months from the date of receipt of the requisition(s) by the Board.

Pursuant to Article 8.6 of the Company's Articles of Association, when the Company convenes a general meeting, shareholder(s) holding 3% or more of the total voting shares of the Company shall have the right to submit new proposals in writing, and the Company shall place such proposals on the agenda for such general meeting if they are matters falling within the functions and powers of shareholders in general meetings.

SHAREHOLDERS' ENQUIRIES

Enquiries or requisitions to convene a general meeting or submit a proposal pursuant to the Articles of Association of the Company that the shareholders of the Company wish to make to the Board may be addressed to the Investor Relations Department of the Company by our shareholders' hotline at 852-3699 0000 or by email at ir@chinaccs.com.hk.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Board has formulated the shareholders communication policy and has regularly reviewed on this. Such policy regulates the Company's various routine and non-routine daily communication channels with shareholders, including general meeting(s), roadshows and daily meetings. The above arrangements enable shareholders and investors to keep abreast of the latest operating status and development prospects of the Company. In addition, the Company has set up a public email for investor relations to facilitate the communications and feedback from investors, allowing the Company to collect different opinions from the market in an effective and timely manner. The details of the communication with the shareholders including information on the shareholders' calendar of significant events and the public shareholding percentages, are set out in the section of "Investor Relations" of this annual report and the website of the Company. The dividend policy of the Company is set out in the section of "Report of the Directors" of this annual report. Based on the communications between the Company and the shareholders and investors as well as the feedback received during the year, the Board considers that the shareholder communication policy of the Company has been properly implemented and effective during the year.

BOARD OF DIRECTORS

The Board is responsible for leading and supervising the Company, and performing the duties of formulating strategies, making decisions and preventing risks, as well as implementing the resolutions passed in general meetings. The major responsibilities of the Board include making decisions on the medium and long-term development of the enterprise, formulating the Company's strategies and development plans, determining the Company's business plans and investment proposal, reviewing financial policies and performance, formulating the basic management systems of the Company, formulating the appraisal and compensation administrative measures of the management and determining their remuneration, rewards and penalties as well as conducting performance appraisal. The Board has delegated to the senior management the powers and responsibilities to conduct the day-to-day management and operations of the Group and to organize the implementation of the resolutions of the Board, annual business plans and investment proposals. The senior management must obtain the Board's approval before entering into any material transactions in accordance with the relevant provisions of the Articles of Association. The Articles of Association and the Rules of Procedure for the Board have clearly defined the scope of duties of the Board and the management of the Company.

CHAIRMAN AND PRESIDENT

Mr. Liu Guiqing and Mr. Yan Dong take up the position of Chairman and President of the Company, respectively. Mr. Liu Guiqing, our Chairman, is responsible for overseeing the operation of the Board and in charge of the Company's overall management. Mr. Yan Dong, our President, is responsible for the Company's daily operation and management.

COMPOSITION OF THE BOARD AND DIVERSITY POLICY

As of the date of this report, the Board comprised nine directors, including three executive directors (Mr. Liu Guiqing, Mr. Yan Dong and Ms. Zhang Xu), two non-executive directors (Mr. Gao Tongqing and Mr. Huang Zhen) and four independent non-executive directors (Mr. Siu Wai Keung, Francis, Mr. Lv Tingjie, Mr. Wang Qi and Mr. Wang Chunge).



The Company has adopted a board diversity policy, which sets out the approach to achieve diversity on the Board. The Company's board diversity policy gives a number of considerations in aspects including skill, knowledge, professional experience, gender and age. The Board of the Company comprises professionals with diversified backgrounds including telecommunications industry, technology, finance and accounting, compliance, management and academics. The Company has one female director on the Board and complies with its board diversity policy. The Company will continue to maintain gender diversity on the Board and the Nomination Committee will proactively consider the increase in the proportion of female members when selecting and making recommendations on suitable candidates for Board membership. Through the board diversity policy of the Company and the annual assessment by Nomination Committee on the board structure, the Company will develop a pipeline of potential successors to the Board which could achieve gender diversity. The Board has four independent non-executive directors, of which an independent non-executive director Mr. Siu Wai Keung, Francis possesses accounting professional qualification in compliance with Rules 3.10 and 3.10A of Chapter 3 of the Listing Rules. The profiles of the directors are set out in the "Profiles of Directors, Supervisors and Senior Management" section of this annual report and the Company's website.

The Company's human resources work focuses on coordinating the reform of the labor, personnel and distribution systems, giving full play to the decisive role of the market in resource allocation, fully implementing the tenure system and contractual management of the managerial staff, promoting market-oriented labor employment, strengthening the construction of the cadres, talents and employees, continuously optimizing the planning and structure of the team. We have established a market-oriented recruitment mechanism, improved the market-oriented operation mechanism and incentive and constraint mechanism, improved the standard and efficiency of human resources management, and provided solid organizational support and talent support for the sustainable and healthy development of the Company. The Company takes into full consideration of skills, age and gender diversity when recruiting its employees, and based on business development and operational needs and a comprehensive consideration of various factors, strives to achieve a balanced proportion of our employees in skills, age and gender. Information on the Company's workforce and gender ratio in 2022 is set out in the "Environment, Society and Governance" section of this annual report.

As of the date of this report, to the best knowledge of the directors, the members of the Board did not have any financial, business, family or other material connection with each other, in particular between the Chairman and the President, and all of them are free to make independent judgments.

The Company has received the written annual confirmation of independence from each of the independent non-executive directors pursuant to Rule 3.13 of the Listing Rules and considers all independent non-executive directors to be independent.

The Company has also arranged appropriate insurance cover in respect of possible legal actions against its directors, supervisors and senior management.

Directors devoted sufficient time and efforts to the business of the Company. The Company also requires the directors to disclose the number of key positions they hold in public companies or organizations and provide the Company with the time they devoted to the relevant positions.

SECURITIES TRANSACTIONS BY DIRECTORS

The Company has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Listing Rules to govern securities transactions by the directors and supervisors of the Company. The Company has made specific enquiries to the directors and supervisors, and each of the directors and supervisors has confirmed his/her compliance with the Model Code in connection with the transactions of the Company's securities in the reporting period.

NOMINATION AND APPOINTMENT OF DIRECTORS

The Company follows a formal, considered and transparent procedure for the appointments of new directors. The Nomination Committee of the Board first considers and discusses the nomination and appointment of a new director, and also makes recommendations to the Board for decision based on the board diversity policy. The Board shall recommend the candidate(s) at the general meeting and the candidate(s) shall be elected at the general meeting each for a term of three years (including non-executive directors), effective from the date of election.

If an independent non-executive director serves more than 9 years in the Company, the further appointment of such director should be subject to a separate resolution to be approved by shareholders. The papers to shareholders accompanying that resolution should include the reasons why the Board believes the independent non-executive director is still independent and should be re-elected, including the factors taken into account, the process and the discussions conducted by the Board in making such decision. After obtaining the authorization at the general meeting, the Board will determine the remuneration of each of the directors with reference to factors including their duties and responsibilities with the Company, their experiences and the current market conditions.

Among the board members, except for Mr. Mai Yanzhou who resigned as a non-executive director of the Company on 30 May 2022, and Mr. Wu Taishi and Mr. Liu Linfei, who retired as independent non-executive directors of the Company, Mr. Huang Xiaoqing (then executive director), Ms. Zhang Xu (an executive director), Mr. Gao Tongqing (a non-executive director), Mr. Huang Zhen (a non-executive director), Mr. Siu Wai Keung, Francis (an independent non-executive director) and Mr. Lv Tingjie (an independent non-executive director) of the fifth session of the Board were re-elected as directors of the sixth session of the Board at the AGM held on 17 June 2022. Besides, Mr. Liu Guiqing was newly appointed as executive director, Mr. Wang Qi and Mr. Wang Chungu were newly appointed as independent non-executive directors of the Company. The directors of the Company are all eligible for re-election at the expiration of the term.

MEETINGS OF THE BOARD

Pursuant to the Company's Articles of Association and the Listing Rules, the Board shall convene at least four meetings a year. In addition, the Company has formulated the Rules of Procedure for the Board to define the relevant arrangements of the Company on matters such as the convening of board meetings, the delivery of notices and materials of meetings, and the manner of participation and voting by directors.

The Company Secretary assists the Chairman in preparing the agenda for Board meetings. Unless stipulated otherwise by the Board in advance, the time and place for any Board meeting shall be notified to all directors at least 14 days prior to the date of the meeting. The agenda and related documents of the Board meetings will be dispatched to all directors at least 3 days prior to the date of the meeting. The Board and each of the directors may contact the senior management independently if necessary and obtain additional information from the Company so that the directors can make informed decisions with relevant information. In addition, prior to the board meeting, the Company will obtain the advice and opinions from the directors on significant issues to ensure that the Board is provided with independent views and opinions. The Company conducts an annual review of the implementation and effectiveness of these mechanisms.

All minutes of the Board meetings record the details of resolutions considered and decisions made, and are kept by meeting secretary and open for inspection by the directors. A director shall abstain from voting on any board resolution approving any proposal in which he or any of his associates has a material interest, nor shall he be counted in the quorum present at the meeting. In 2022, the Board held seven meetings and passed one written resolution. In addition to general matters such as review of the annual and interim financial statements, dividend distribution, Corporate Governance Report, ESG Report and budget, the Board also considered other resolutions, mainly including the amendments of the Articles of Association, restructuring and optimizing the human resources division at the headquarter, re-election of the Board and reviewing the structure and composition of the Board, the composition of committees of the Board, the further implementation of the duties and powers of the Board, optimization of the organizational structure of the headquarters, the implementation plan for the remuneration of the Board, the outline of the 14th Five-Year Plan and the targets of the 2022-2024 rolling plan, the professional integration of the property management companies, and the amendments of the Charter of the Nomination Committee and the Charter of Remuneration Committee, etc. Meanwhile, in terms of on the agenda of approving director remuneration, relevant directors with conflicts of interests on their own remuneration also abstained from voting on relevant matters.

In 2022, the Chairman of the Company had a meeting with the independent non-executive directors without the presence of other directors.

The attendance record of the Company's directors in Board meetings, board committee meetings and general meeting(s) in 2022 were as follows:

Attendance in 2022/Meeting convened during period of appointment								
	Board of Directors	Strategy Committee	Audit Committee	Remuneration Committee	Nomination Committee	Non-competition Undertaking Review Committee	AGM	EGM
Executive Directors								
Liu Guiqing ⁽¹⁾	4/4	1/1	-	-	-	-	-	-
Yan Dong ⁽²⁾	-	-	-	-	-	-	-	-
Zhang Xu	7/7	-	-	-	-	-	1/1	1/1
Non-executive Directors								
Gao Tongqing	7/7 ⁽¹⁰⁾	1/1	-	-	-	-	0/1	0/1
Huang Zhen ⁽³⁾	6/6 ⁽¹¹⁾	1/1	-	-	-	-	1/1	-
Independent Non-executive Directors								
Siu Wai Keung, Francis	7/7	-	2/2	1/1	-	2/2	1/1	1/1
Lv Tingjie	7/7 ⁽¹²⁾	1/1	2/2 ⁽¹²⁾	1/1	1/1	2/2	1/1	1/1
Wang Qi ⁽⁴⁾	4/4	1/1	-	1/1	-	-	-	-
Wang Chunge ⁽⁵⁾	4/4	-	1/1	-	-	1/1	-	-
Resigned Directors								
Huang Xiaoqing ⁽⁶⁾	7/7	1/1	-	-	-	-	1/1	1/1
Mai Yanzhou ⁽⁷⁾	3/3 ⁽¹³⁾	-	-	-	-	-	-	0/1
Wu Taishi ⁽⁸⁾	3/3	-	-	-	1/1	-	1/1	1/1
Liu Linfei ⁽⁹⁾	3/3	-	1/1	-	1/1	1/1	1/1	1/1

Notes:

1. Mr. Liu Guiqing was appointed as an executive director and the Chairman of the Company with effect from 17 June 2022.
2. Mr. Yan Dong was appointed as an executive director of the Company with effect from 10 February 2023.
3. Mr. Huang Zhen was appointed as a non-executive director of the Company with effect from 25 February 2022.
4. Mr. Wang Qi was appointed as an independent non-executive director of the Company with effect from 17 June 2022.
5. Mr. Wang Chunge was appointed as an independent non-executive director of the Company with effect from 17 June 2022.
6. Mr. Huang Xiaoqing resigned as an executive director of the Company on 10 February 2023.
7. Mr. Mai Yanzhou resigned as a non-executive director of the Company on 30 May 2022.
8. Mr. Wu Taishi resigned as an independent non-executive director of the Company on 17 June 2022.
9. Mr. Liu Linfei resigned as an independent non-executive director of the Company on 17 June 2022.
10. Mr. Gao Tongqing appointed another director to attend four meetings.
11. Mr. Huang Zhen appointed another director to attend three meetings.
12. Mr. Lv Tingjie appointed another director to attend one meeting of the Board and appointed another director to attend one meeting of the Audit Committee.
13. Mr. Mai Yanzhou appointed another director to attend three meetings.

DIRECTOR'S TRAINING

Newly appointed directors will receive trainings provided by the Company upon the appointment, so as to ensure that they have adequate understanding of the Company's business and they are fully aware of their duties as directors under the laws and regulations. The Company engaged external lawyers to provide the new directors appointed during the reporting period with trainings on issues including directors' duties and the Listing Rules.

The Company distributed board memorandum to directors each month, setting out updates on major business and financial position of the Company to facilitate the directors to discharge their duties. In addition, the Company also issued latest information regarding corporate governance, anti-corruption and directors' responsibilities under the Listing Rules and other applicable laws and regulations to the directors in a timely manner, ensuring their awareness of their responsibilities under the laws and regulations. All the directors were also encouraged to participate in continuous professional development to develop and refresh their knowledge and skills to ensure that their contributions to the Board remain informed and relevant.

In 2022, the training records of the directors of the Company were as follows:

	Attend training or seminar relevant to the Company's industry, director's duties and/or corporate governance	Read information relevant to the Company's industry, director's duties and/or corporate governance; or read regular updates issued by the Company
Executive Directors		
Liu Guiqing	✓	✓
Zhang Xu	✓	✓
Non-executive Directors		
Gao Tongqing	✓	✓
Huang Zhen	✓	✓
Independent Non-executive Directors		
Siu Wai Keung, Francis	✓	✓
Lv Tingjie	✓	✓
Wang Qi	✓	✓
Wang Chungue	✓	✓

Note: One of the current Executive Directors of the Company, Mr. Yan Dong, was appointed on 10 February 2023, and therefore he is not listed in the table above.

BOARD COMMITTEES

As an important part of a sound corporate governance practice, the Board has set up five board committees since the listing of the Company: the Audit Committee, the Remuneration Committee, the Nomination Committee, the Non-competition Undertaking Review Committee and the Right of First Refusal and Priority Right Committee, and all of which are responsible for the supervision of the overall affairs of the Company in various areas and assistance of discharging its responsibilities. Except for the Chairman of the Nomination Committee, members of all these five board committees comprise of independent non-executive directors to ensure full expression of independent and objective views and to fulfill each of its responsibilities of review and supervision. In August 2019, the Company newly set up a Strategy Committee to further enhance its corporate governance. The list of members of each committee is published on the websites of the Company and the Stock Exchange.

Strategy Committee

The Strategy Committee is chaired by the Chairman of the Company and consists of six directors, including Mr. Liu Guiqing and Mr. Yan Dong, the executive directors, Mr. Gao Tongqing and Mr. Huang Zhen, the non-executive directors and Mr. Lv Tingjie and Mr. Wang Qi, the independent non-executive directors. The Strategy Committee is mainly responsible for studying and making recommendations on the mid-to-long-term plan for development strategy, operating objectives and development direction of the Group.

In 2022, the Strategy Committee held one meeting, and mainly reviewed the resolutions of the outline of the 14th Five-Year Plan and the targets of the 2022-2024 rolling plan.

Audit Committee

The Audit Committee consists of three independent non-executive directors: Mr. Siu Wai Keung, Francis (Chairman), who has accounting or related financial management expertise, Mr. Lv Tingjie and Mr. Wang Chungue. The Audit Committee is mainly responsible for reviewing the interim and annual financial statements of the Company to ensure a true and fair view of the state of affairs, reviewing interim and annual results of the Company after consulting with external auditors, and making recommendations to the Board. In addition, the Audit Committee is also responsible for examining the appointment of external auditors, considering and supervising the financial reporting procedures and the risk management and internal control systems of the Company, reviewing the effectiveness of the internal audit of the company, overseeing the execution of the connected transactions, and also listening to the external auditor's audit memorandum. The Audit Committee makes an assessment of the effectiveness of the Group's risk management (including environmental, social and governance risks) and internal control at least once a year. In addition, the Audit Committee is also responsible for reviewing the adequacy of resources of the Group's accounting and financial reporting function. Audit Committee could establish a reporting mechanism to accept and handle the complaints and anonymous reporting on accounting, internal control and auditing matters.

In 2022, the Audit Committee held two meetings, and mainly reviewed the resolutions of the audited financial report of the Company of 2021, interim report of 2022, report on connected transactions, report on internal control and risk management and appointment of independent auditors. The Audit Committee also met with the external auditors separately to discuss the matters found during the audit and other issues that might be raised by the auditors.

CORPORATE GOVERNANCE REPORT

Remuneration Committee

The Remuneration Committee consists of three independent non-executive directors: Mr. Wang Qi (Chairman), Mr. Siu Wai Keung, Francis and Mr. Lv Tingjie. The Remuneration Committee is mainly responsible for making recommendations to the Board on the Company's policy and structure for remunerations of all directors and senior management, on the establishment of a formal and transparent procedure for developing remuneration policy, the remuneration packages of directors and evaluating the performance of senior management and conducting their performance assessment, etc.

After being authorized by the shareholders at the general meeting, the Board will determine the remuneration for each director based on their duties, responsibilities, experience, and current market conditions. In addition, the Company has established a series of management measures as the basis for determining the compensation of senior management, which include the following four measures: the selection and appointment of management, performance appraisal of members of the management, remuneration management for members of the management and total salary.

In 2022, the Remuneration Committee held one meeting and passed one written resolution, and mainly reviewed the resolution regarding the implementation of the duties and powers of the Board to establish four human resources measures, the implementation plan for the remuneration of the Board and the amendments of the Charter of Remuneration Committee.

Nomination Committee

The Nomination Committee consists of one executive director and two independent non-executive directors: Mr. Liu Guiqing (Chairman), Mr. Lv Tingjie and Mr. Wang Qi. The Nomination Committee is mainly responsible for making recommendations to the Board on the appointment or reappointment of directors and succession planning for directors, reviewing the structure, size and composition of the Board annually, identifying individuals suitably qualified to become Board members or senior management and selecting and nominate relevant individuals for directorships or senior officers, or making recommendations to the Board on the selection of individuals nominated for directorships or senior officers. The Nomination Committee will review the Board Diversity Policy annually to ensure its effectiveness, and the details of the board diversity policy has been set out under "Composition of the Board and Diversity Policy" of this section.

In 2022, the Nomination Committee held one meeting and passed one written resolution, and mainly reviewed the resolution regarding the re-election of the Board, reviewing the structure and composition of the Board, and the amendments of the Charter of the Nomination Committee. The Nomination Committee considered that the candidates of the sixth session of the Board possess extensive experience in multiple areas, including telecommunications industry, technology, finance and accounting, management and legal, etc. Their expertise and knowledge in different areas are strongly complementary to each other and are conducive to the scientific decision-making of the Board. At the same time, they also have diverse characteristics in terms of gender, age, cultural and educational background, and length of services, which was in alignment with the Board's diversity policy, so Nomination Committee recommended nominating these candidates to serve as directors.

Non-Competition Undertaking Review Committee

The Non-competition Undertaking Review Committee consists of three independent non-executive directors: Mr. Lv Tingjie (Chairman), Mr. Siu Wai Keung, Francis and Mr. Wang Chungge. The Non-competition Undertaking Review Committee is mainly responsible for monitoring the implementation of the non-competition undertakings given by China Telecom to the Company.

In 2022, the Non-competition Undertaking Review Committee held two meetings, and mainly reviewed the implementation of the non-competition undertakings by China Telecom, and made their recommendations to the Board.

The Company has received a letter issued to the Company by China Telecom stating that they were not in breach of any non-competition undertakings in 2022. The letter has been reviewed by the Non-competition Undertaking Review Committee and the Board.

Right of First Refusal and Priority Right Committee

The Right of First Refusal and Priority Right Committee consists of three independent non-executive directors: Mr. Wang Chungge (Chairman), Mr. Siu Wai Keung, Francis and Mr. Wang Qi. The Right of First Refusal and Priority Right Committee is mainly responsible for monitoring the enforcement of the right of first refusal and priority right granted by China Telecom since the Company was listed and protecting the interests of independent shareholders when such right of first refusal or priority right is exercised. Meeting(s) are held when necessary according to the Right of First Refusal and Priority Right Committee Charter. In 2022, the Right of First Refusal and Priority Right Committee did not hold any meeting.

Independent Board Committee

Pursuant to the relevant requirements under the Listing Rules, a listed company shall establish an Independent Board Committee (which shall consist only of independent non-executive directors) to advise independent shareholders in relation to transactions that are subject to independent shareholder's approval (such as connected transactions) as to whether the terms of the relevant transaction or arrangement are fair and reasonable and whether such a transaction or arrangement is in the interests of the Company and its shareholders as a whole. In 2022, the Independent Board Committee did not hold any meeting.

SUPERVISORY COMMITTEE

The Company established a Supervisory Committee pursuant to the PRC Company Law. The Supervisory Committee consists of three female members: Ms. Ye Lichun (the chairperson), Ms. Cai Manli (an independent supervisor) and Ms. Liu Lian (the employee representative supervisor). The term of service of the supervisors are three years, commencing from the AGM on 17 June 2022 approving the sixth session of the Supervisory Committee. The supervisors may serve consecutive terms if re-elected upon the expiry of their terms of service. The Supervisory Committee is a standing supervisory institution of the Company and is accountable and reports to all the shareholders. The Supervisory Committee normally meets at least twice a year.

The primary duties of the Supervisory Committee are to supervise the financial activities of the Group, to review the financial statements and other financial information prepared and presented by the Board at the general meeting(s); to supervise the performance of duties of the directors and other senior management; to prevent them from abusing power; and to deal with the directors or to initiate legal actions against the directors on behalf of the Company. In 2022, the Supervisory Committee held five meetings, details of which are set out in the "Report of the Supervisory Committee" of this annual report.

AMENDMENTS TO THE ARTICLES OF ASSOCIATION

In order to further improve corporate governance, the Company made certain amendments to the Articles of Association in accordance with the relevant provisions in the PRC Company Law, the Administrative Measures for the Formulation of Articles of Association of State-owned Enterprises and other relevant rules and regulations. Besides, due to the changes in the shareholding structure of the Company, the Company also made amendments to the relevant provisions in the Articles of Association. At the 2022 EGM held on 25 February 2022, the shareholders of the Company approved the amendments to the Articles of Association. The amended Articles of Association were published on the websites of the Company and “HKExnews” of the Stock Exchange.

COMPANY SECRETARY

The Company Secretary, Mr. Chung Wai Cheung, Terence, is an employee of the Company and has appropriate understanding of the Company’s business. The Company Secretary is responsible for supporting the daily operation of the Board and ensuring the compliance with the policies and procedures of the Board. All of the directors can access to opinions of the Company Secretary to ensure that the procedures of the Board conform to the applicable laws and regulations. The profile of the Company Secretary is set out in the section of “Profiles of Directors, Supervisors and Senior Management” in this annual report. The Company Secretary met the requirement on professional training under the Rule 3.29 of the Listing Rules in 2022.

REMUNERATION OF THE AUDITORS

The international and domestic auditors of the Company are PricewaterhouseCoopers and PricewaterhouseCoopers Zhong Tian LLP, respectively. The external auditors have provided audit services to the Company since they were initially appointed at the 2021 AGM on 17 June 2022. The remuneration (including VAT) received by the external auditors for the audit services and non-audit services provided to the Group during the year amounted to RMB30.2 million and RMB0.5 million respectively.

DIRECTORS’ RESPONSIBILITY FOR FINANCIAL STATEMENTS

The directors are responsible for the preparation of financial statements. The directors are not aware of any material uncertainties relating to events or conditions that may cast significant doubt on the Company’s ability to continue as a going concern, and therefore the directors continue to adopt the going concern approach in preparing financial statements.

The responsibility statement of PricewaterhouseCoopers, our external auditors, regarding its Independent Auditor’s Report on the financial statements of the Group is set out on pages 151 to 156 of this annual report.

RISK MANAGEMENT AND INTERNAL CONTROL

Risk Management and Internal Control System

The Board of Directors of the Company is fully responsible for establishing and maintaining an appropriate and effective risk management and internal control system to safeguard the investment of the shareholders and the assets of the Group. The Company has set up an internal control system and risk management mechanism in compliance with the COSO standards and defined management structure and its authority, which aims at ensuring the efficient utilization of the resources of the Company to achieve its business targets and safeguard its assets, with a view to preventing unauthorized utilization or disposal of the resources of the Company, securing appropriate accounting records to provide reliable financial evidence for internal use or external dissemination, so as to ensure that its operating activities are in compliance with relevant laws and rules. The above control system is designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss. The Company has a Code of Conduct for Employees to ensure ethical values and competency and it attaches great importance to the prevention of fraud risk and has established an internal reporting mechanism to encourage anonymous reporting of irregularities by the Company's employees, especially senior management. The Audit Committee has the power to make inquiries of the President and Chief Financial Officer of the Company regarding any fraud, whether material or not, involving management or other employees who play a significant role in the internal controls of the Company. For more information on the Company's anti-corruption initiatives, please refer to the "Environmental, Social and Governance Report" section of this annual report.

The Company attaches great importance to risk management in the course of its daily operation. With a decade of development since the listing, the Company has established a risk management culture appropriate to its business practices. The Company put in place a set of practicable risk management methods as well as a sound organization structure and management mechanism for risk management, which solidified risk management procedures, enhanced risk management efficiency and perfected its comprehensive risk management mechanism. In 2022, the Company took into account the requirements of Rule D.2 of the Corporate Governance Code of the Stock Exchange and continued to strengthen the identification, classification, assessment and control of risks, paid attention to environmental changes, strengthened green and energy-saving measures, innovation and transformation, and compliant operation. The Company actively shouldered social responsibilities, improved management efficiency, and monitored and tracked significant risks related to environmental, social, and governance, to promote its long-term sustainable development. No material risk issue was identified during the year. After strict identification, assessment and analysis of risks, the Company conducted assessments on the potential risks that the Company may be exposed to in 2023, such as market risks and financial risks, as well as the significant risks related to environmental, social and governance, and proposed practicable corresponding solutions. The Company formulated the annual risk management report which sets out the risk management work in 2022 and the assessment of material risks and the control plan for 2023. For details of the major risks of the Company, please refer to the "Report of the Directors" and "Environmental, Social and Governance Report" sections of this annual report.

Since its listing in 2006, the Company has formulated the internal control manual, internal control assessment rules and other systems based on the COSO internal control framework. Over the years, the Company has striven to improve the systems related to internal control and risk management in light of the changes in internal and external operating environments and business development requirements. In 2022, according to the internal and external regulatory requirements, as well as in response to the strategy of corporate transformation, the Company adapted to the changes in its operation management and policy environment and completed the revision of the internal control manual, and optimized and improved the internal control authority list. The Company has newly added internal control procedures related to environmental, social and governance as well as business practices on network information security management, overseas investment business, equity investment management and debt financing management. We revised the business processes for capital management, fixed asset management, contract management and procurement, and improved the management practices for safety production business, guarantee business management and assets rights management to ensure that the Company's internal control manual meets the management needs of the Company.

CORPORATE GOVERNANCE REPORT

The Company has established an internal audit division, which is responsible for organizing the Company's daily risk management and internal control assessment and reporting to the Audit Committee and the Board of Directors to ensure that the Board and management maintain and operate a sound risk management and internal control system in accordance with established procedures and standards. In 2022, the Company further strengthened audit supervision, attached importance to the audit rectification and utilization of the results of audit, and continued to strengthen the construction of its audit team in order to foster management improvement and prevent loopholes. The above work plays an important role in supporting the Board, the management and the risk management and internal control assessment.

The Company has formulated guidelines on information disclosure management to regulate the disclosure of the periodical result announcements, sensitive information and other important information of the Company and to make proper disclosure in accordance with the requirements of the Stock Exchange. The Company has established a progressive accountability, verification and reviewing system, to ensure the truthfulness, accuracy and timeliness of information disclosure. The Company will appoint external independent advisors, such as legal advisors, for reviewing and verifying when necessary. The Executive Vice President and the Company Secretary of the Company are responsible for coordinating and organizing information disclosure to ensure the compliance of the information disclosure. The Company Secretary is responsible for the daily management of information disclosure, including the disclosure of inside information. The Company also has the Office of the Board to assist in the detailed work regarding information disclosure.

In order to fulfill the requirements of the Stock Exchange, to ensure connected transactions are carried out according to the pricing policy or mechanism under the framework agreements and to regulate and enhance the management of connected transactions, the Company has formulated the "Administrative Measures of Connected Transactions of China Communications Services Corporation Limited". The Company enters into a connected transaction framework agreement with China Telecommunications Corporation and applies for the annual caps of connected transactions every three years. At the end of each year, the Company evaluates the connected transactions entered into in each province in the previous year. In order to ensure the compliance and effective operation of connected transactions on financial services with China Telecom Group Finance Co., Ltd., the Company has formulated the "Administrative Measures of Connected Transactions on Financial Services of China Communications Services Corporation Limited", through transaction verifying mechanism, daily monitoring mechanism, price checking mechanism and contingency planning mechanism, providing safeguards for the internal control of connected transactions on financial services, to ensure compliance with relevant regulatory requirements. The Company develops the monthly budget for deposit services, monitors the total amount of deposits of the provincial companies, and ensures that the caps of connected transactions is not exceeded. In addition, the risk identification and control targets for connected transactions formulated by the Company are set out in the internal control manual. A series of internal control procedures have been established in respect of the reporting and determination of the annual caps for connected transactions, signing and execution of contracts, reconciliation with connected parties, data verification, accounting, verification of information disclosure and information disclosure, and on-going improvements are made to the management process for connected transactions.

Annual Risk Management and Internal Control Assessment

The Company continues to focus on strengthening internal control and risk management and has sound internal control and management systems in place. The main internal control and risk management measures of the Company in 2022 are summarized as below:

In 2022, the internal audit division of the Company took the lead in organizing self-assessment for internal control within the whole Group. During the year, the Company continued its risk-oriented internal control self-assessment, which was organized from top to bottom and under a unified manner. With the changes in the Company's internal and external environments as well as the continuous expansion of its business scale, the Company increased its attention to comprehensive risk management. On the basis of its risk-oriented internal control self-assessment system and a comprehensive assessment, the Company identified the key areas and processes to focus on according to the major risks that might be faced by the Company during the year, and effectively and adaptively prepare the list of contents to be addressed for the self-assessment in the year, so as to accomplish a comprehensive and well-targeted inspection and assessment, which covered all of its subsidiaries.

The internal control self-assessment was conducted under the supervision of the Company's comprehensive risk management committee, with the President of the Company acting as its director. Leading by the internal audit division, it organized and coordinated the relevant departments of each risk issue to coordinate and assess their own risks, emphasizing the business departments playing a leading role in dealing with the risk management issues at source. The Company further promoted the effective combination between the self-assessment and daily operation management and ensured the effectiveness of the self-assessment work. The business departments were to decide on the persons responsible, exert themselves as the first line of defense of risk management, and instill the risk prevention awareness into all areas of the Company's operations, so as to enhance the effectiveness of their self-assessment efforts and promote the improvement of their management.

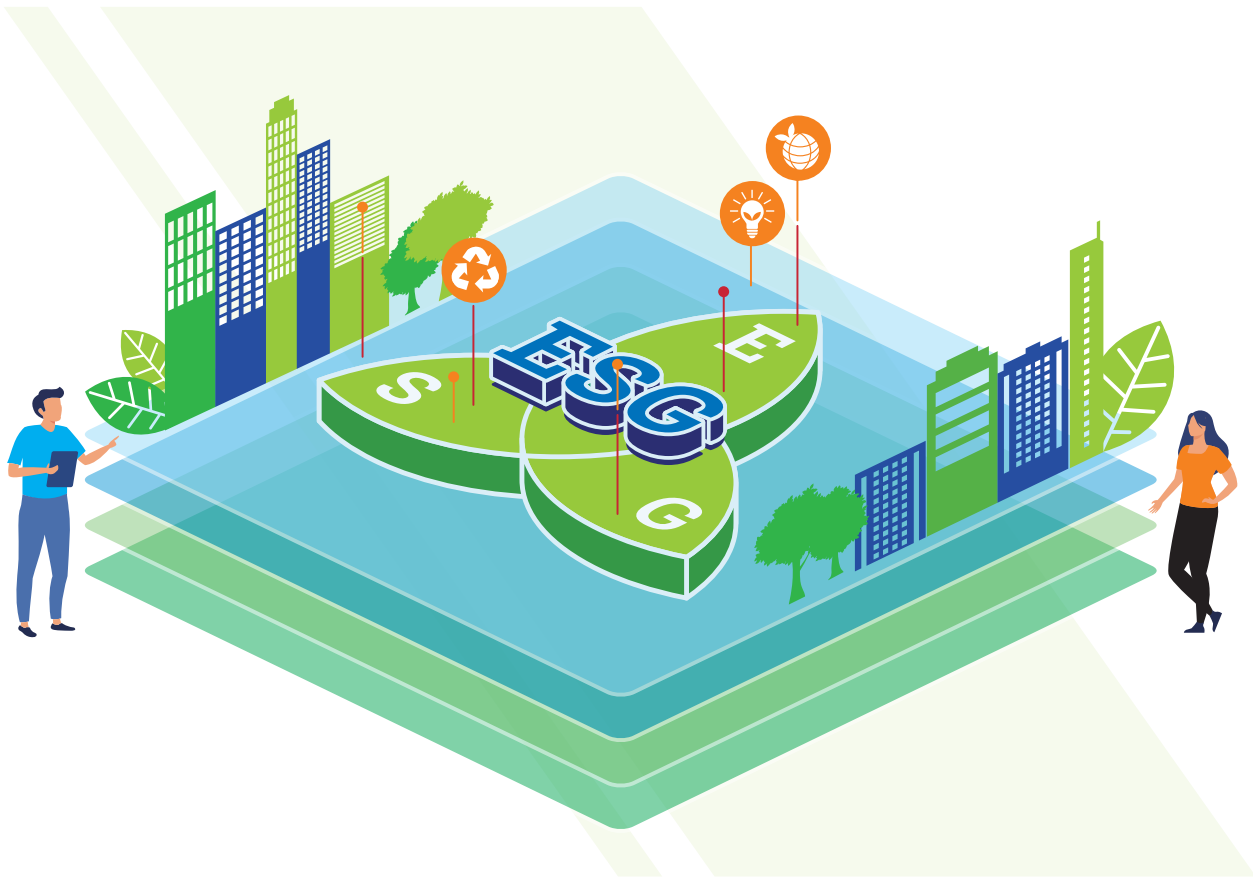
After the completion of the assessment, the Company focused on prevention of material risks, and reviewed and examined the design and implementation of its internal control and risk management systems. The Company also formulated practical and effective rectification measures in relation to defects identified during the self-assessment to ensure the effectiveness of the rectification, aiming to make ongoing improvements to the internal control system and process so that it could function better to prevent risks and contribute to good management practice. Meanwhile, in the subsequent internal audit, attention was paid to the effectiveness of the internal control for various businesses and inspection was made on assessment of internal control and rectification of defects, so as to ensure that the assessment is effective.

In 2022, the Company further improved its internal audit system and continued to promote the execution of the audit project plan and conduct comprehensive internal audits. The Company made independent and objective supervision and assessment of the operation activities and the appropriateness, compliance and effectiveness of its internal control, with an aim to enhance its operation and create more value for the Company, improve the processes for risk management, control and corporate governance and contribute to the fulfillment of its strategic goals. In light of the requirement on annual key risk control and the characteristics of its operation and management. The internal audit carried out during the year mainly included economic accountability audit, revenues and expenses audit and special audit on relevant matters, with a focus on income and cost accounting, cash management, and product distribution business management. Upon the request of the management of the Company and in light of the needs of relevant business departments, the internal audit division made use of the data from the audit and the audit outcomes to hold the audit joint meetings, so as to provide advice for the decision-making and operation and management activities of the Company.

In 2022, the Company continued to promote audit standardization and widely applied the standard audit plan to various special audits based on its audit informatization system. The Company utilized informatization audit measures to manage the audit projects and established an internal audit quality assessment system to conduct quality assessment so as to improve audit quality and achieve full audit coverage. In 2022, the Company completed not only the planned economic accountability audit, but also the revision of internal control manual and the special audit on the efficiency of internal control process, and promoted the implementation of strategic control to all levels of the Company.

The Board continued to monitor and supervise the risk management and internal control systems of the Company through the Audit Committee, and conducted an annual review on the risk management and internal control systems of the Company and its subsidiaries for the financial year ended 31 December 2022. The review covered all significant aspects of controls, including financial controls, operational controls and compliance controls. After receiving the report from the internal audit division as to the effectiveness of the relevant systems (including the environmental, social and governance related risk management and internal control systems) and the relevant confirmation from the management to the Board, the Board considered that the risk management and internal control systems of the Company were stable, healthy, proper, effective and adequate. The annual review also confirmed that the adequacy of resources, staff qualifications and experience, training programmes, and budget for the Company's accounting, internal audit, financial reporting functions, as well as those relating to the Company's environmental, social and governance performance and reporting. The Company has satisfied the requirements under Rule D.2 of the Corporate Governance Code of the Stock Exchange regarding risk management and internal control.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



This report is prepared pursuant to the Environmental, Social and Governance (“ESG”) Reporting Guide (the “Guide”) in Appendix 27 to the Rules Governing the Listing of Securities (the “Listing Rules”) on The Stock Exchange of Hong Kong Limited (the “Stock Exchange”). This report covered the period from 1 January 2022 to 31 December 2022, and the relevant key performance indicators were mainly from the Group and most of its subsidiaries. There is no significant change in the scope of this report from that of the 2021 ESG Report. This report has complied with all the “comply or explain” provisions as set out in the Guide. We did not disclose certain key performance indicators which are required to be disclosed by the Stock Exchange but not directly related to the business of the Group or have minimal influence.

PHILOSOPHY OF ENVIRONMENTAL, SOCIAL AND GOVERNANCE

As a leading service provider in the informatization sector in the PRC, the Group adheres to its position as a “New Generation Integrated Smart Service Provider” and commits to “Building Smart Society, Boosting Digital Economy, Serving a Good Life”, providing integrated comprehensive smart solutions in the informatization and digitalization sectors.

Sustainable Development

The Group places a strong emphasis on the concept of scientific development, actively responds to the United Nations Sustainable Development Goals (SDGs) initiative and adheres to the sustainable development principle of “customer prioritization, efficient resources allocation, talent orientation, and responsibility”. On the back of our fundamental missions of serving our customers, bringing returns to our shareholders, caring about our employees and giving back to society, we are committed to providing innovative, high-quality, efficient and secure integrated services including telecommunications infrastructure services, business process outsourcing services, applications, content and other services, while delivering value to our customers and the society, promoting healthy and sustainable development of itself, and aligning our corporate development with society and environment.

Customer prioritization



Remaining customer-centric with a focus on their needs; ensuring the quality of our customers' products and delivery on the basis of high-quality products, solutions and services, ensuring prompt response to customer concerns, and continuously improving their satisfaction

Efficient resources allocation



Gradually improving the synergistic and professional operation of our internal resources to achieve eco-friendly and efficient utilisation of resources through scientific management and innovative application of new technologies; helping our partners achieve low-carbon and intelligent operation leveraging the integration of new technologies and innovation

Talent orientation



Caring about the development of our employees in various aspects, striving to provide them with adequate space for development, a comprehensive training system, competitive salary and welfare packages and incentive mechanism while creating a safe and enjoyable working environment for them

Responsibility



Striving to give back to society by fulfilling our responsibilities as a state-owned enterprise in emergency rescue and disaster relief, etc., actively participating in projects for rural revitalization and improvement of people's livelihood, and encouraging our employees to actively participate in social welfare activities



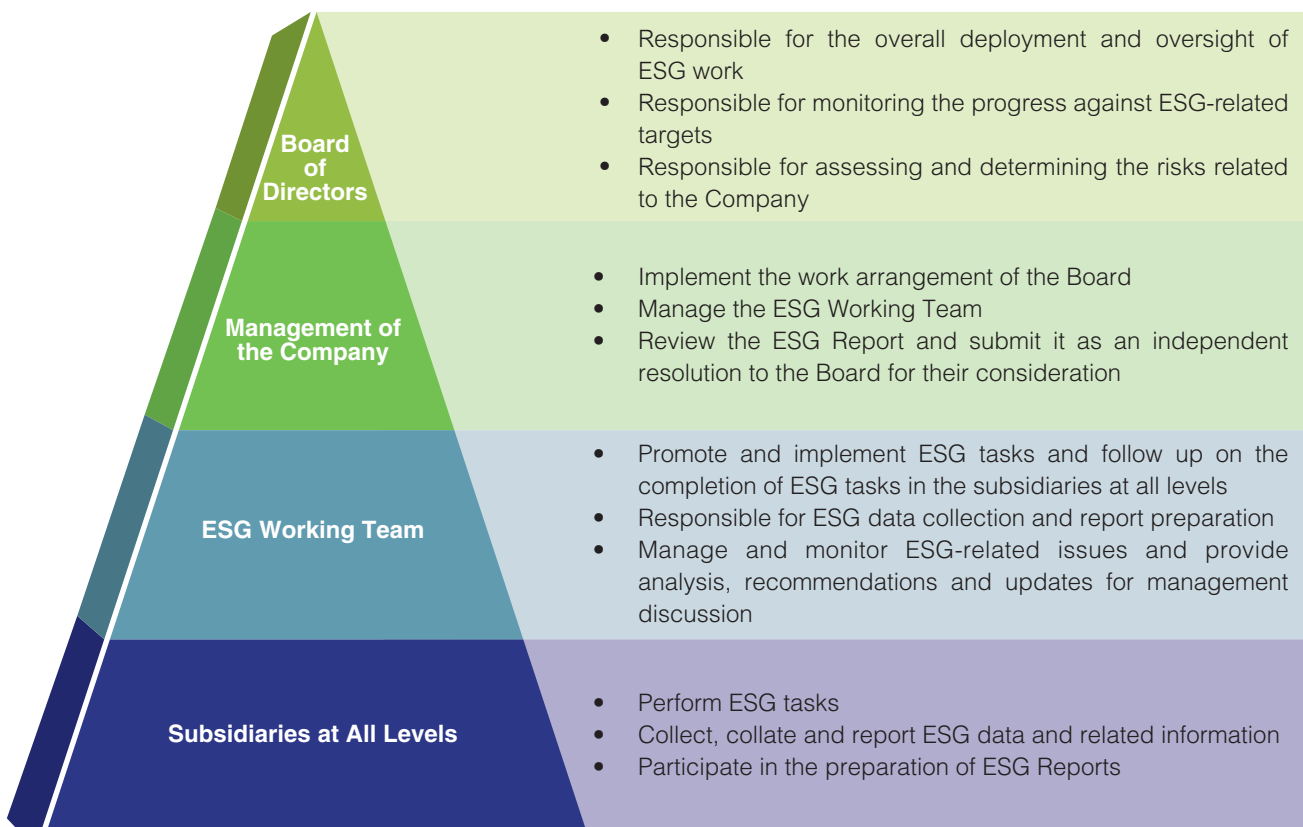
ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Board Statement

The Board of Directors (the “Board”) of China Communications Services Corporation Limited (the “Company”) is the highest responsible and decision-making body for ESG governance and has overall responsibility for environmental, social and governance work. The Board meets annually to review and approve the publication of this report (including the review of the progress on ESG-related goals). The Company’s management is authorized to be responsible for the implementation of specific ESG works of the Group (including stakeholders identification and communication). At the same time, the Board reviewed the potential risks and opportunities of ESG issues on the Company’s overall strategy and the results of the materiality assessment of ESG issues.





The Audit Committee of the Board of the Company is responsible for assisting the oversight of ESG issues and is continuously enhancing the requirements of internal control processes for ESG risk identification. The management of the Company formulates relevant internal control processes in accordance with the requirements of the Audit Committee of the Board to ensure the effective control of ESG risks by the Company’s risk management and internal control system.

ESG Governance Structure



Communication with Stakeholders

The Group pays attention to the common interests of stakeholders, including the government and regulatory authorities, shareholders and investors, employees, suppliers, customers and communities. It attaches great importance to the communication with them. Through announcements, regular reports, meetings, talks, visits, special communications and events, the Group collates and actively responds to the views and suggestions of all parties to promote innovative, coordinated, green, open and shared corporate development.

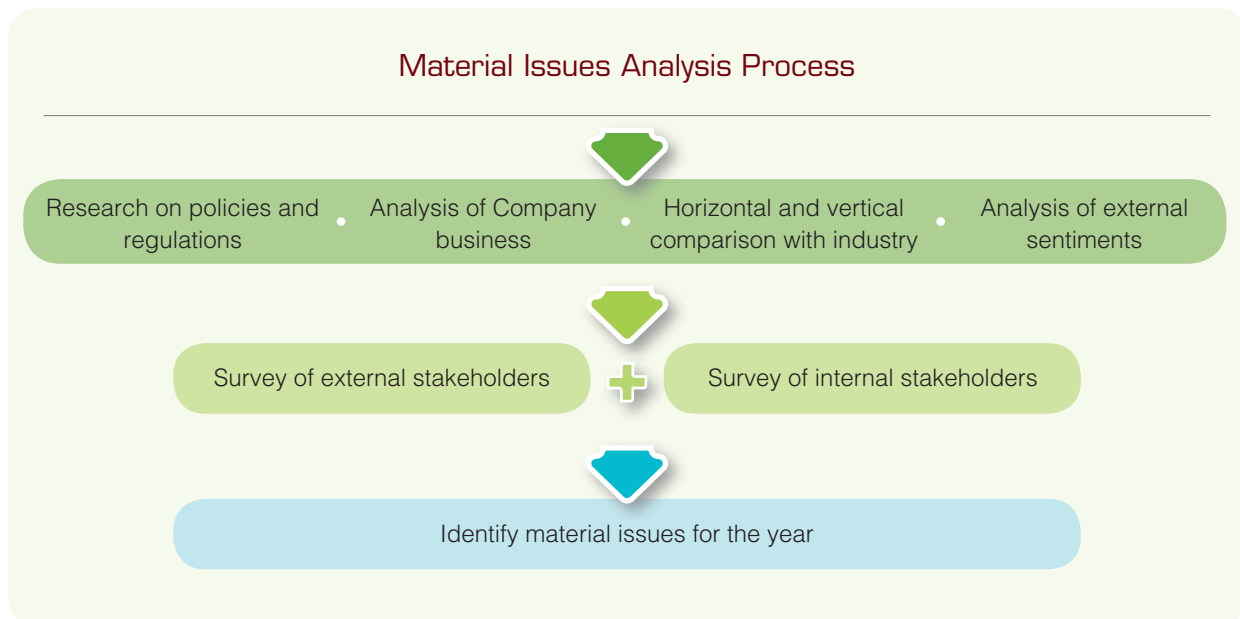
Stakeholders	Mechanism and Means of Communication	Expectations on the Company	Company Response
 Government and Regulatory Authorities	Meeting	Compliance with laws and regulations	Comply with laws and operate with integrity
	Reports or statements	Implement government regulatory requirements	Pay taxes in accordance with the laws and promote employment
	Report and visits	Promote the building of an industrial ecosystem	Innovate smart products and services
 Shareholders and Investors	Periodic reports, announcements	Asset preservation and appreciation	Operate in a stable manner and continuously create value for shareholders
	Special report, visit	Regulate corporate governance	Improve corporate governance and continuously enhance the internal control system
	Daily communication	Prevent operational risks	Protect the rights and interests of investors, especially small and medium-sized investors, in accordance with the laws
	Investor meeting	Regulate information disclosure	Disclose corporate information in strict accordance with the rules
 Employees	Employee representative supervisors, employee representative meeting	Safeguard legal rights and interests	Regulate labour management
	Employee symposium with management	Achieve career development	Enhance staff training and open up career paths
	Employee questionnaire	Participate in management	Improve income distribution and welfare protection mechanism
	Letter and visit	Staff caring	Care for the physical and mental health of staff and improve working conditions
 Suppliers	Supplier selection and engagement	Integrity and self-discipline in procurement, clearly defined systems, rigorous processes and standardized operations	Improve the synergistic and compliant procurement management systems and separate the supplier selection, procurement execution and monitoring functions
	Subcontract management	Clear needs and high transparency in management	Establish a supplier resource base, ensure supplier qualifications and service capabilities, provide necessary skills training and strengthen project-focused whole process management
	Green procurement	Implement green and eco-friendly concepts, reduce the damage and impact to the environment	Give priority to suppliers with environmental management system certificates and products that are in line with environmental protection standards. Disseminate the concept of environmental protection to suppliers and actively explore whole-process electronic procurement

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Stakeholders	Mechanism and Means of Communication	Expectations on the Company	Company Response
 Customers	Contract fulfilment	Cost-effective solutions (services, products)	Identify customer needs accurately and innovate smart products to meet their customized needs
	Visit, meeting and communication	Good service quality	Project reports, regular meetings, project visits, etc. for full life cycle business management
	Roadshow, exhibition	Efficient response	Respond to customer needs as soon as possible
 Community	Community communication activity	Protect the environment	Energy saving, emission reduction and conservation of water and electricity
	Community building activity	Safeguard emergency communications	Actively engage in disaster relief and communications safeguard
	Public welfare activity	Care for the underprivileged groups	Carry out poverty alleviation work, help the disabled and the poor

Material Topic Identification

With regard to the 12 ESG issues set out in the Guide, the Group took into consideration the characteristics of its business and the industry in which it operates to conduct investor meetings so as to understand the concerns of external stakeholders such as shareholders, investors and the capital market. It actively participated in questionnaire surveys conducted by ESG rating agencies to comprehensively analyse the concerns of stakeholders. At the same time, in combination with the Company’s strategies, the Group interviewed its internal employees and conducted research on the issues related to sustainable development. Together with the results of internal and external analysis, it identified several material topics and specifically disclosed and analysed them in this ESG report. These topics included “Environmental Protection and Climate Change”, “Human Resources Management”, “Development and Training”, “Health and Safety”, “Supply Chain Management”, etc. Details of which are discussed in this report.



ENVIRONMENTAL PROTECTION AND CLIMATE CHANGE

Climate change not only has profound impacts on the global ecosystem, but also brings significant impacts on the global economy. Carbon dioxide emission has been adopted as an important indicator by the PRC for the evaluation of an enterprise's production and operation performance, which presented new requirements for enterprises to adapt to climate change. The Group has realized the effects of risks and policies associated with climate change on its operations and has taken corresponding proactive measures to capitalize on the opportunities arising therefrom and cope with the challenges.

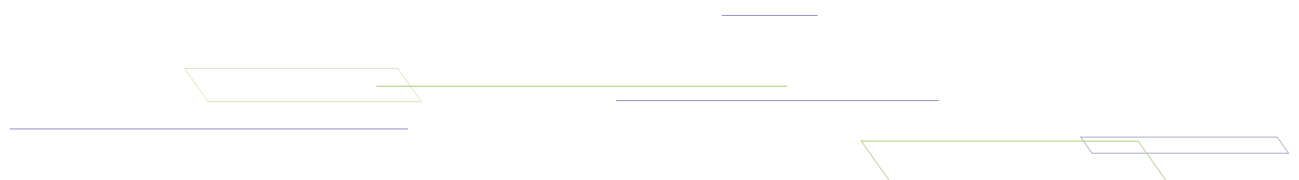
In 2022, the Group actively researched on and discussed the pathways to address climate change and control greenhouse gas emissions, while formulating green and low-carbon development plans. It organised capacity building, technology research and publicity work to fight against climate change and endeavoured to improve its capability in environmental management, with a view to contributing to mitigate global warming.

Climate Risk Governance

To enhance its ability to respond to climate change, the Group has analysed and sorted out major climate-related issues that had and may have an impact on the Company and the action taken to managing climate change. It has also established targets and work plans for reducing emissions. The Company has also taken into account the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to advance its work on governance, strategy, risk management and targets to address climate change.

Governance



The Board is responsible for coordinating and overseeing the implementation of ESG goals and ESG actions, including climate risk management and "Carbon Peak, Carbon Neutrality" ("Dual Carbon") planning. The ESG Working Team under the Board is responsible for carrying out ESG-related tasks, including climate risk assessment and energy saving and emission reduction initiatives. Besides, the Group also set up a "Carbon Peak, Carbon Neutrality" management organization, with the President of the Company as the person in charge, which is responsible for work related to overall planning and management.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Strategies

The Group realized the long-term and significant impact and risks posed by climate change to the enterprise. By analysing the potential impact of the risks, it identified strategies to deal with risks to avoid negative impact on business operations as far as possible. In addition, the Group prepared “the Dual Carbon Goals Rolling Development Plan” and “the Dual Carbon Action Plan” to actively seize the opportunities from climate change. Please refer to relevant sections in this report for relevant contents.

Type of risk	Risk description	Potential impact	Preventive strategy	
 Physical risks	Acute risk: extreme weather such as typhoons and heavy rainfall	Increase in frequency and severity of extreme weather, such as heavy rainfall, which affects business development progress	Loss of revenue, higher operating costs	Implement emergency plans for natural disasters
	Chronic/long-term risk	Higher temperature in the future, increasing energy consumption	Increase in operating costs such as energy consumption due to the need for more refrigeration equipment as a result of higher temperatures	Implement energy saving and emission reduction measures Research and development for the application of more energy-efficient refrigeration technologies and equipment
 Transition risks	Technology risk	Low-carbon technology transformation leading to change of business scenarios	Stranded assets due to failure to adopt low-carbon technologies timely	Enhance R&D capabilities for low-carbon technology and commence relevant technology cooperation
	Market risk	Customer preference for low-carbon products and solutions based on climate related considerations	Failure to effectively meet consumer demand for green and low-carbon products and solutions	Expand the industrial ecosystem to provide low-carbon products and solutions
	Regulatory compliance risk	Enforcement of stricter climate-related laws and regulations	Increase compliance costs	Form working groups to regularly follow up on legal and regulatory requirements

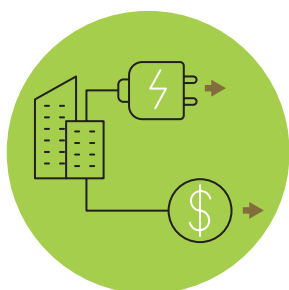
Risk Management

The Audit Committee of the Board is responsible for reviewing the assessment of the relevant risks and delegating authority to management to develop and implement the relevant systems. At the same time, climate change risks were included in the overall risk assessment and management system of the Company and internal control process related to the environmental, social and governance was newly added to further strengthen the Company's risk management of ESG.

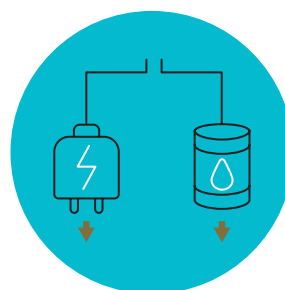
Metrics and Targets

The Group actively responds to the national strategy of "Dual Carbon" while persistently implementing the development philosophy of innovation, coordination, green, openness and sharing. It has formulated green and low-carbon plans and related implementation programs and continuously increased its R&D investment in emerging energy-saving technologies and new businesses, thereby creating a green ecosystem and making China Comservice more eco-friendly.

Targets during the period of Dual Carbon Goals Rolling Development Plan



The growth rate of total energy consumption does not exceed that of business revenue



Electricity and fuel consumption per revenue of RMB10,000 remains on a reasonable decline

	2022	2021*	Change
Energy consumption per revenue of RMB10,000 (kg of standard coal)	11.29	12.70	-11.1%
Electricity consumption per revenue of RMB10,000 (kWh)	20.56	23.69	-13.2%
Fuel consumption per revenue of RMB10,000 (L)	7.26	8.12	-11.9%

* During the reporting period, the Company systematically sorted out the calculation methodology adopted by the Greenhouse Gas Protocol for the disclosed data and made corresponding adjustments to the data for 2021 to increase data comparability, so the data for 2021 is slightly different from those disclosed in the 2021 report.

Our actions

Action 1

The Group has set up a "Carbon Peak, Carbon Neutrality" management organization, with the President as the main person in charge and the Company's management working together to form the leading group. This three-tier working structure aims to promote the Group's green and low-carbon development.

Leading Group

Directing the deployment of green development work and studying and making decisions on important issues in respect of "Dual Carbon"



Office of the Leading Group

Implementing the specific work and organizing the day-to-day work of the Group for the "Dual Carbon"



Subsidiaries at all levels

Implementing the Group's "Dual Carbon" plans and objectives, promoting and undertaking "Dual Carbon" projects



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

During the year, “Dual Carbon” management organization planned and conducted a three-week “Dual Carbon” Empowerment Training Month under three themes: new infrastructure and new energy, contract energy management and consulting training, and platform services and eco-cooperation, and a total of over 1,500 participants joined the training online.

The Group summarized the main capabilities of subsidiaries at all levels in terms of “Dual Carbon” and formed a list of “Dual Carbon” services in 12 major categories and six areas in total.

中国通服双碳赋能月

创新引领 科技共享

新基建及新能源篇
7月12日上午09:00

时间	内容	发言人
09:00-09:15	领导讲话	梁世平
09:15-09:35	绿色5G基站产品及解决方案	湖南康普
09:35-09:55	绿色5G基站一体化服务能力	中时讯
09:55-10:15	老旧机房节能降碳解决方案	中通服务
10:15-10:35	新型绿色低碳数据中心一体化服务能力	中通服务设计
10:35-10:55	光伏新能源解决方案	中通服务
10:55-11:15	光伏发电一体化解决方案	浙江工程
11:15-11:35	中国通服2022年“双碳”赋能光伏新能源解决方案	安徽电力行业中心
11:35-11:55	风力发电项目承接解决方案	中融建

中国通服双碳赋能月

创新引领 科技共享

平台服务及生态合作篇
7月26日上午09:00

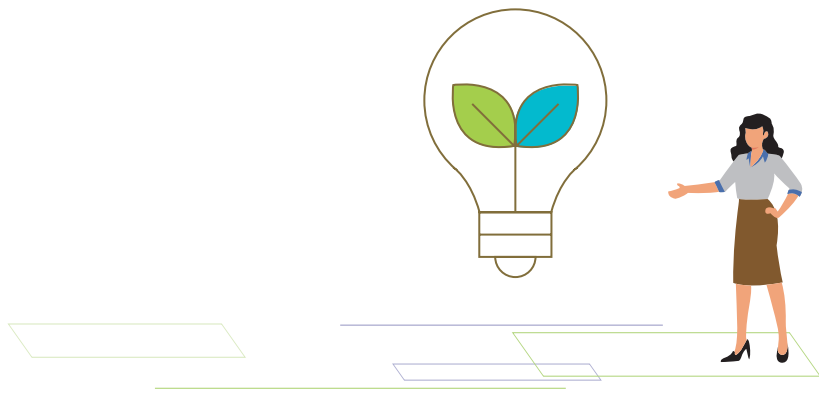
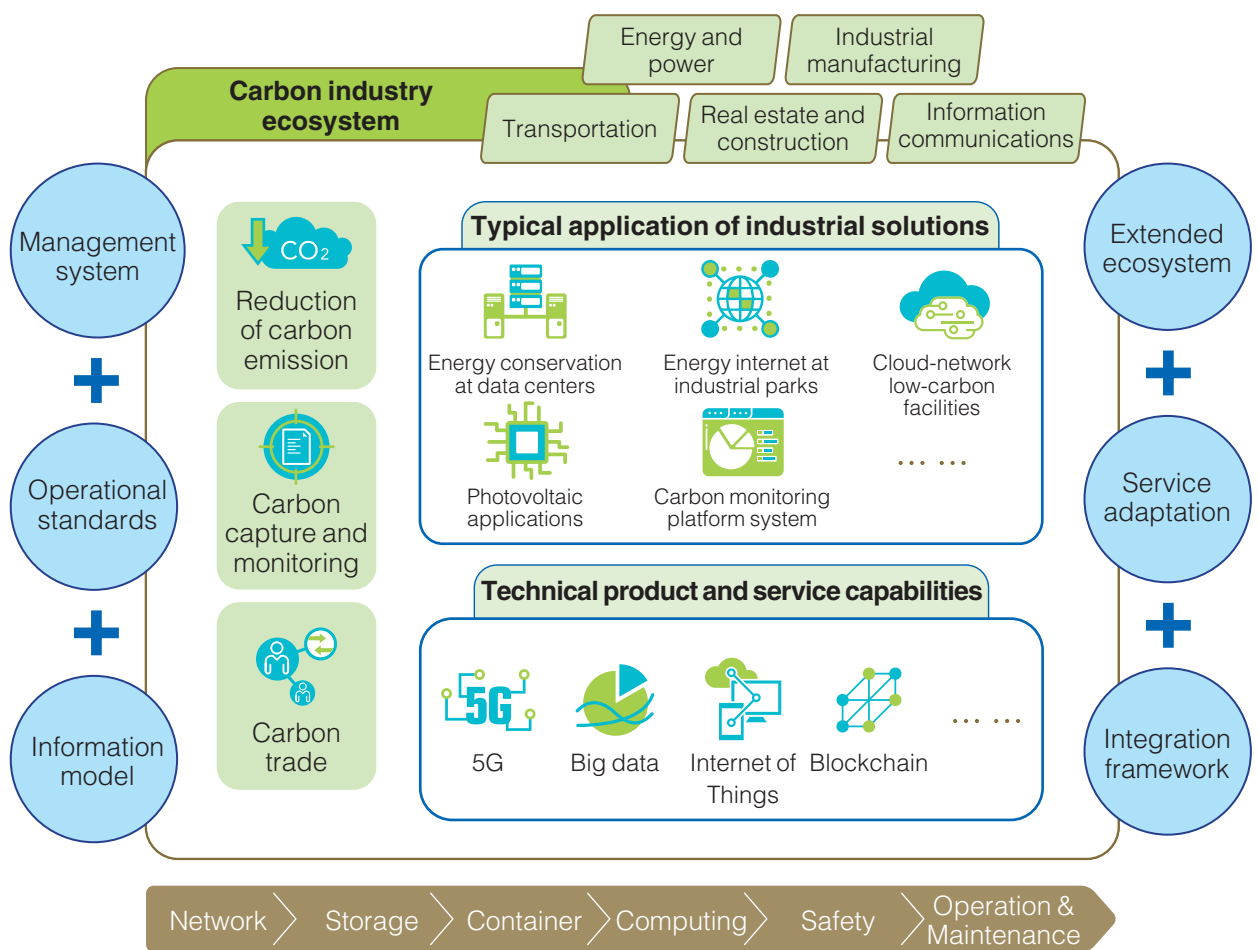
时间	内容	发言单位
09:00-09:20	生态合作-能源数字化	中能融合智慧科技有限公司
09:20-09:40	生态合作-绿电	国网绿色能源有限公司
09:40-09:55	绿电交易探索	公诚设备
09:55-10:10	碳足迹	中国通服数智科创
10:10-10:25	智慧节能机房	福建技民
10:25-10:40	园区智慧节能管控管理平台	中通服务
10:40-10:55	双碳监测管理平台	重庆通建
10:55-11:10	基于平台的多场景节能服务	浙江邮电工程
11:10-11:25	智慧园区下的双碳管理解决方案	中通服务四局
11:25-11:40	机场智慧能源	中通服务
11:40-12:00	领导总结	/

The Second Carbon Neutralization Boao Conference was successfully held and the Group’s subsidiary, China Information Consulting & Designing Institute Co., LTD., was awarded the “Carbon Neutrality Industry Pioneer Award (Information and Communications Industry)”. This award is the most influential award among the China Energy Conservation Association’s carbon neutrality field enterprise awards, reflecting the industry’s high recognition of the Company’s capabilities and achievements in the field of carbon neutrality in the information and communications industry.



Action 2

The Group prepared “the Dual Carbon Goals Rolling Development Plan for 2023–2025” and “the 2023–2025 Dual Carbon Action Plan”, and continuously promoted the “Research on the Peaks of Carbon Emission and Pathways to Carbon Peak”. Leveraging the “Dual Carbon” mission, it improved the organizational system and rules for energy conservation and emission reduction, supported the construction of a binding incentive mechanism for energy conservation and emission reduction, and reduced total energy consumption. Focusing on the areas of energy and power, industrial manufacturing, transportation, real estate and construction, and information and communications as well as three major business sectors which included carbon emissions, carbon management and carbon removal, the Group strived to promote carbon reduction in society.



Use of Technology to Seize Opportunities from Energy Saving and Carbon Reduction

In managing the risks of climate change, the Group has leveraged its unique advantages to increase the application of new technologies such as 5G, big data, cloud computing and the Internet of Things. While promoting upgrade and carbon reduction of energy-intensive industries, it developed a series of energy-saving technologies and products for energy saving and carbon reduction, which allows it to seize the opportunities in climate change.



The First “Zero-Carbon” Green Big Data Center in China

China Telecom (National) Digital Qinghai Green Big Data Center undertaken by Huaxin Consulting Co., Ltd., which is a subsidiary of the Group, in general contracting model, has reached a PUE of less than 1.2 through advanced cooling technologies such as indirect evaporative cooling and liquid cooling. With the construction of its own distributed photovoltaic parking shed for power generation and the development of a green power monitoring platform in collaboration with State Grid, it established China’s first traceable 100% clean energy power supply, as well as China’s first exemplary model of integrated source-grid-load-storage smart green power supply in the data center sector. The data center has been rated as an AAAA low-carbon data center (planning category) and it has passed the ISO certification for data centers. It has also been awarded the “2022 Industrial Transformation and Energy Saving Special Fund” in Qinghai Province, selected as one of the “2022 Corporate Cases for High-Quality Development of Big Data Centers” and “2022 Excellent Case of Green ‘Dual Carbon’ Technology Application in Digital Industry” in China.

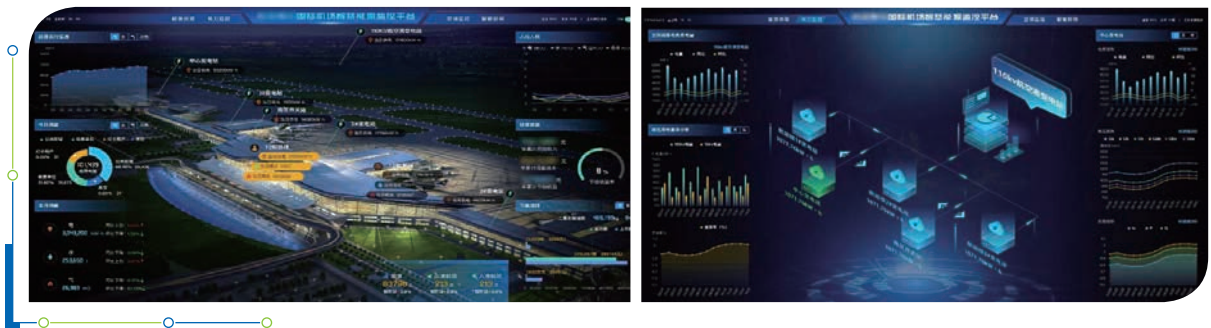
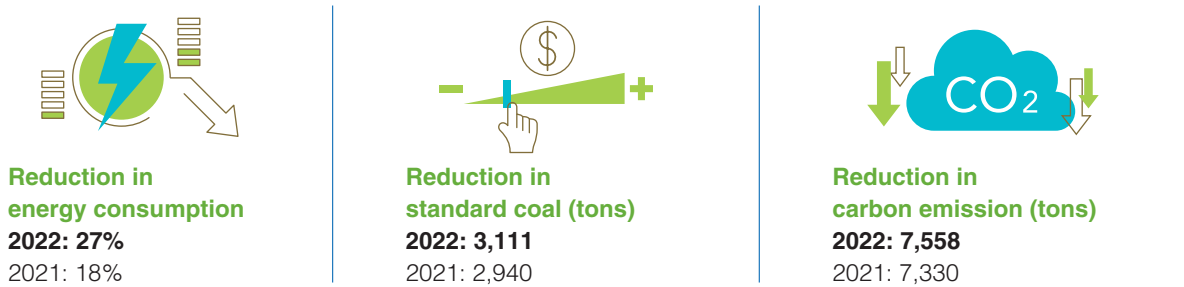


Integrated Energy Management Platform for Smart Airport

China Comservice Transfar Technology Company Ltd., which is a subsidiary of the Group, provides integrated smart energy control services for the green airports. With a focus on energy consumption indicators, the platform achieves panoramic multi-dimensional visual monitoring of the airport energy system and helps airports to make better data-driven decisions. A new integrated energy dispatching system was established to enable “demand-supply interaction”. Based on load forecasts and energy production costs, it dynamically adjusts the composition of production equipment to achieve optimal dispatching of the entire network, further improves the quality of energy consumption and reduces production costs.

An international airport has become the first airport in China to adopt smart energy management. It has achieved significant reductions in average annual energy consumption, average annual energy costs and total carbon emissions, without compromising the comfort of passengers.

Operational outcome of the integrated smart energy management platform at an international airport



Distributed Photovoltaic Power Generation Project of a Factory

China Comservice Construction Co., Ltd., a subsidiary of the Group, has built a photovoltaic parking shed for customers, adopting the mode of “self-generation for self-use and grid-connection of surplus power”. By utilizing Building Integrated Photovoltaic (BIPV) and BIM technology, the distributed photovoltaic power generation steel structure parking shed was constructed using the parking lot in the factory. The total installed capacity of the overall photovoltaic parking shed construction of the factory is about 50MWp, and the annual emission reduction of carbon dioxide is more than 18,000 tons.





Comprehensive Energy-saving Retrofit of Equipment

Guangdong Nanfang Communication Construction Company Ltd., which is a subsidiary of the Group, adopted diversified means for the comprehensive energy-saving retrofit of the micro-modules at access network rooms, the air conditioning system in the machine room and 2/3G sites.

- A total of 17 access network rooms in Guangzhou, Foshan and Shantou have undergone the retrofit of micro-modules using a consortium approach and completed the supply, installation, testing and commissioning of micro-module equipment. The PUE of most of the micro-modules in the access network rooms is reduced to around 1.2–1.4 after the retrofit, saving approximately 1.91 million kWh of electricity for the 17 machine rooms per year.
- With regard to the energy-saving retrofit of the air-conditioning system in the machine room, a comprehensive energy-saving solution was adopted, which included the use of high-efficiency inverter screw units, inverter pumps, inverter cooling towers and EC fan terminal air cabinets. Following the completion of the renovation of the central air-conditioning system of a comprehensive building of a research institute, the customer can precisely adjust the cooling system according to the real-time changes of the cooling load and achieve 50% more energy saving benefits as compared to those before the retrofit. As a result, the customer can save around 2 million kWh of electricity each year.
- The minimalist retrofit of 2/3G sites included the customization of the centralized dispatching plan for remote and near-end server rooms, the consolidation of BBU and integration of baseband boards for target sites, and the switch-off and phase-out of high-energy-consuming equipment such as air-conditioners at relevant sites. The minimalist retrofit of nearly 1,500 sites has been completed, which reduced the overall power consumption by about 53% and cut carbon dioxide emissions by about 22,500 tonnes per year.



Red Line Monitoring System for Ecological Protection



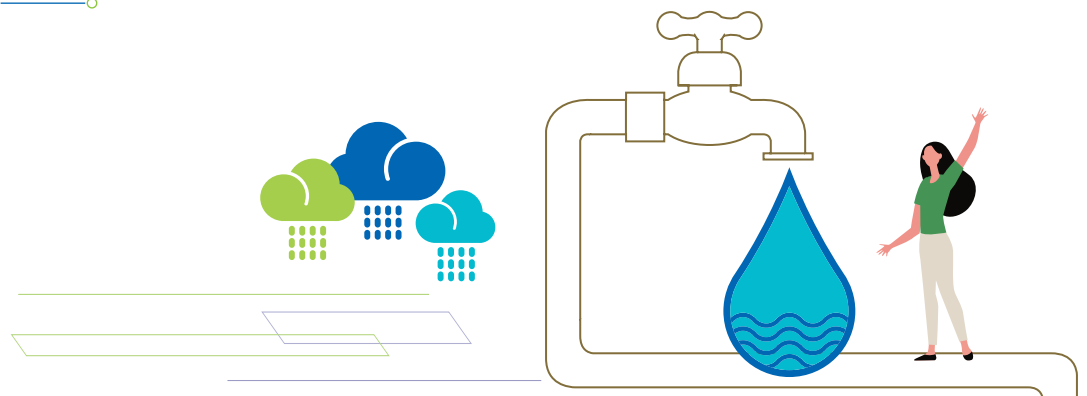
China Comservice Construction Co., Ltd., which is a subsidiary of the Group, undertook the construction project of the red line monitoring and supervision capacity for the ecosystem and ecological protection in Shenzhen City, Guangdong Province. The system covered five major areas of monitoring, which included the monitoring of ecosystem structure, the monitoring of ecological resources status, biodiversity observation, ecosystem function observation and human habitat suitability monitoring. A total of 296 biodiversity observation sites (200 for animals, 11 for insects and 85 for plants) and 20 sites for building the monitoring capability of human habitat suitability (6 for air microorganisms, 6 for pollen, 6 for negative ions and 2 for BVOC) have been established. Relying on “integrated space, sky and ground” drones, video surveillance, ground surveillance and other automated monitoring means, the system achieves round-the-clock and large-scale real-time dynamic monitoring of urban ecology and ecological protection red line.



“Smart Water Conservancy” Products

Based on a unified microservices structure, the Group achieved the integration and unified visualization presentation of diversified applications for the management of “three defense”, river chiefs, water resources and environment, with successful cases all over China.

- **Three Defense Command Center and Protection System for a customer in Guangdong Province**
The center established and achieved the integrated linkage of three defense decision support, three defense video surveillance, three defense consultation and dispatch and three defense mobile application business system. It launched a mobile APP for remote consultation and integrated monitoring of flood and rainfall, weather and video surveillance.
- **Phase I of Smart Water Conservancy Project in a city of Jiangsu Province**
The project included the building of eight major sub-systems, namely the flood and drought prevention information management system, water supply information management system, drainage information management system, South-to-North Water Transfer information management system, water conservancy project information management system, water resources information management system, rural water conservancy information management system and smart water conservancy collaborative office platform, etc. It is also China’s first integrated informatization platform for water conservancy and water affairs.
- **Smart Water Conservancy Construction Project in a city of Fujian Province**
The project included the building of an efficient and comprehensive awareness system, a big data resource center and a unified smart application platform of water conservancy in that city. It assisted the customer in making decisions and reducing flood disasters, eliminating potential flood hazards, safeguarding people’s lives and property, and improving public service efficiency and service capacity.



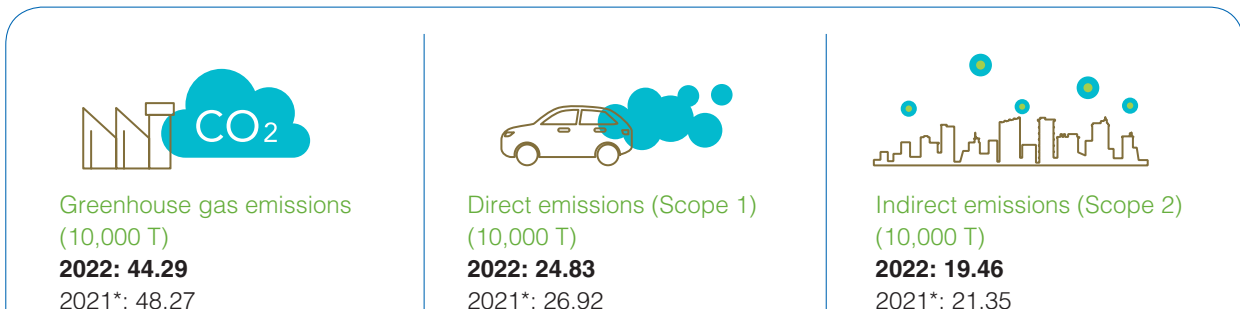
Promote Green Operations

The Group is an informatization communications service provider. In the course of providing services to customers, the Group has always strictly complied with various laws and regulations on environmental protection and emissions, including the Environmental Protection Law of the People’s Republic of China and the Energy Conservation Law of the People’s Republic of China. It has carefully formulated internal management systems for environmental protection and resource use, actively controlled pollutant and greenhouse gas emissions, sewage discharge and the disposal of solid and hazardous waste. The Group has actively responded to the national call to reduce the impact of its operations on the environment.

Energy Consumption

In 2022, the total energy consumption of the Group was approximately 159,000 tons of standard coal, with an energy consumption per revenue of RMB10,000 at 11.29 kg of standard coal (2021*: approximately 170,000 tons of standard coal, with an energy consumption per revenue of RMB10,000 at 12.70 kg of standard coal).

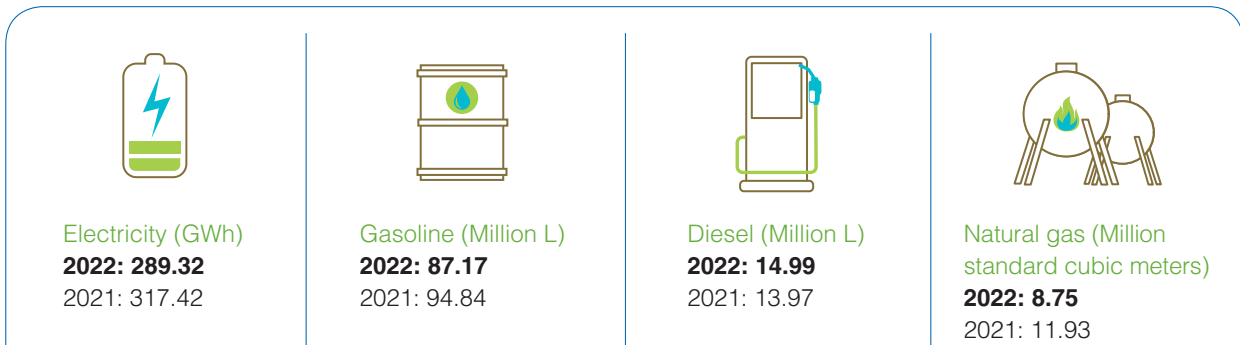
According to the energy report of the Group, the total emission of greenhouse gases generated from energy consumption of the Group in 2022 as accounted pursuant to the Greenhouse Gas Protocol was approximately 442,900 tons (2021*: approximately 482,700 tons).



Notes:

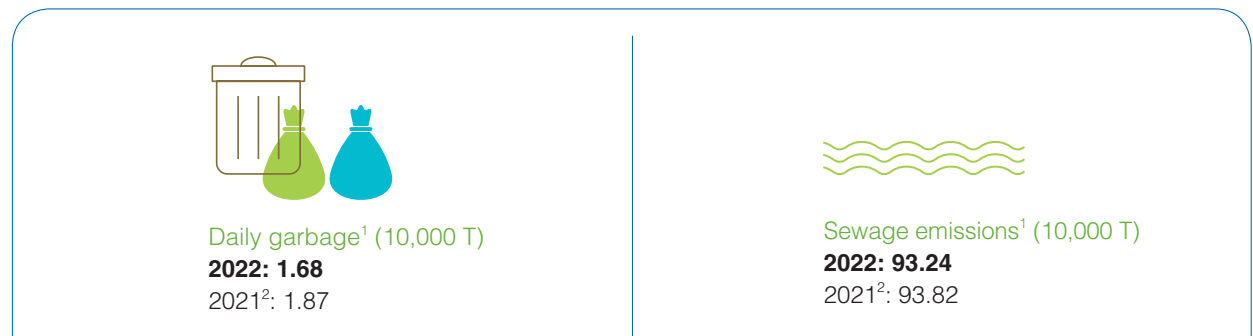
1. Scope 1 direct greenhouse gas emissions include greenhouse gas emissions from the consumption of natural gas, coal, gasoline and diesel.
 2. Scope 2 indirect greenhouse gas emissions include greenhouse gas emissions from the purchase of electricity and heating.
 3. Total greenhouse gas emissions are the sum of Scope 1 direct greenhouse gas emissions and Scope 2 indirect greenhouse gas emissions.
- * During the reporting period, the Company systematically sorted out the calculation methodology adopted by the Greenhouse Gas Protocol for the disclosed data and made corresponding adjustments to the data for 2021 to increase data comparability, so the data for 2021 is slightly different from those disclosed in the 2021 report.

Direct/Indirect Energies by Type



Waste Discharge

The Group strictly follows the Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes and other laws and regulations regarding waste disposal and utilisation, and carries out waste disposal in accordance with regulatory requirements. Some of the provincial companies and professional companies of the Group have engaged property management firms for waste disposal.



Notes:

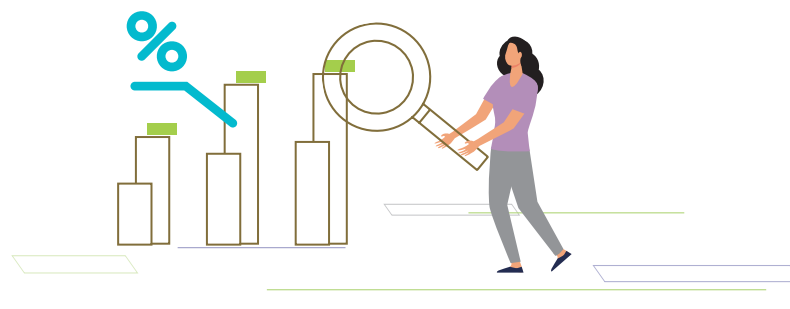
1. The Group is an asset-light enterprise, its solid wastes are mainly daily garbage, and the sewage it discharges is mainly daily sewage.
2. During the reporting period, the Company has made concurrent adjustments to the data for 2021 to enhance data comparability, leading to the slight difference between the data for 2021 and those disclosed in the 2021 annual report.

Resource Utilisation

In terms of the use of packaging materials, the Group operates in the informatization communications service industry, and is mainly engaged in design, construction, supervision, maintenance and other services. Therefore, there is no significant usage of packaging materials in its production and operation process.

As for water consumption, the Group's water supply is provided by the owner or property manager of the office building. The Group attaches great importance to the reasonable and efficient usage of water resources in the normal course of business. It strives to promote and advocate water conservation through public promotion on a daily basis and the installation of water-saving taps, which allows it to further intensify the management of water resource utilisation and reduce unnecessary consumption of water resources. In 2022, the Group's total water consumption was approximately 4.60 million tons (2021²: approximately 5.30 million tons).

In respect of office paper usage, the Group adheres to the principle of economical use and tolerates no waste to strictly control the use of office paper. In addition, the Group actively enhances its online office capabilities, continuously improves its service quality with informatization means, and extensively promotes the use of cloud-based office applications such as paperless conference systems and online conference systems. In 2022, the Group's total office paper consumption was approximately 1,135 tons (2021²: approximately 1,081 tons).



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Protecting the Ecological Environment in Project Construction

The Group complies with environmental laws and regulations, contracts and other relevant requirements in its business operations. It reduces construction waste and natural resource consumption, and requires its subsidiaries to understand the environmental characteristic and needs of the regions where they operate, and establish and implement environmental management strategies in line with the requirements. More than 100 professional companies of the Group have obtained the ISO9001 and ISO14001 certifications and among them, Jiangsu Communications Real Estate Management Co., Ltd., a subsidiary of the Group, has obtained ISO50001 energy management system certification. They are committed to managing and reducing their environmental impact in their business activities.

	<p>Land conservation</p>	<p>Strictly abide by national laws and regulations, effectively protect arable land, and orderly implement treatment and restoration work such as site closure, rehabilitation and greening to achieve sustainable use of land resources</p>
	<p>Equipment pollution</p>	<p>Give priority to equipment that is free of noise, electromagnetic radiation and pollutant emissions</p>
	<p>Construction impacts</p>	<p>Avoid mineral deposits, forests, grasslands, wildlife, natural relics, human relics, natural reserves, scenic spots and other areas when conducting field survey for communication lines and avoid changing the neighbouring environment when laying optical fibre cables as far as possible</p>
	<p>Electromagnetic radiation</p>	<p>Actively adopt advanced technical means to refine the layout of base stations and ensure that the electromagnetic radiation indicators meet the national standards; monitor and assess the electromagnetic environment around base stations; strictly control the quality of equipment connecting to the network to exercise strict control at source</p>

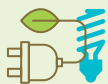
Green Office

The Group constantly improves its organizational system, management system and work process for energy saving and emission reduction through multiple measures, so as to effectively reduce energy consumption. Campaigns like Energy-saving Promotion Week and National Low-carbon Day are actively carried out by the Group to continuously raise the energy-saving and environmental-protection awareness of its staff. Energy conservation slogans are put up in venues such as public areas inside the buildings and conference rooms. In addition, the Group strictly implements the assessment and reward and punishment mechanisms in relation to energy saving and emission reduction performance and sets annual energy-saving and emission-reduction budgetary targets for its provincial companies, which ensure the accomplishment of its annual energy-saving tasks.



Improve online office capabilities

The Group makes full use of cloud conferencing and cloud research to enhance online office efficiency



Strengthen power saving management for lighting

The Group continues to enhance its daily electricity saving measures and adopts energy-saving lamps in all offices, meeting rooms and other premises to reduce the electricity consumption of lighting equipment



Enhance energy consumption management for vehicles and promote green travel

The Group strictly controls the formation and scale of the fleet of business vehicles to reduce its energy consumption, and it has implemented a "one vehicle, one card" refuelling system in an effort to reduce total fuel consumption. With the use of GPS systems for precise positioning, it aims to reduce the energy consumption of vehicles. It also advocates green travel among employees



Eco-friendly Recycling

Several professional companies of the Group collect returned network equipment, inefficient equipment with high-energy consumption and other inefficient assets from telecommunications operators for recycling and disposal via a green auction platform. By introducing the reverse integrated asset disposal model of “dismantling, transportation, storage and sale”, a closed-loop ecological chain of environmentally-friendly asset disposal, starting from the source of scrap materials till the auction and delivery of assets, has been developed, which not only realizes eco-friendly disposal of waste and obsolete products, but also achieves effective utilisation of resources.

The Group will actively establish and improve a long-term mechanism for resource conservation, improve energy efficiency, develop a circular economy and fulfil its corporate environmental responsibility.

China Comservice Supply Chain Management Company Ltd.

China Comservice Supply Chain Management Company Ltd. (“Supply Chain Company”), which is a subsidiary of the Group, owns six subsidiaries including Zhongjie Telecommunications Co., Ltd., Shanghai Tongmao International Supply Chain Management Company Ltd., Zhejiang Zhongtong Communications Co., Ltd., Jiangsu Zhong Bo Communications Co., Ltd., Fujian Zhongtong Communication Logistics Co., Ltd. and Hubei Xintong Communication Ltd. These subsidiaries engaged in the auction business and disposed of cables, batteries, return network equipment, office supplies and engineering materials for a total of RMB860 million in 2022. Since 2009, they have disposed of assets with a total amount of over RMB6 billion.

Based on the nature of the waste and obsolete materials from customers, Supply Chain Company has established a green auction support system, which integrates the recycling, transportation, sorting, storage and disposal of such materials to solve the problems including long asset disposal cycle, various safety hazards and high storage costs for customers. The company has also compiled a whole process integrated plan to meet customers’ needs for the whole process control from asset scrapping to material delivery.

Zhejiang Zhongtong Communications Co., Ltd.

Since 2009, it has engaged in the recycling, storage and disposal of scrap materials for operators and built its own disposal platform for waste and obsolete products. The company has over 1,600 high-quality recycling partners and a business presence in 31 provinces, municipalities and autonomous regions across China. It disposes of communication assets, office supplies and engineering materials for customers including telecommunications operators, such as China Telecom, China Mobile and China Tower. It also offered integrated assets disposal services for asset owners which include asset valuation, qualification examination and online auction services.

Shanghai Tongmao International Supply Chain Management Company Ltd.

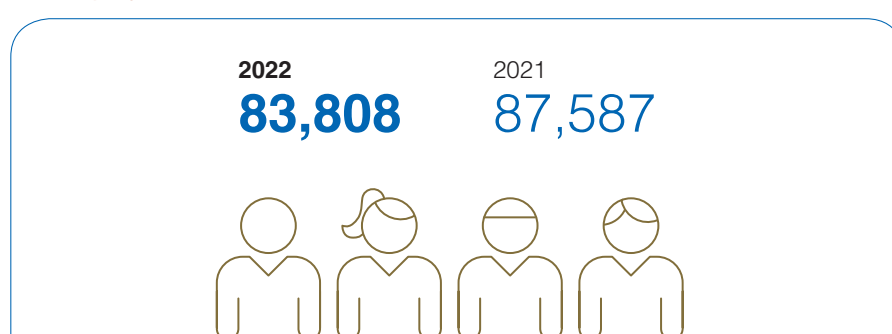
The green auction support system of Shanghai Tongmao formed a mature reverse integrated asset disposal model by integrating the recycling, transportation, sorting, storage and disposal of scrap materials. The whole process fully covers from the source of scrap materials after they are generated, all the way to the disposal, delivery and settlement of scrap assets. Currently, the auction platform has nearly 350 recycling enterprises with various qualifications for various types of materials, which can cover the disposal needs of operators for scrap materials. Apart from improving the disposal efficiency of asset units, it can also avoid the environmental risks arising from scrap materials and fulfils the environmental responsibilities of waste-producing units.

HUMAN RESOURCES MANAGEMENT

Employment

The Group had approximately 84,000 employees as at 31 December 2022. We are committed to ensuring equal development opportunities for both genders, and protecting and enhancing the rights and interests of female employees. Our employees are located primarily in the PRC with some of them located in other regions around the world such as Southeast Asia, the Middle East and Africa. Our employees are divided into contract employees, dispatched employees, part-time employees and other employees.

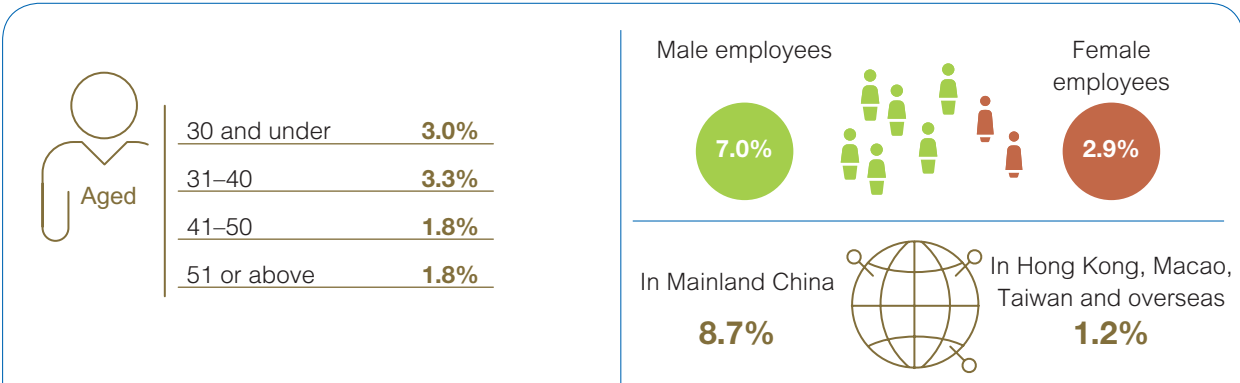
Total Number of Employees



Indicator	2022	2021
By type (no. of employees)		
Contract employees	80,549	83,871
Dispatched employees	3,009	3,380
Part-time employees	59	140
Others	191	196
By geographical location (%)		
Mainland China	98.7	97.6
Hong Kong, Macao, Taiwan and overseas	1.3	2.4

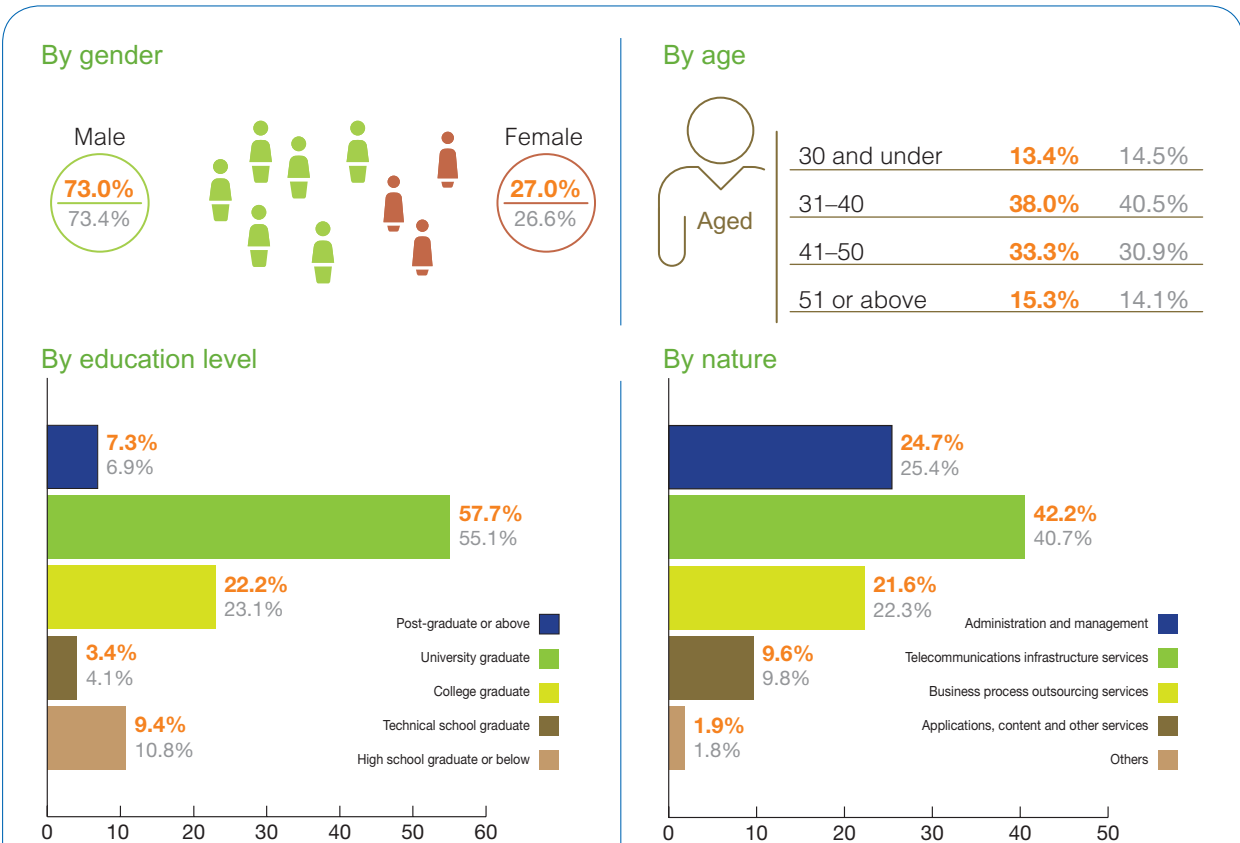


2022 Employee Turnover Rate

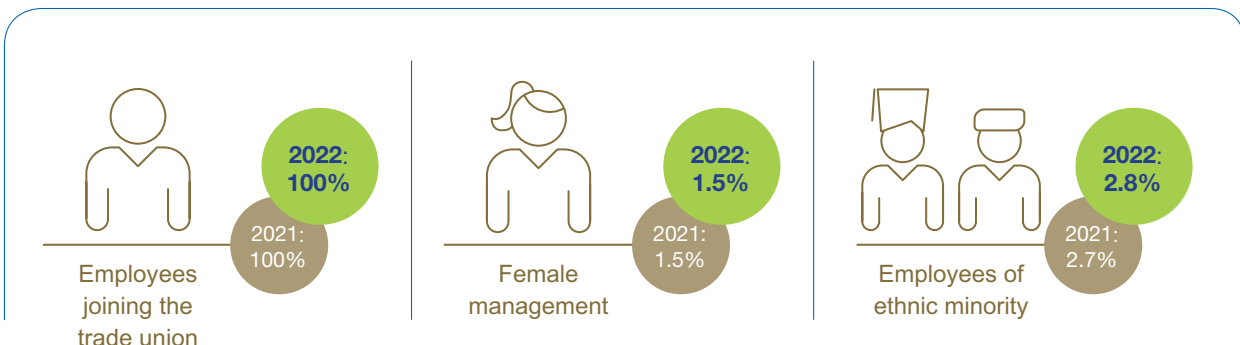


Employee Structure (Contract + Dispatched Employees)

● 2022 ● 2021



Contract



Broadening the Talent Pool

As a state-owned enterprise, the Group undertakes an important social responsibility of stabilizing employment situation and provides a large number of job opportunities in the market every year. In addition, we take into consideration the characteristics of communications infrastructure construction projects, i.e. strong cyclicity with a large demand for temporary labour, and encourage our upstream and downstream partners to conduct flexible recruitment during the installation of communication cables and equipment based on actual business needs. Through which, we created a large number of job opportunities in the market, which plays an important role in building up our own talent pool and addressing the employment needs of fresh college graduates.

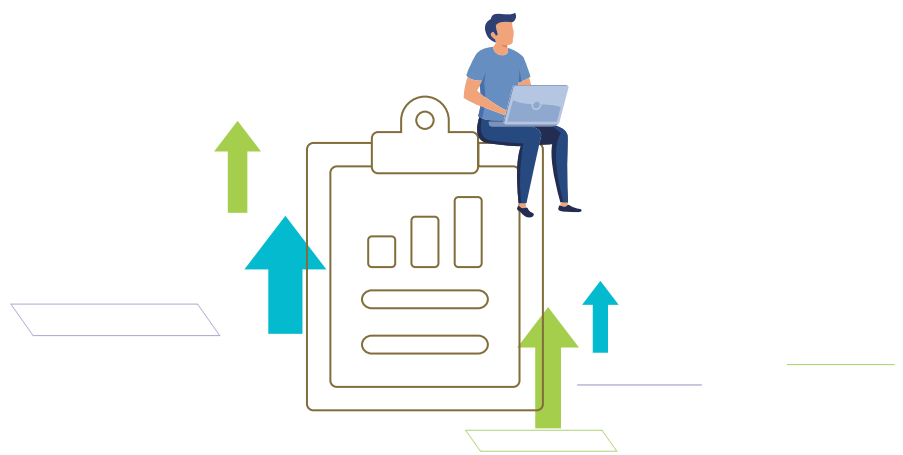
To further improve the market-oriented operational mechanism and deepen the innovation of the human resources system and mechanism, the Group has been pushing forward the reform of the human resources, labour, and allocation systems in 2022. It established an employment mechanism based on position management with contract management as the core, with a focus on key business areas. It has also introduced high-tech, highly skilled, and high-quality talent, maintained control over the total number of employees, optimized the workforce structure, improved the effectiveness of career mobility mechanism, enhanced the overall quality of staff, and boosted labor productivity continuously.

Remuneration and Performance Management

The Group regards employees as an important resource of the enterprise and attaches significance to the protection of their interests. In accordance with the principle of “performance-oriented, internally equitable and externally competitive”, it optimises the remuneration distribution system which links closely with its enterprise value and individual performance. It formulates and implements the “Guidance on Performance-related Pay for Heads of Professional Companies and Municipal Companies under Provincial Subsidiaries of China Comservice”. It insists on adopting a remuneration system that favours employees with outstanding contributions and those working in crucial and front-line positions of hardship and danger to support first-class talents in delivering first-class performance for first-class remuneration, so that employees who worked more would be paid more.

The Group actively supported the implementation of the position-based bonus incentive scheme for state-owned technology-based enterprises in 47 technology-based enterprises under the Group, which aimed to promote a close linkage between the remuneration of technological talents and their innovation ability and contribution. This allows employees to share the fruits of corporate development and stimulates the vitality of the organization and staff. The Group pays social insurance and housing fund for its employees in strict accordance with relevant national policies. It establishes an enterprise annuity system to protect the basic rights and interests of employees.

We are committed to the career development of our employees and offer dual promotion paths for them: “promotion for management functions” and “promotion for technical expertise.” We implement a system that links our employees’ remuneration and promotion to their work experience, capabilities, and performance, which encourages them to be proactive. Staff promotion follows the principles of fairness, justice, openness and transparency, and fully respects employees’ right to choose, right to know and right of supervision. In addition, the Group provides the Provincial Company Leaders’ Performance Evaluation Indicator System and Scoring Measures every year to ensure the full implementation of the Company’s development objectives and tasks for the year. By closely coordinating the budget, evaluation, and resource allocation, the Group gives full play to the motivating and guiding roles of performance evaluation, motivates business units at all levels to further develop strategic businesses, and promotes the steady improvement of the Company’s value and capability.



ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

In order to deepen the reform of the incentive and restraint mechanism and establish a sound medium and long-term incentive system, the Group launched a new round of share appreciation rights incentive scheme in 2022 to promote the mutual coordination and promotion of shareholders' interests, the Company's interests and the interests of incentive recipients. As a result, the interests of core employees in key positions are closely aligned with the Company's operating performance, which motivates their enthusiasm.

Welfare and Labour Standards

Compliance with the Laws in the Use of Labour

The Group has always complied with laws and regulations on dismissal, working hours and anti-discrimination. Our employees are entitled to national holidays. The Group strictly abides by and implements the laws and regulations in relation to labor employment and protection of labor's rights and interests, including the PRC Labor Law, the PRC Labor Contract Law and the PRC Trade Union Law. Pursuant to which, the Group protects the labor rights and interests, democracy and spiritual and cultural rights and interests of its employees.

The Group stands on various labor policies, including but not limited to, gender equality, and equal pay for equal work. It treats employees equally in the process of recruitment and promotion, regardless of their gender, age and race. It protects employee privacy in compliance with laws and implements a paid leave system.

- It strengthens labor employment management in a lawful and standard manner, ensures the entering into labor contracts with contract employees and makes contributions to the social insurance.
- In line with employment standards, it provides standardized labor contracts by category to clarify the rights and obligations of both parties, so that there are rules and laws for the management of labor relations to follow.
- It sets up standards for the dispatching contracts entered into with the labor dispatching units, inspects and supervises the signing of labor contracts between the labor dispatching units and dispatched employees, makes contributions to the social insurance and protects the rights and interests of the dispatched employees.

The Company strictly implements the relevant requirements of the Provisions on the Prohibition of Using Child Labour. It specifies the age requirements for applicants in accordance with the recruitment management measures, prohibits the use of child labour in accordance with the law and prevents the use of forced labour. There were no incidents of child labor and forced labor in 2022.

Safeguarding Democratic Rights and Interests

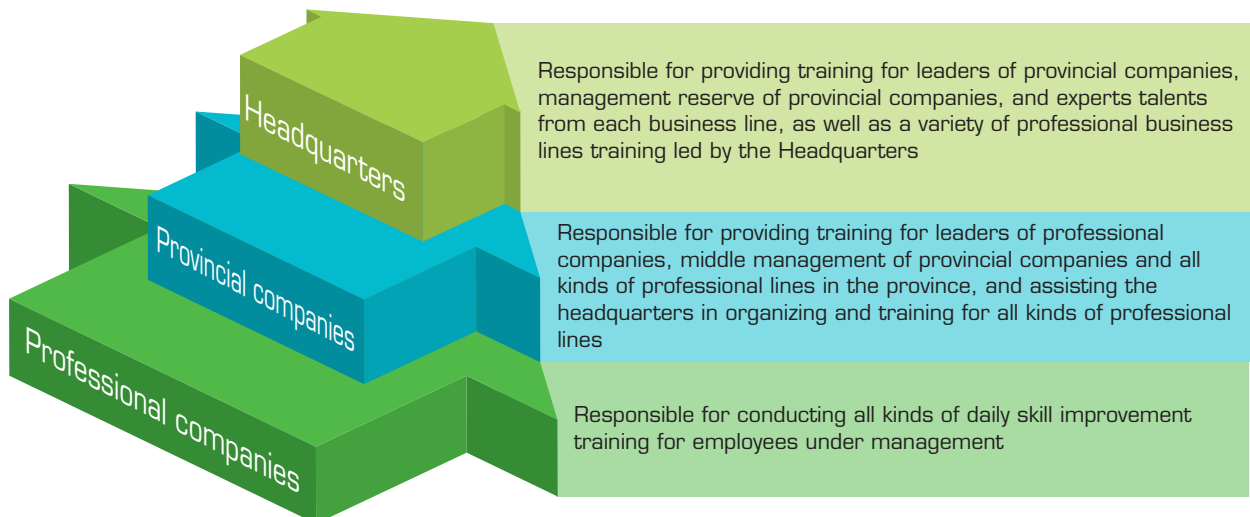
The Group continuously improves the organizational structure of the labor union, clarifies the division of responsibilities, and strives to leverage the role and value of the labor union in promoting business development. We also continuously expand democratic management channels, improve democratic management systems, adopt diversified methods to ensure staff representatives participate in enterprise democratic management, encourage employees to provide suggestions and fully guarantee their rights of information, participation, expression, and supervision. We continuously enhance the level and ability of enterprise democratic management, safeguard democratic rights and interests, and promote the healthy development of the Company.

Safeguarding the Rights and Interests of Female Employees

The Group is highly concerned about and values the care for female employees and strengthens the protection of their legal rights and interests, enhances female employees' qualities and contributions, offers support of rights protection, strictly implements the protection of female employees during the "four periods" (menstruation, pregnancy, childbirth and breastfeeding), and cares and comforts "single mothers" and menopausal female employees. At the same time, enterprises at all levels are urged to protect the legal rights and interests of female employees and widely collect reasonable suggestions from female employees.

Development and Training

The Group attaches great importance to staff training. Currently, it has established a three-tier training system covering the headquarters, provincial companies and professional companies. By fully leveraging the resource advantage of the training centers under the Company, it strives to build a hierarchical, classified, synergistic and efficient training system to promote the building of a learning-oriented organization.



In 2022, the Group formulated and issued the “China Comservice 2022 Training Work Plan”. It made synergistic and efficient use of resources from the colleges and training centers under the Company, led by the key tasks of promoting high-quality development of the Company, and concentrated on the key tasks for the year. With a focus on building up three teams, namely leading cadres, expert talents and key employees at the base level, it coordinated the training camps for improvement of various management and professional capacities, and continuously optimized the training management system, course development system and online training system, so as to provide talent and capability support for the innovation and transformation of the Company.





Leadership development training: In the context of the main tracks and new challenges of the Group in the new era, and towards the requirements of high-quality development of the Company, we are committed to promoting the awareness enhancement, knowledge re-construction and mindset re-creation of the management reserve in each provincial company, so as to build a double-engine management reserve team of “Entrepreneurial Leaders” and “Technical Talents”.

Professional line training: Focus on creating a high-quality talent ecology, with the goals of expanding perspectives and enhancing capabilities, and take various training camps and action learning as the vehicle to train for practice, combine training with practice, and devote efforts to cultivate a team of professional backbone talents on each line.

Demonstration and rotation course at the primary level: We pay attention to the capability enhancement and development aspirations of the core backbone employees at the frontline, and organize various comprehensive ability and professional skills training courses for frontline employees on 5G key technologies and industry applications, project management, marketing, etc., so as to build a frontline employee team with core competitiveness and cohesion.



Training camp for elite managers of general contracting projects

In order to timely adapt to the market demands under the new norm, the Group focused on offering training to project managers with potential and planned to nurture a team of around 300 high-calibre managers for general contracting projects to support and lead the development of the general contracting business. The training camp covered three main types of general contracting projects, namely 5G, IDC and DICT projects. Project managers received different training on professional practices based on their fields, so that they were precisely trained and empowered with a combination of general knowledge and specialist expertise.

Training for directors and supervisors of subsidiaries

In 2022, the Group organized training for directors and supervisors of its subsidiaries to educate them on the relevant contents of the Company Law, the responsibilities, rights and obligations of directors and supervisors, the operational practices of the board of directors and the relevant working system. The training aimed to help directors and supervisors to carry out their work properly, reasonably and effectively.

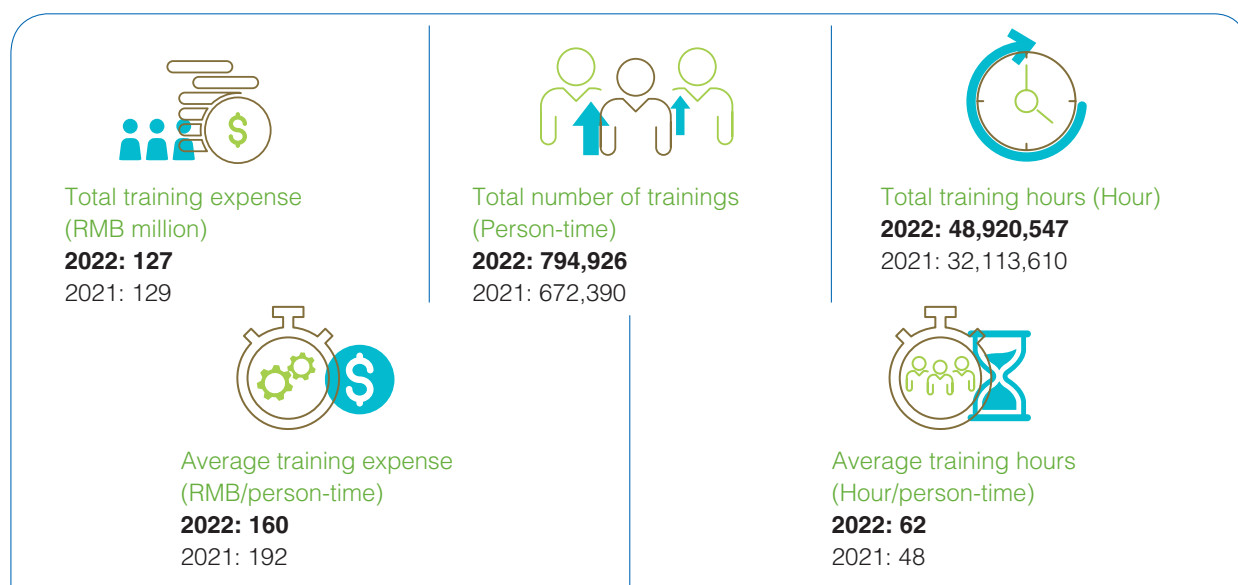
Training course for reserve heads of subdivision of accounting units

We organized “China Comservice Subdivision Lectures” for all leaders of level 2 and level 3 subdivision of accounting units. These lectures aimed to enhance the strategic thinking and operation and management ability of these heads, and to build a team of leaders of subdivision of accounting units who “know strategy, can lead teams, are good at operation and can manage accounts”.

Training course for service capability (bidding capability) improvement in the operator market

The course is designed for employees who are engaged in the bidding and tendering processes for all levels of operator customer business lines. Combining community management and online “live + recorded” teaching, the course covered bidding laws and regulations, demand analysis of purchasers, important skills and key points in bidding document preparation. Its aims are to enhance the theoretical and professional technical skills of relevant personnel, refine their skills in preparing tender documents, solve various problems in the process of tender preparation, and ensure that each tender can meet the needs of customers, thereby improving the winning rate and comprehensively enhancing the service capability for the operator market.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



Types of Training	Unit	2022	2021
Production safety training	No. of trainings	6,057	6,179
	Person-time	216,922	205,979
Anti-corruption training and activities	No. of trainings	1,886	2,081
	Person-time	59,348	63,089
Operation management training	No. of trainings	2,980	3,486
	Person-time	70,191	62,237
Technical expertise training	No. of trainings	13,207	42,529
	Person-time	262,166	189,352
Other training	No. of trainings	6,069	8,047
	Person-time	186,299	151,733

Training by Position/Gender

Proportion of senior management receiving training	Ratio	2.6%	2.3%
Proportion of middle management receiving training	Ratio	35.8%	29.6%
Proportion of general employees receiving training	Ratio	61.6%	68.1%
Proportion of male employees receiving training	Ratio	72.1%	72.6%
Proportion of female employees receiving training	Ratio	27.9%	27.4%

Average Training Hours by Position/Gender

		2022	2021
Average training hours received by senior management	Hour/person-time	93	84
Average training hours received by middle management	Hour/person-time	39	77
Average training hours received by general employees	Hour/person-time	72	34
Average training hours received by male employees	Hour/person-time	59	46
Average training hours received by female employees	Hour/person-time	69	51

OPERATION MANAGEMENT

Health and Safety

The Group proactively complies with the national laws and regulations, and resolutely implements the PRC Labor Law, the PRC Production Safety Law, the PRC Fire Protection Law, the Administrative Regulations on the Production Safety of Construction Projects and the safety production requirements of the industry regarding construction and building. It continuously improves the basic management system, and carries out the works in strict compliance with China Comservice Production Safety Management Measures and the safety management requirements of units of higher levels regarding densely-populated premises and communications materials warehouses.

Safety Management System

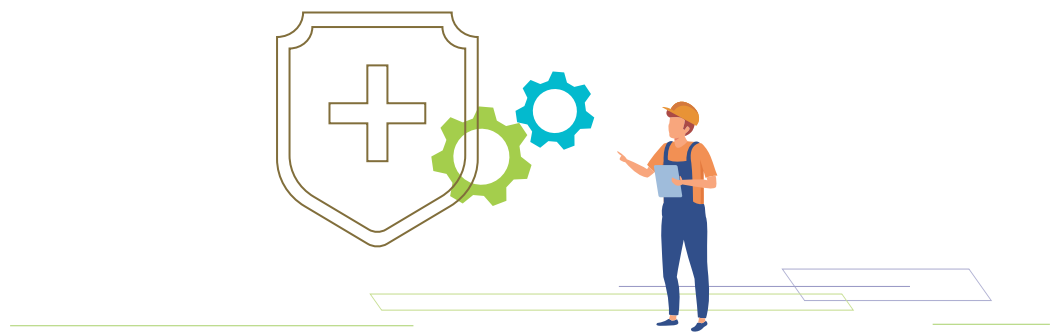
The Group's Production Safety Committee is a production safety management body, with the President as its director. Each of the subordinate provincial companies has set up a production safety committee to implement production safety responsibilities and regularly hold production safety committee meetings to discuss and make decisions on material matters related to production safety. By refining the duties and responsibilities of the organization and increasing the number of experts, the level of safety management is continuously enhanced.

Safe Construction

The Group attaches importance to and makes every effort to safeguard the funding for production safety, and requires all its subsidiaries to reserve special production safety funds in accordance with the regulations for, among others, improving working conditions, improving safety facilities, updating labor protection equipment, conducting education and training, and strengthening safety inspections, so as to provide financial safeguard for the smooth implementation of production safety.

In 2022, the Group issued "China Comservice's Ten Forbidden Matters for Production Safety" to specify the requirements for safe production in 23 scenarios, and issued "China Comservice's Eight Hard Measures for Production Safety". The Group engaged 18 externally invited production safety experts to consolidate its technological strength. Joint training and knowledge competitions were held, covering 254 units (including provincial companies, professional companies and closely cooperating subcontractors). Over 4,000 emergency evacuation drills were organized by the Group's headquarters and all of its provincial companies during the three-year special rectification period for production safety.

In 2022, the Company carried out a special inspection and rectification of production safety hazards throughout the Group and conducted a special safety hazard inspection of owned properties and leased properties to identify and rectify production safety risks and hazards in a timely manner to prevent accidents from occurring at source.



Building a Culture of Safety

Conducting education and training on production safety

The Group continued to carry out production safety education and training to enhance employees' awareness of production safety. Firstly, through the Group's production safety education and training platform, a total of 8,853 production safety managers from all provincial companies were provided with production safety training. Secondly, we organized a production safety knowledge competition for a total of over 70,000 employees from all provincial companies and business cooperation partners in conjunction with the theme of the "Production Safety Month" activity.

Valuing expert talents

In 2022, the Group updated and optimized the "Management Measures for Invited Experts of Production Safety of China Comservice", and engaged several external experts to give full play to their technological supporting role. These experts created synergy with the Group's expert talents, thereby enhancing China Comservice's education and training and supervision and management capabilities in respect of production safety.

Pilot working mechanism of on-site investigation and research by safety experts

A team of experts was sent to the branches from all regions and prefectures of Sichuan Communications Services under the Group to conduct in-depth investigation and research on the implementation of production safety. The team pointed out problems and gave advice on rectification in a timely manner. On the basis of the in-depth investigation and research and taking into account the current situation of safe production in other provincial companies of the Group, the expert team prepared the "Report on the Reflections and Working Recommendations on Production Safety of China Comservice" and presented it to the Company's Production Safety Committee.



Safeguarding the Occupational Health of Employees

The Group always values the occupational health management of its employees, strictly complies with The Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and other relevant laws and regulations, provides occupational safety and protective equipment that meets the national occupational health standards and requirements, and ensures the occupational health of all employees. In order to enhance health and safety management, the Group has introduced internationally recognized occupational health and safety management system certification. As at the end of 2022, a number of the Group's subsidiaries have obtained the international OHSAS 18001 certification, ISO 45001 certification or relevant domestic certifications, etc.

The Group has established and implemented an accident reporting system and prepared statistics on a quarterly basis. During 2022, the Group did not have any material production safety responsibility accidents, and for the past three years (including the reporting year), there were no responsible work-related fatalities or serious injuries to employees*, and no working days were lost due to work-related injuries.



* The scope of the data covers current contract employees, which is counted based on the scope of responsibility for production safety, including those production safety incidents for which the Group has direct responsibility or management responsibility.

Supply Chain Management

In compliance with relevant laws and regulations of the PRC, the Group takes into account the actual situation of the enterprise to continuously improve the relevant administrative methods on procurement and strengthens their implementation, with a focus on the management and control over key procedures of, among others, the selection and management of suppliers, contract signing, safety management, financial settlement, supervision and inspection. At the same time, it provides trainings on job skills and safety education to the personnel of suppliers, and regulates their management on production safety, ensuring that the suppliers comply with the national and local regulations on the payment of remuneration and labor management.








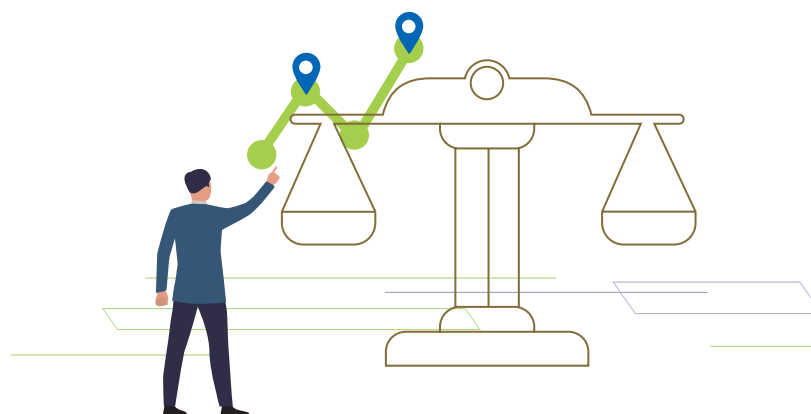
Geographic Location	Unit of service suppliers (Number)	Unit of goods suppliers (Number)
● Northeast region	329	153
● Northwest region	1,250	1,132
● Mid-South region	3,605	2,478
● Southwest region	1,078	2,033
● Northern China region	893	1,047
● Eastern China region	3,631	5,295
● Hong Kong, Macao and Taiwan	2	–
Overseas	26	5
Total	10,814	12,143

Note: Each supplier is counted only once according to the area of principal use; some suppliers supplying services and goods at the same time are counted separately on both sides.

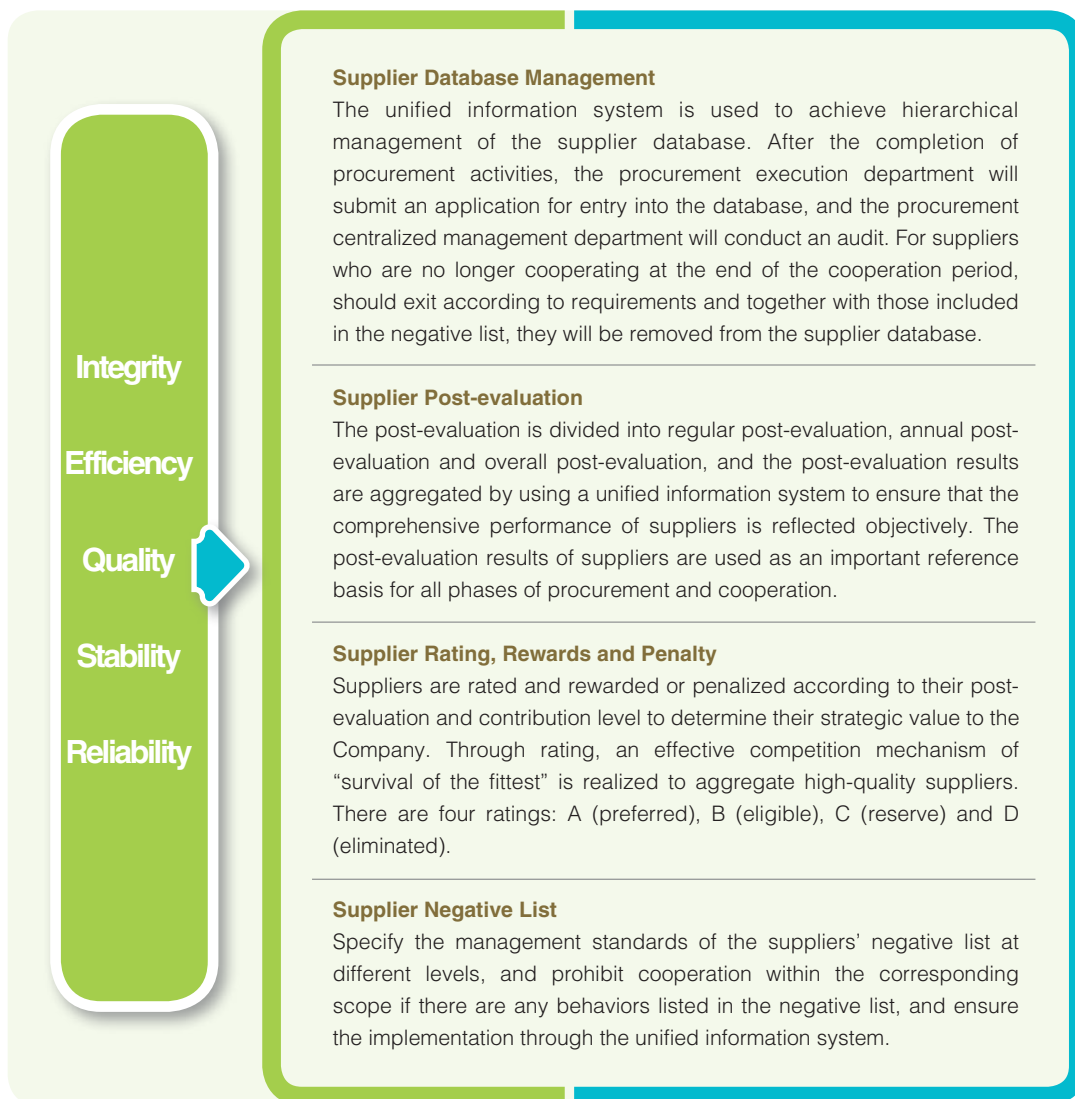
Develop a Fair and Equitable Supply Chain Environment

The Group implements hierarchical management of suppliers by its headquarters, provincial companies and professional companies. The headquarters is responsible for establishing a synergistic procurement system, formulating procurement management strategies and IT-based management requirements, and supervising, inspecting and assessing the procurement management of provincial companies. Provincial companies are responsible for establishing their own provincial procurement management system, carrying out the synergistic management of suppliers in the province through the IT system, formulating the implementation rules for procurement management and improving the corresponding internal control processes, and conducting inspection and assessment of the procurement situation of professional companies. Professional companies are responsible for the specific implementation of procurement management in their own units, formulating management standards or specific measures, and accepting supervision and inspection by the headquarters and provincial companies.

1	 Organizational System	<ul style="list-style-type: none"> Adapting to the Company's organizational structure and establishing the system of "three-level procurement and two-level centralized procurement" Leveraging the Company's subsidiary, China Comservice Supply Chain Management Company Ltd., to implement centralized procurement Establishing "headquarters + 21 provincial companies" centralized procurement center
2	 Scope & Plan	<ul style="list-style-type: none"> Headquarters-level centralized procurement, provincial-level centralized procurement, professional company procurement Classifying procurement types based on business development model, professional nature and other factors
3	 Procurement Method	<ul style="list-style-type: none"> Procurement methods include tendering, comparison, quotations, competitive bargaining, competitive negotiation, competitive bidding, single-source procurement, etc. Implementing procurement according to the content and amount, taking into account both efficiency and effectiveness, to ensure the maximum transparency of procurement
4	 Contract & Price	<ul style="list-style-type: none"> Formulating and utilizing standardized contract texts and adopting electronic approval throughout the process Establishing and implementing an "annual benchmark price" management system to control procurement costs reasonably
5	 Supervision	<ul style="list-style-type: none"> Comprehensively using "the China Comservice procurement management platform" to conduct procurement work Ensuring procurement data is comprehensive, timely, true and valid Improving the review and assessment mechanism to carry out supervision level-by-level



In 2022, targeting the principal business activities and key issues of supply chain management, the Group newly formulated, among others, the “China Communications Services Corporation Limited Procurement Management Measures (Self-use Category)”, “China Communications Services Corporation Limited Procurement Management Measures (Contracting Business Services Category)” and “China Communications Services Corporation Limited Centralized Procurement Management Measures” on the basis of the previous systems to ensure the achievement of procurement objectives, enhance the enterprise’s ability to acquire and integrate external resources, and improve the efficiency and service level of the supply chain operation, thus fostering a green cooperation ecosystem of “integrity, efficiency, quality, stability and reliability”.



Supplier Communication

The Group fully implements the “China Communications Services Corporation Limited Procurement Supplier Management Measures”. In order to facilitate suppliers and potential suppliers to accurately understand the Group’s relevant policies on supplier management, we proactively disclose such measures in the public through “China Comservice Procurement and Tendering Portal” (<https://szyc.chinaccs.cn/>).

Controllable Supply Chain Risk

Through continuous amendments and improvement on the system, the Group drives the implementation of the system and further improves management, implementation and monitoring and inspection capabilities. It strictly follows the supplier selection and examination procedures to eliminate the disqualified suppliers, to ensure that all suppliers enlisted in the “supplier resource pool” have materials to prove they possess adequate capabilities to perform the contract and control the risks. Such materials include enterprise qualifications issued by relevant government departments (the construction enterprise qualification, the design qualification, the labor qualification and the production safety permit), product standards and competence certificates recognized by the industry (product certificates and the service capability evaluation), professional qualification certificates of relevant personnel (certificates related to special operations, and certificates of safe production specialists of A, B and C classes). The Group instructs suppliers to improve their awareness of production safety, eliminates hidden risks and hazards and promotes the healthy development of the Company through a range of activities such as establishment of IT systems and standardization of management processes.

1		Pre-job Training	<ul style="list-style-type: none"> • Daily safety and technical briefings for construction operations • Unified drills
2		Working with Certificates	<ul style="list-style-type: none"> • Climbing, electricity and other high-risk work scenarios require the appropriate certificates
3		Purchase of Insurance	<ul style="list-style-type: none"> • No insurance, no entry • Work-related injury insurance, with additional commercial insurance for construction business
4		Labor Protection	<ul style="list-style-type: none"> • Pay the production safety fee in full and ensure the usage • Central purchase of labor protective equipment with reliable quality
5		Safety Supervision	<ul style="list-style-type: none"> • Complete on-site supervision by project manager • High frequency of safety inspection

For major suppliers providing construction and other services, the Group required its subsidiaries at all levels to include the training and education of their employees in the organization coordinated by the Company. During the year, the Group’s headquarters organized a production safety knowledge competition relating to information and communications engineering to promote training, explicitly covering employees of major suppliers.

When the Group enters into contracts with suppliers, the Group includes the Confidentiality Agreement, Production Safety Agreement, Anti-Corruption Agreement and Environmental Protection Agreement as the main annexures to the contracts, monitors the relevant situations through proactive audit activities to ensure the contracts are honored during cooperation, and performs procedures such as termination of cooperation, withdrawal or inclusion in the list of negative suppliers in accordance with the regulations for suppliers who have committed relevant risky acts.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Green Procurement

The Group has incorporated “green and environmental friendly” as one of the principles in its procurement system and strives for its compliance. In practicing the concept of green procurement, the Group has to take into account the requirements of environmental protection at the beginning of raising the procurement needs and is committed to working with the upstream and downstream of the supply chain to reduce the damage and impact on the environment.

1	 <p>Preference for Suppliers with Environmental Management System Certification</p>	<p>In centralized procurement, the presence or absence of the environmental management system certification (ISO 14001) is one of the scoring criteria for suppliers.</p>
2	 <p>Preference for Products that Meet Environmental Protection Standards</p>	<p>In the centralized procurement of goods, specific environmental protection clauses are set as one of the main technical requirements in the technical specifications, and the implementation standard is “Requirements of Concentration Limits for Certain Restricted Substances in Electrical and Electronic Products” (GB/T 26572-2011), etc. Bidders are required to present their RoHS inspection reports.</p>
3	 <p>Conveying Environmental Protection Concepts to Suppliers</p>	<p>The Group’s subsidiaries are explicitly required in the system to strengthen the dissemination of environmental protection concepts to suppliers; for service suppliers, the “Environmental Protection Agreement” is included as one of the main annexures to the contract and their implementation of environmental protection responsibilities is strictly monitored; specific requirements are made for the packaging of goods in the centralized procurement of goods to prevent unnecessary excessive packaging.</p>
4	 <p>Disciplinary Action Against Suppliers who Neglect Environmental Protection</p>	<p>Suppliers who cause environmental pollution incidents can be withdrawn from the system and disqualified from cooperation according to the system. During the year, no supplier was withdrawn accordingly.</p>
5	 <p>Actively Exploring the Whole Procurement Process through Electronic Means</p>	<p>The Group put into operation of its “China Comservice Procurement Management Platform”, covering many modules such as procurement and tendering portal, procurement system, bidding system and e-mall, to promote the whole procurement process to be accessed online and minimize carbon emissions from paper use and personnel travel.</p>

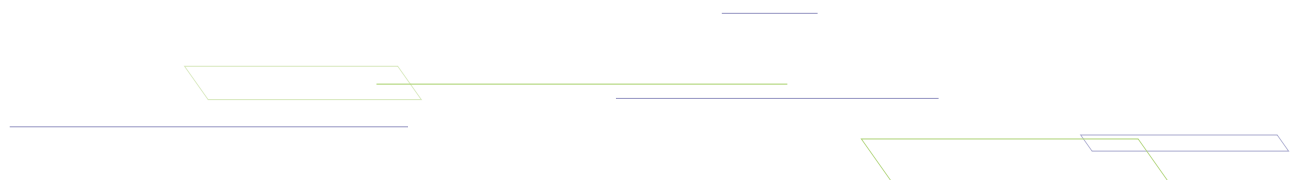
Integrity and Self-discipline in Procurement

In accordance with the provisions of the Group's procurement-related system, before the commencement of a procurement project, all personnel involved are required to sign a "Commitment of Integrity and Self-discipline" to remind them to perform their duties objectively and impartially and to serve as a basis for accountabilities afterwards. A pool of bid evaluation experts is established and maintained on a graded basis, and experts are randomly selected to participate in the evaluation process before the commencement of a procurement project, of which 381 experts were approved and included in the pool of headquarters-level bid evaluation experts in 2022. During the year, the Group conducted an inspection and verified the supplier enterprises, and included over 500 relevant enterprises into the negative list of suppliers at the headquarters level according to the system in order to prevent the occurrence of integrity risks.

Labor Rights Protection by Suppliers

The Group pays great attention to the protection of the rights and interests of its labor by its suppliers. In the process of cooperation with suppliers during procurement, we ensure that the wages and remuneration packages provided by suppliers are reasonable, wages are paid in a timely manner and all labor rights and interests are enforced through prior review, inspection during the process and assessment afterwards.

The Group specifically opens a channel for whistle-blowing and complaints regarding defaulted migrant workers' wages, ensuring that it is accessible, and actively coordinates the handling of relevant clues received. The Group could include suppliers who deliberately defaulted on migrant workers' wages or caused mass events in the negative list of suppliers in accordance with the system. During the year, the Group's subsidiaries had cumulatively included two suppliers who had wage claims in the negative list of suppliers at the corresponding level.



Product Responsibility and Customers

Ensuring Quality of Service

The Group is committed to building a “Service Excellence” corporate image and continuously improves its service quality. Over 100 subsidiaries of the Group have obtained ISO 9001/GB/T 19001 quality management system certification. During the year, the Group compiled the “China Communications Services Corporation Limited Service Quality Management Guidelines” to further standardize and improve the service quality management system, promote service awareness of companies at all levels of the Group, improve management and service quality, enhance customer satisfaction, shape a good image of the Company, build a “moat” of service quality and establish service golden signboard.

Basic Principles of Service Quality Management

 <p>Customer Satisfaction-oriented</p>	<p>We gain in-depth understanding of customers’ requirements or potential demands to offer compliant products and services that are in line with the interests of the customers and able to meet their demands. We also promote our service awareness and enhance our professional capabilities so as to enhance customer satisfaction.</p>
 <p>Emphasize the Involvement of All Employees</p>	<p>The detailed analysis on customer demand and the thoughtful and meticulous services and communications of the marketing personnel, the suitable solutions provided by the technical personnel, the stringent quality control of the delivery personnel, and the strict process control of the quality personnel are the core forces for the provision of high-quality delivery services of the Company. The staff in all departments and job positions cooperate with each other to establish the awareness of service quality, actively seek opportunities to enhance their skills, knowledge and experience, and proactively share the knowledge and experience with the team in an effort to jointly promote the improvement of service quality.</p>
 <p>Focus on Process Control</p>	<p>Service quality is not only reflected in the results, but more importantly in the quality of the service process. We ensure the overall service standard of the Company by establishing reasonable and detailed service specifications and processes, implementing process control to manage risks that may affect the process and results outcome, through practicing the principle of prevention beforehand, control the process and assessment afterwards.</p>
 <p>Maintain Continuous Improvement</p>	<p>We timely track customer advices and recommendations, analyse the key concerns of customers, continuously improve our technical solutions, optimize the service processes, and constantly enhance professional capability and service quality in order to satisfy customers’ demand.</p>
 <p>Enhance Services Communications</p>	<p>The communication with customers is the key method of the provision of services by the Company, and an important source for customer to realise the overall service quality of the Company. Companies at all levels should establish their own service concepts, maintain timely communication and quick response, enhance motivation and sense of responsibility to solve the actual problems faced by the customers.</p>

In terms of the delivery management of contracting business, the Group implements the “China Communications Services Corporation Limited Contracting Business Delivery Management Measures” to regulate the whole process from project implementation to completion, acceptance and settlement, to streamline the responsibilities of internal and external parties and management processes in the delivery process, and to promote internal management and customer satisfaction through scientific, regulated, standardized and effective delivery management.

1		Determine the department and person responsible for delivery quality management
2		Develop clear delivery quality standards with clients for specific projects
3		Quality control/inspection/assessment during delivery process
4		Use of digitalized control tools
5		One-time quality acceptance target
6		Data archiving/experience accumulation/continuous improvement

Ensuring Quality of Service



The Group held the “Cloud-network Engineering Service” labor competition to improve engineering service level and enhance engineering service quality.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT

Awards Received

During the year, the Group's subsidiaries provided supervision services for a project which was selected for "China Construction Engineering Luban Prize", a project which was selected for "the China Installation Star" and two projects which were selected for "the China Steel Structure Golden Award", respectively, and provided design, construction and supervision services for a project which was selected for "the National Quality Engineering Award".

Responding to Customer Complaints

Adhering to the "customer-centric" development philosophy, the Group pays great attention to customer perception. Catering to the characteristics of customer service for government and enterprises, companies at all levels under the Group have set up service departments for different customer groups, established direct and efficient communication channels with customers, and actively followed up on customers' needs through customer visits, skills exchanges, implementation of delivery, maintenance services, post-sales visits and satisfaction surveys at all stages of pre-sales, in-sales and post-sales.

The Group has set up a customer complaint response mechanism, with different response processes for serious and general complaints. It adopts closed-loop management in handling customer complaints, with the handling process recorded and filed in writing. It proactively explores the in-depth root causes of customer complaints. The Group organizes service quality meetings from time to time to collect and handle customers' opinions and recommendations on its services, carry out analysis on service quality, and formulate specific rectification measures so as to develop an effective mechanism of improvement.

In 2022, customers were generally satisfied with the quality of the Group's services and there were no material complaints or disputes. The Group belongs to the informatization communications services industry, and is mainly engaged in project design, construction, supervision and maintenance services for the communications service industry, which does not involve product recall.



Intellectual Property Protection

The Group strictly complies with all the laws and regulations in relation to the protection of intellectual property rights, such as the PRC Civil Code, the PRC Trademark Law, the PRC Patent Law, the PRC Copyright Law and the PRC Anti-Unfair Competition Law, while continuously enhancing its awareness of intellectual property rights protection, handling and resolving infringement disputes on a timely basis. The Group strengthens trademark management to regulate the use of registered trademarks. It pays attention to brand protection while promoting its own brand and enhancing the brand value. It conducts research on intellectual property in respect of the emerging businesses of the Group. The Group organizes law-enforcement seminars from time to time to enhance its employees' knowledge of, respect to, compliance with and usage of relevant laws and regulations and their awareness and levels of intellectual property rights protection.

In the process of product research and development, the Group attaches importance to the protection of intellectual property rights, resulting in the corresponding patents or software copyrights.



Information Security and Privacy Safeguards/Cybersecurity

Attaching great importance to the protection of information, privacy and data security of the Company, its employees and customers, the Group strictly complies with the laws and regulations such as the PRC Cybersecurity Law, the PRC Data Security Law, the PRC Personal Information Protection Law, and complies with and continuously improves a series of systems such as the Management Measures for Network and Information Security and the Management Measures for Data Security of the Group to regulate internal network, information and data security management. Over 60 companies under the Group obtained ISO27001 information security management system certification.

Network and Information Security Management System

The Group's Network and Information Security Leading Group is the network and information security management body, headed by the President. Each of its provincial companies has set up its Network and Information Security Leading Group to fulfill the responsibility for network and information security. The Group and all of its provincial companies regularly hold monthly meetings of the Leading Group to discuss and make decisions on network and information security matters.



Network/Information Security and Privacy Protection Training and Dissemination

The Group strengthened the training and dissemination of network and information security and privacy protection for its employees. In 2022, a total of five training sessions on network and information security were organized for relevant management and technical personnel, including policy interpretation, awareness dissemination and skill enhancement, with a total of over 190,000 person-times' participation. In addition, we actively participated in publicity activities such as National Security Education Day and Cybersecurity Publicity Week, and we have been raising the awareness of internal employees on network and information security and privacy protection through online and offline forms such as special training by external experts, poster publicity and video dissemination.

Building a Strong Line of Defense for Network and Information Security

The Group actively carries out regular security operations, organizes 7 x 24 hrs round-the-clock security monitoring, regularly analyses security situation, conducts and organizes offensive and defensive drills and social engineering drills covering the entire Group, conducts special inspections and checks on key issues, and establishes an all-round emergency response mechanism and process.

In order to strengthen information security protection, the Group continues to promote various special actions, organizes data security compliance assessments, and conducts regular inspections of new technologies and businesses. Meanwhile, it carries out assessments and inspections of its own APPs involving users' personal data to effectively protect users' personal information and avoid excessive claims to rights.

Culture and Responsibility of Privacy and Security

In 2022, no occurrence of leakage of customer privacy and information was identified within the Group. The Group enters into relevant information protection agreements in accordance with the customer needs and signs confidentiality agreements with relevant employees according to actual needs, which are strictly complied after signing. The possibility of leakage of customer privacy is also eliminated through technical means such as isolation from the Internet, data desensitization and encryption, data leakage prevention and data auditing.



Cybersecurity Capabilities

Through integration of internal resources, the Group has established a sub-brand of “CCS Cyber Security” and set up a professional team to serve the country, customers and industry, so as to provide overall solutions and comprehensive security products and services for information infrastructure security and undertake the construction of national major network and information security projects. Having participated in compiling the national and industrial standards for network and information security, the Group was accredited the “Pilot Demonstration of Cybersecurity Technology Application” by the Ministry of Industry and Information Technology in many occasions. It has been listed in the “Top 100 Cybersecurity Enterprises in China” report published by “AQNIU”, an authoritative media in the cybersecurity industry for four consecutive years, and its own core products and services have been selected for many times in the “China Cybersecurity Industry Panorama” report. The brand influence of “CCS Cyber Security” is gradually expanding.



Cyberspace asset surveying and mapping platform

Based on the perspective of network attack and defense, it adopts a combination of active and passive methods to comprehensively discover the security assets in the enterprise network, continuously detects the security risks of network assets through real-practice-oriented, automated and intelligent technical means, consolidates the cornerstone of customer security management so that the security of assets is identifiable, visible, manageable, verifiable and controllable.



Data security monitoring and management platform

We provide data security management services such as data asset management, data desensitization management, interface security management and access and operation audit management to help customers improve their overall data security capabilities and enhance their data security assurance capabilities, so as to build a good data security ecology and provide protection for the development of digital economy.



Comservice crowdsource testing and security vulnerability management platform

By aggregating information security experts through Internet crowdsourcing, and based on an intelligent control model with in-depth integration of “manual + automation”, we provide operators, government and enterprise customers and venture-startup teams with a full set of one-stop services with cybersecurity vulnerability management as the core, realizing the visibility, control and management of the whole life cycle of vulnerabilities.

Anti-corruption

Strengthening Integrity Construction

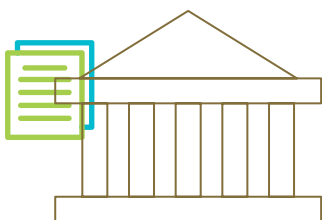
The Group always strictly abides by the PRC Criminal Law, the PRC Oversight Law, the Law of PRC Administrative Discipline for Public Officials, the PRC Company Law, the PRC Anti-Money Laundering Law, the PRC Anti-Unfair Competition Law, the Regulation on the Integrity of State-owned Enterprise Officials and other laws and regulations, and complies with social morality, business ethics and industry rules, and has formulated the Code of Conduct and Ethics for Employees, the Code of Conduct and Ethics for Senior Management and the Code of Professional Conduct for Employees to supervise senior management and employees to comply with them consciously. These codes and guidelines set out the Group's regular initiatives in key areas, including anti-corruption, fraud, conflict of interest, anti-discrimination, anti-competition and confidentiality, which form the basis for the Group to deliver its products and services in a responsible manner. The Code of Conduct and Ethics and the Code of Conduct Guidelines provide guiding principles for all employees of the Group to act with integrity, impartiality and honesty.

The Group safeguards the rights and interests of shareholders, creditors, customers and partners, fulfills contracts in good faith and includes the "Anti-Corruption Agreement" as a major annex to contracts when entered into contracts with suppliers. It abides by its business credentials, opposes improper competition and eliminates corrupt practices in business activities, including but not limited to bribery, extortion, fraud and money laundering.

The Group attaches importance to strengthening integrity and discipline education, and actively guides and supervises the management and employees at all levels to enhance their awareness of integrity and red lines through various means such as holding warning education conferences, informing of typical cases, conducting integrity propaganda, daily conversations and reminders and new media platforms propaganda. During the year, the Group held a total of 254 warning education conferences, and actively conducted integrity publicity activities to continuously build up the ideological defense line of integrity and self-discipline.

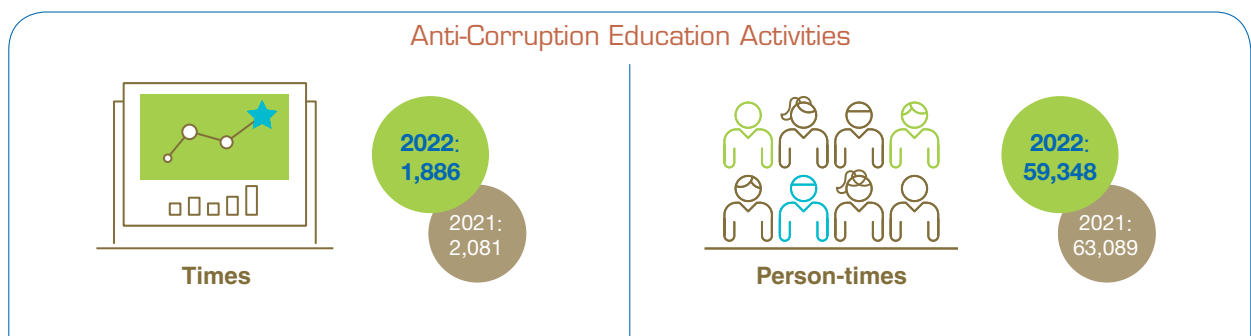
Improving the Supervision System

The Group continues to establish and improve the supervision system in order to strengthen the restriction and supervision to exercises of power. Focusing on key areas and key sections, the Group carries out targeted special governance and supervision, optimizes relevant system processes, improves risk prevention and control capabilities, and resolutely prevents major risks. The Group focused on strengthening supervision and inspection over important nodes, strictly and genuinely reinforced the conversation reminders for and daily supervision on management and personnel in key positions at all levels, and conducted 6,734 on-site supervisions and inspections at major festivals and nodes. The Group integrates all kinds of supervision efforts such as human resources, audit, risk management, industry and finance, actively builds a synergistic and efficient general supervision system, promotes the integration of all kinds of supervision in a concerted effort.






The Group has continuously strengthened the management of letter and visits and problem clues and the development of integrity culture. It has established a whistle-blowing mechanism to standardize the acceptance procedure. When the Group's internal employees and business partners identify corruption and bribery of the Group's personnel, they can report by real-name or anonymously through the post office box (Beijing, 100033 mailbox 33 bin), or by telephone or by visiting the Group in person. The information of the whistleblower will be kept strictly confidential. The Group will investigate the report according to the regulations, disciplines and laws, timely beware of the existing problems and solve them, so as to continuously create positive atmosphere of good integrity.

During the year, the Group provided training to directors and employees on anti-corruption.



The Group attaches great importance to the development of an anti-corruption system, always maintains a high-handed anti-corruption stance at all times, enforces discipline and accountability seriously with "zero tolerance" for violations of laws, regulations and disciplines, and deals with them seriously in accordance with the requirements of laws and regulations to maintain the normal operation order of the Group. During the reporting period, there were no concluded litigation cases regarding corrupt practices brought against the Group or its employees.

 <p>Organizational system construction</p>	<p>Leverage the role of the anti-corruption coordination team. Hold regular coordination team meetings, promote the organic integration of audit supervision, accounting supervision and other kinds of supervision, and actively build a synergistic and efficient supervision system.</p> <p>Improve the primary-level supervision system, and formulate guidelines for the list of 13 supervision items in 4 categories; Use digital means to realize cross-domain data communication and timely alert, and weave densely the primary-level supervision network.</p>
 <p>Work style construction</p>	<p>Insisting on the performance-oriented principle and selecting the best from the best, the Group organized and carried out the selection of "Dare to Take Charge, Good at Acting" pacesetters and advanced individuals in anti-corruption work and awarded 15 pacesetters and 32 advanced individuals who adhered to the principles and made outstanding contributions in various types of supervision were commended.</p>
 <p>Warning and education enhancement</p>	<p>Promote the integrity education via warning and education meetings, integrity promotion, daily education and reminder, and new media platforms publicity, to make employees hold discipline in awe, keep the vigilance and hold the baseline, thus building a solid integrity and self-discipline ideological defense line.</p>

SOCIAL PARTICIPATION

The Group has always fulfilled its responsibilities as a State-owned enterprise in disaster relief and emergency support, actively participated in rural revitalization and the improvement of people's livelihood, encouraged its employees to participate in social welfare activities in a bid to give back to society and contribute to the building of a harmonious society.

Communications Support for Major Events

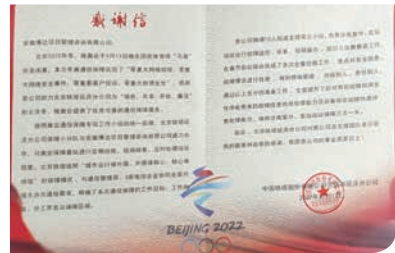


Communications support for the Beijing 2022 Winter Olympics and Paralympic Winter Games

With clear working goals and requirements, Huaxin Consulting Co., Ltd., Zhejiang Post & Telecom Engineering Construction Co., Ltd. and Zhongzhixin Technology Consulting Co., Ltd., which were the subsidiaries of the Group, devised the emergency plans during the Winter Olympics. Sufficient vehicles, surveying equipment and tools were prepared to meet the needs of unexpected and urgent tasks. Based on the demands of clients and the Organizing Committee, our subsidiaries were able to give immediate response, organize high-quality resources and follow up actions within two hours, and deal with emergency situation without sacrificing the quality and capacity.

China Communications Construction First Engineering Bureau Co., Ltd. which was a subsidiary of the Group, established the project department and the professional support team. The team stationed at the urban area and major gaming venues of Zhangjiakou to ensure safe operation of communication equipment and pipelines within the region. It was also responsible for communication emergency support related to the Olympics and the round-the-clock non-stop patrol and inspection, troubleshooting and emergency response.

During the Winter Olympics and the Winter Paralympic Games, Anhui Boda Project Management Consulting Co., Ltd., which was a subsidiary of the Group, formed the communications support working group to help clients in monitoring failures of macro cells and DAS sites related to the Olympics, dispatching, on-site supervision, tracking and information reporting, so as to implement refined management of personnel at sites and the responsibilities of individual staff. The Group also focused on the self-inspection of safety hazards and failures. By completing multiple inspection at full capacity, it ensured safe communications.





25th anniversary events of Hong Kong's return to the Motherland

On 1 July 2022, Hong Kong held a series of major events such as the celebration of the 25th anniversary of Hong Kong's return to the Motherland and the inauguration of the sixth government of the Hong Kong Special Administrative Region. The Group's subsidiaries, international company and Hong Kong company actively planned and carried out various communications support services of relevant activities. They allocated maintenance efforts to designated communications construction sites and communications maintenance sites, implemented contingency plans, and engaged professional personnel for communications construction, emergency support and communications duty to ensure communications safety.



Shanghai company's communications support for CIIE

On 4 November 2022, the opening ceremony of the 5th China International Import Expo ("CIIE") was held at the National Convention and Exhibition Center. Shanghai Telecommunications Technology Development Co., Ltd., a subsidiary of the Group, participated in the task of communications support for the 5th time at the CIIE. The project team made all the preparations in advance and completed the construction of the temporary points as well as the backbone optical fiber cable of the OB (outside broadcast) vans, satellite vans and IBC general control room. Catering to the needs of various business scenarios at the National Convention and Exhibition Centre, the project team assisted in opening a number of business links and implemented closed-loop management. During the Expo, it arranged for the support team to be on standby outside the stadium on round-the-clock basis to undertake inspection, supervision and on-site repair of server room equipments, ducts and cables and facilities along the route.



Communications support for Boao Forum for Asia Annual Conference

In April 2022, Hainan Boao entered the "annual conference time". Acting as the communications support unit for each Boao Annual Conference previously, Hainan Communications Construction Co., Ltd., a subsidiary of the Group, attached great importance to the event, planned and carried out various support services in advance to successfully fulfil the task of communications support for the Annual Conference.

In order to ensure a smooth and uninterrupted communications network for the Annual Conference, Hainan Communications Construction Co., Ltd. strictly followed the requirements of the "Boao Forum for Asia Annual Conference 2022 Communications Support Plan" and actively put in resources for the preparatory efforts such as hidden hazard investigation, cable inspection and patrol and rectification of hidden hazards of poles. As at the end of the Annual Conference, a total of 9 vehicles, 8 sets of devices or instruments and 32 personnel were contributed; the inspection of 94 base stations in key support sites and 211 base stations in the core circle sites were completed, and the total length of optical cables inspected was approximately 4,255 kilometres.



Disaster Relief

The Group actively practices its social responsibility, assists in emergency support all over the country in major natural disasters and public safety incidents without delay, actively assists in repairing communication lines and ensuring smooth communications networks. In the fight against the COVID-19 pandemic, it provided informatization construction services such as 5G base stations and optical fiber broadband for emergency command of governments at all levels and key medical institutions throughout the country.



over **49,400**
person-times



13,200 vehicle-times



more than **30,600**



more than **73,600** hours

In 2022, the Group contributed resources including a total of over 49,400 person-times and 13,200 vehicle-times, repaired more than 30,600 communications facilities and participated in disaster relief for more than 73,600 hours, while actively participating in post-disaster pandemic prevention and disinfection and environmental clean-up.



Guangdong Floods

In June 2022, Guangdong Qingyuan and Shaoguan had sustained heavy rainfall over a vast area, with flooding in various regions and mobile base stations in some areas were flooded, as well as landslides and road collapses that resulted in large areas of fallen communications poles, damaged base stations and interrupted signals. China Communications Construction Third Engineering Bureau Co., Ltd., a subsidiary of the Group, activated the emergency plan in a timely manner and led emergency teams to the disaster-stricken areas at once to do their best to provide emergency communications support for rescue and relief.



Chongqing Hill Fire

In August 2022, a number of districts and counties in Chongqing were hit by successive wildfires, which posed great potential hazards to communications facilities and equipment in various districts. In the face of the disaster, the Group's subsidiary, Chongqing company put in supporting resources of a total of 647 person-times, 155 vehicle-times and 622 unit-times of oil machine to support the communications at the front line, carry out preventive measures of disaster relief, excavate fire breaks and ensure the safety of server rooms and facilities of communications. Organizing the communications support measures, the Group actively conducted on-site fault repair and power generation support duty, effectively safeguarding and protecting the smooth flow of communications and the safety of people's lives and properties.



Sichuan Ganzi Earthquake Relief

In September 2022, a sudden 6.8 magnitude earthquake struck Luding County, Ganzi Tibetan Autonomous Prefecture, Sichuan Province, causing power outages in a number of access-network server rooms and base station disruptions or blackouts. The Group's subsidiary, Sichuan company activated the emergency plan at once, set up emergency rescue team, support team and logistics team, assembled 60 members of emergency rescue team, 21 vehicles and dispatched rescue materials, and rushed to the disaster area to carry out emergency rescue for communications support.



Rural Revitalisation

The Group actively fulfilled its corporate social responsibility, promoted the spirit of poverty eradication, and consolidated and expanded the achievements of poverty eradication to promote the effective coordination between poverty alleviation with rural revitalization. Giving full play to its own advantages, it continuously implements major supporting policies to support the development of poverty-eradicated areas and rural revitalisation.

The Group formulated and issued the “China Comservice 2022 Work Focus for Contributing to the Comprehensive Promotion of Rural Revitalization”, established a sound and effective coordination mechanism to consolidate and expand the achievements of poverty alleviation and rural revitalization, supervised and guided each provincial company to effectively implement the rural revitalization and working plans, and reported the progress of rural revitalization on a quarterly basis, so as to ensure the fulfilment of all annual mission targets.



The Group actively cooperated with the China Charity Federation, a third party organization, and raised charitable donations totaling RMB1.00 million to Shufu County, and raised charitable donations totaling RMB0.12 million to Jiuzhi County during the year of 2022.

The Group actively implemented the task of procuring agricultural products for supported areas and organized the trade unions of all provincial companies to procure agricultural by-products for supported areas. Poverty alleviation products of a total of approximately RMB33.43 million were procured in 2022, with a per capita procurement of RMB416.

The Group gave full play to their resource advantages, increased training efforts and continued to strengthen the training of grassroots cadres, rural revitalization leaders and various professional and technical talents in the supported areas. Under the guidance of Guangdong company of the Group, Guangdong P&T Human Resource Services Company, Ltd. was successfully selected as the training base for rural revitalization talents of the Guangzhou National Modern Agricultural Industry Technology Innovation Centre and signed a five-year strategic cooperation agreement. The two parties will carry out in-depth cooperation in various ways, including building training bases mutually, undertaking talent training projects, customizing training courses, cooperating on technology research projects and organizing lectures and trading activities on rural revitalization expertise.



Employee Care

Adhering to employee-centric principle, the Group focuses on strengthening employee care, and actively launches the employees' sense of happiness program. It pays attention to the thoughts, work and life dynamics of employees, regularly communicates with employees and solves their problems to continuously improve their sense of security, sense of gain, sense of achievement, sense of belonging and sense of happiness. The Group insists on "sending warmth in winter and coolness in summer", offers "five visits and five congratulations"¹, and always offers visits during festivals to retired employees, advanced and model workers and employees in difficulty.

The Group has been earnestly improving the working and living conditions of frontline employees, encouraging primary level trade unions to improve the working environment for employees by adding water purification equipment and mother-and-baby rooms, and according to local conditions, continuing to promote the "Four Small Facilities" including the "Small Canteens, Small Restrooms, Small Shower Rooms and Small Activity Rooms", which improves from "being available" to "being better".



The Group organized employees to participate in voluntary services



Since July 2022, the high temperature in several regions across the country has sustained and red alerts for high temperatures have been issued several times, which have tested every employee at the front line of production and operation. During this period, the management of the companies at all levels visited employees at the grassroots frontline and sent condolences, so that the staff could feel the care of the Company.



¹ The Group visits sick employees in hospitals, employees who have special family difficulties, bereaved employees, employees who encounter material family disputes, and employees who disagree with other colleagues. The Group also congratulates employees on their birthdays, weddings, giving birth, their children's admission to colleges (or the army) and their retirement.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORT



In order to further enrich the leisure and cultural life of female employees and motivate them to create a learning organization and become knowledgeable women, the Group carried out various abundant cultural and sports activities on holidays such as International Women's Day and Mother's Day. The trade union of the Group's supply chain company in Guangxi province organized a caring activity for female employees, namely, "Women's practical work in cloudification and digital transformation", the contents of which included studying the "Regulations on Labor Protection for Female Workers" and the "Outline of Women's Development in China (2021–2030)".



In order to safeguard the special rights and interests of female employees, the Group has been upgrading the nursery room and increasing the number of medical check-ups year by year, such as two kinds of cancer screening, so as to care for the physical health of female employees. In case of important events of female employees, such as marriage and childbirth, it will perceptively visit and congratulate them immediately.



In order to promote nation-wide fitness, enrich the cultural and sports life of employees and advocate the concept of "happy work and healthy life", several subsidiaries of the Group actively held various cultural and sports activities.



INVESTOR RELATIONS

The Company attaches great importance to maintaining close and effective communication with the capital market, and builds sound relationship with investors through proactive interaction of various means. In 2022, the Company further strengthened its investor relations' initiatives under the principles of high transparency, accuracy, timeliness, fairness and effectiveness.

The Company keeps improving the two-way communication channels with the capital market in order to maintain favourable and long-term interaction with its shareholders and investors. During 2022, under the continual impact of the COVID-19 pandemic, routine investor communications such as physical results presentation mostly could not be conducted in the usual format. The Company responded flexibly and continued to host virtual results presentation. Meanwhile, we communicated with investors using various online conferencing tools to maintain smooth communication with the capital market, while proactively responding to the major issues that the investors concerned about and explaining market opportunities, our position and strategies, development measures, technological innovation and reform, as well as financial condition, thereby facilitating investors to have a better grasp on the overview of the Company and conduct a more comprehensive analysis of the investment value of the Company. As most regions began to resume regular economic activities during the year, the Company actively participated in investor conferences to meet with investors for more effective face-to-face communication. On the other hand, the investor relations team of the Company closely monitored the feedback from the capital market and reported the opinions, suggestions and expectation to the management in a timely manner. Such action is beneficial to the formulation of operation, management and development strategies by the management of the Company, promoting sustainable development and enhancing long-term corporate value of the Company.

INVESTOR RELATIONS ACTIVITIES

In 2022, the Company maintained interactive communication with investors through multiple channels including investor presentation with the use of "online platform + telephone" model, press teleconferences, non-deal roadshows, online investor forums organized by investment banks, teleconferences and video conferences, to achieve favourable communication proactively with investors, so as to enhance their comprehension on the current and future development direction and strategies of the Company. During the year, the Company held meetings and communicated with analysts and investors for approximately 280 person-times. At the same time, the Company also proactively broadened mainland brokers' coverage and expanded its investor base in China. During the year, two brokers initiated coverage and covered the Company again, respectively, with investment ratings of "Accumulate". Mainland brokers contributed to broadening the Company's investor base. Through participating in non-deal roadshows organized by mainland brokers and proactively joining online investor forums and conferences held by mainland brokers, the Company was in contact with more mainland investors and the portion of shares held by mainland investors increased during the year.

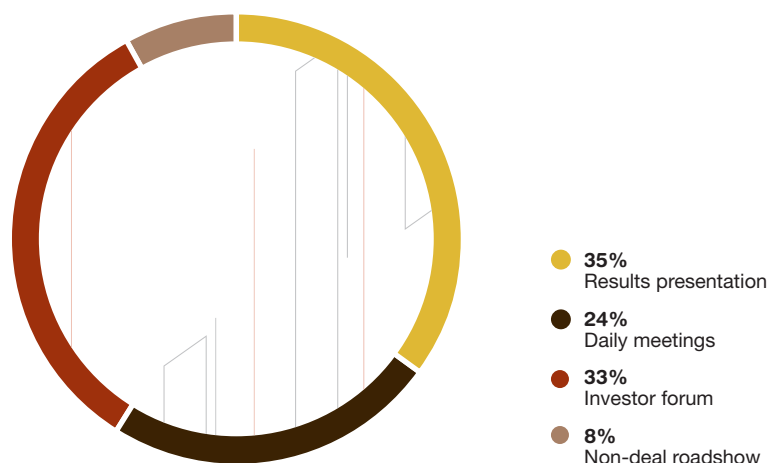
Moreover, the Company also promptly disseminates important information such as operation, development updates and results of the Company to the capital market through various channels including announcements, circulars, press releases and investor relations website, etc.



2022 Annual Results Presentation



Attendance Analysis of Investor Relations Activities in 2022



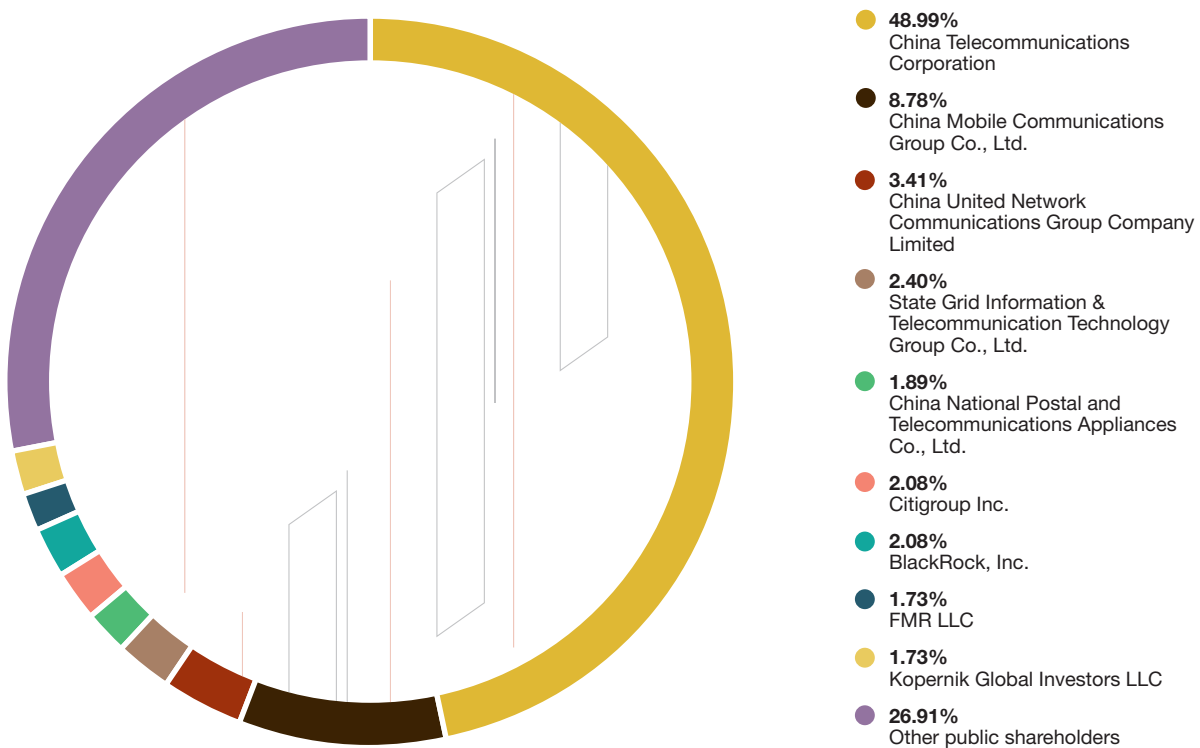
List of Investor Relations Activities of the Company in 2022

Date	Event
1/2022	Morgan Stanley Virtual China New Economy Summit
3/2022	2021 Annual Results Announcement – Online Analyst Briefing – Press Teleconference
3/2022	Non-deal Roadshow
5/2022	Citi Regional Tech Conference 2022 (Virtual)
5/2022	Morgan Stanley Virtual China Summit 2022
5/2022	BofA Securities 2022 Innovative China Conference
6/2022	Citi Pan-Asia Regional Investor Conference 2022
6/2022	CITICS Capital Market Conference 2022
8/2022	2022 Interim Results Announcement – Online Analyst Briefing – Press Teleconference
8/2022	Non-deal Roadshow
8/2022	Citi Asia TMT Corporate Day 2022
9/2022	Morgan Stanley Virtual Asia TMT Conference 2022
11/2022	Citi China Investor Conference 2022
11/2022	BofA Securities 2022 China Conference
11/2022	Morgan Stanley Twenty-First Annual Asia Pacific Summit
11/2022	Kaiyuan Securities 2023 Capital Market Conference
12/2022	CITICS 2023 Capital Market Annual Conference
12/2022	Everbright Securities Virtual Investor Conference 2023

INVESTOR RELATIONS

SHAREHOLDING STRUCTURE

In 2022, the Company continued to appoint an international survey company to conduct comprehensive surveys on the shareholding structure to keep abreast with the information of its shareholders, including structure and position changes of shareholders, types of shareholders, and their geographical distribution and investment styles. The Company actively approached shareholders and potential investors by referencing on the above information, which targeted on strengthening the interactive communications between the Company and investors, as well as proactively broadening its investor base, particularly the investors from Mainland China, in order to diversify the geographical distribution of investors. According to the information from the Central Clearing and Settlement System operated by the Hong Kong Securities Clearing Company Limited, as at 31 December 2022, 5.49% of the issued H share capital of the Company was held by the investors from Mainland China through China Securities Depository and Clearing Corporation Limited, which increased further when comparing with the year end of 2021 (5.09%).

Shareholding Structure¹ as of 31 December 2022

¹ For details of the material interests and short positions in shares and underlying shares of the Company, please refer to "Report of the Directors".

INFORMATION DISCLOSURE

The Company has strictly complied with the information disclosure requirements for listed companies and has considered information disclosure as the responsibility and obligation that must be discharged for the protection of investors' interest. We have made information disclosure with consistent adherence to the principles of accuracy, timeliness, openness and fairness and dedicate to improving the transparency of the Company in respect of information disclosure and facilitating the capital market to gain a better understanding of the Company.

In 2022, in accordance with the Listing Rules, the Company published approximately 24 corporate communication such as announcements and circulars on the websites of the Hong Kong Stock Exchange and the Company. Such publications have objectively and comprehensively disclosed information regarding the Company's results, operating performance, financial information, dividend payment, and poll results for general meetings, mainly including:

24/01/2022	Proposed Amendments to the Articles of Association and Proposed Adoption of the Rules of Procedure for the General Meeting and the Rules of Procedure for the Board
31/01/2022	Circular (Proposed Appointment of Non-Executive Director and Supervisor, Proposed Amendments to the Articles of Association, Proposed Adoption of the Rules of Procedure for the General Meeting and the Rules of Procedure for the Board and Notice of the EGM)
31/01/2022	Notice of the Extraordinary General Meeting
25/02/2022	Poll Results of the Extraordinary General Meeting held on 25 February 2022 and Appointment of Non-Executive Director and Supervisor
25/02/2022	List of Directors and their Role and Function
25/02/2022	Articles of Association
18/03/2022	Date of Board Meeting
30/03/2022	Announcement of Annual Results for the Year Ended 31 December 2021
28/04/2022	2021 Annual Report
28/04/2022	Notice of Annual General Meeting
25/05/2022	Proposed Appointment of Executive Director, Proposed Re-election and Election of Directors and Supervisors, Retirement of Directors and Supervisor
30/05/2022	Resignation of Non-Executive Director and Withdrawal of the Ordinary Resolution at the Annual General Meeting for the Re-election of Such Director
30/05/2022	List of Directors and their Role and Function
31/05/2022	Circular (Proposed Re-election and Election of Directors and Supervisors, Proposed Amendments to the Rules of Procedure for the Supervisory Committee and Supplemental Notice of the AGM)
31/05/2022	Supplemental Notice of the Annual General Meeting
17/06/2022	Poll Results of the 2021 Annual General Meeting, Payment of Dividend, Changes in Directors and Supervisors
17/06/2022	Appointment of Chairman
17/06/2022	List of Directors and their Role and Function
12/08/2022	Date of Board Meeting
25/08/2022	Announcement of Interim Results for the Six Months Ended 30 June 2022
29/08/2022	2021 corporate annual report (available in Chinese version only)
20/09/2022	Interim Report 2022
05/12/2022	Nomination Committee Charter
05/12/2022	Remuneration Committee Charter

INVESTOR RELATIONS

Other than announcements and circulars, the Company's website (www.chinaccs.com.hk) is also one of the important channels for corporate information disclosure and provides capital market, media, shareholders and potential investors with a more convenient and efficient access to the detailed information. Other than introducing the basic information of the Company and disclosing the corporate governance, environmental and social information, the website also showcases the development of businesses and markets of the Company, while highlighting various smart services we provide for different industries and related cases, such that investors could have a more comprehensive understanding on our transformation in recent years. In addition, a range of detailed information catering for investors' needs, including hot topics concerned by investors such as historical financial information, stock information, investment value, annual reports, presentation materials and webcasts, investor activities and frequently asked questions of the Company are systematically disclosed in the Investor Relations' section of the website. The Company also updates the content of the website in a timely manner to keep the capital market abreast of the Company's latest development.

Annual report is not only an important document for information disclosure of a listed company, the Company can also disclose more comprehensive information to investors through the annual report, such as its operating philosophy, strategies and market position, current operating performance, development trends, corporate governance and social responsibility. The Company therefore puts great emphasis on the preparation of annual report. Through the detailed disclosures in the annual report, investors are able to have more adequate and comprehensive understanding of the Company.

The design story of the 2021 annual report took "Innovation and Reform, Value creation" as the theme. Regarding visual impacts, it utilized three levels of colors to represent the different stages of development of the Company, symbolized its development stages of innovation, reform, and value creation. Under the backdrop of the important development opportunities brought by the rapid development of the new generation information technology, aligning with the trend of deep integration of the digital economy and the real economy, together with the acceleration of the digital transformation of society, the Company adheres to the strategic position as a "New Generation Integrated Smart Service Provider", provides integrated comprehensive smart solutions to our customers. Meanwhile, the Company strengthens its technological innovation, continues to deepen reform and promotes high-quality development of the enterprise, thus creating greater value for the country, society, industries, and customers. In 2022, the preparation and design of the 2021 annual report of the Company were recognized by international award organizations again and received Platinum Award and ranked 33rd, promoted from the 69th in 2021, in the Top 100 Reports Worldwide of the "Vision Awards" by "The League of American Communications Professionals" (LACP) and three Gold Awards of "Traditional Annual Report", "Cover Photo & Design" and "Printing & Production" in "International ARC Awards".

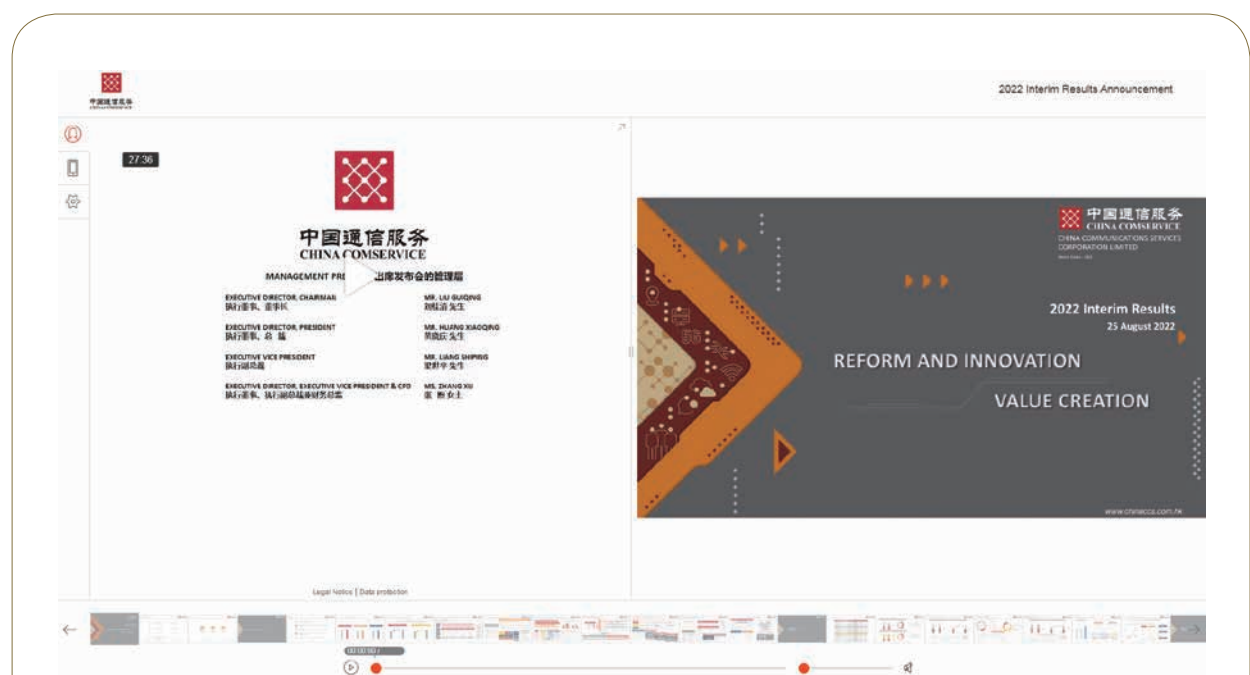
The Company's 2021 Annual Report Design



MULTIPLE CHANNELS OF COMMUNICATION

Subject to the social distancing measures during the peak of the COVID-19, the Company continued to host results presentation in online format. Through presenting the results on a bilingual platform with Q&A function, management could make a more concrete illustration on the presentation materials while responding to questions raised by investors online on the results of the Company immediately. The Company added telephone access function, as an additional channel for investors to join results presentation. At the same time, the Company also held a teleconference with the media on the results to maintain a continuous communication with them. The Company actively participated in events to communicate with the capital market, including 15 virtual and physical investor conferences organized by investment banks, as well as other telephone and video meetings.

2022 Interim Results online presentation provided real-time Q&A opportunities to investors

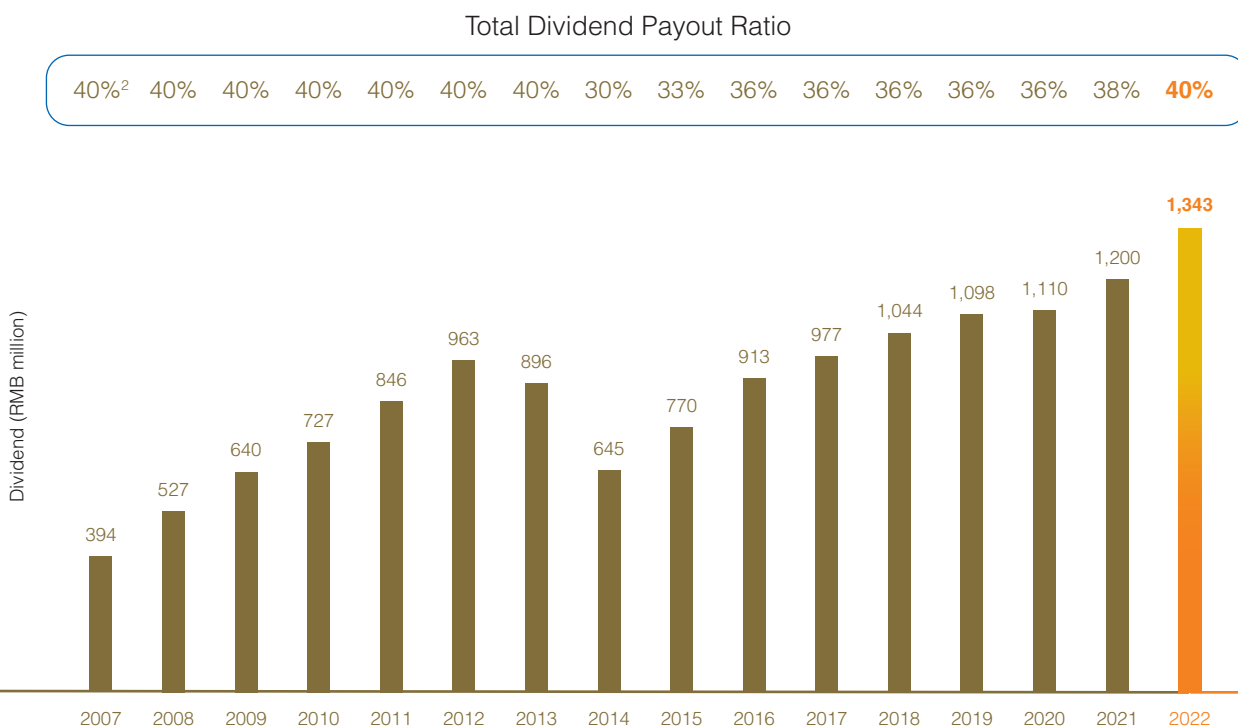


INVESTOR RELATIONS

DIVIDEND

The Company always values the interests and returns to shareholders since its listing in 2006, and distributes relatively stable and sustainable dividend to shareholders. The Company determines the dividend payment for the year with reference to factors such as the Company's results performance, financial position, cash flow, long-term development and business needs and other investment opportunities in the year, as well as consideration of capital market expectation. In 2022, the Company continued to achieve satisfactory operating results and free cash flow for the year. In view of the Company's confidence in operating performance and future development, and to further increase shareholders' return, the Board has proposed to increase the total dividend payout ratio from 38% in 2021 to 40% in 2022, representing a final dividend of RMB0.1939 per share³.

Dividend distribution of the Company since its listing is set out in the chart below.



² The 2007 dividend payout ratio is calculated after deducting the net profit contributed by the business in 13 provinces before 31 August 2007 (being the completion date of the acquisitions) when such business was acquired by the Company.

³ Subject to the approval at the 2022 annual general meeting to be held on 16 June 2023.

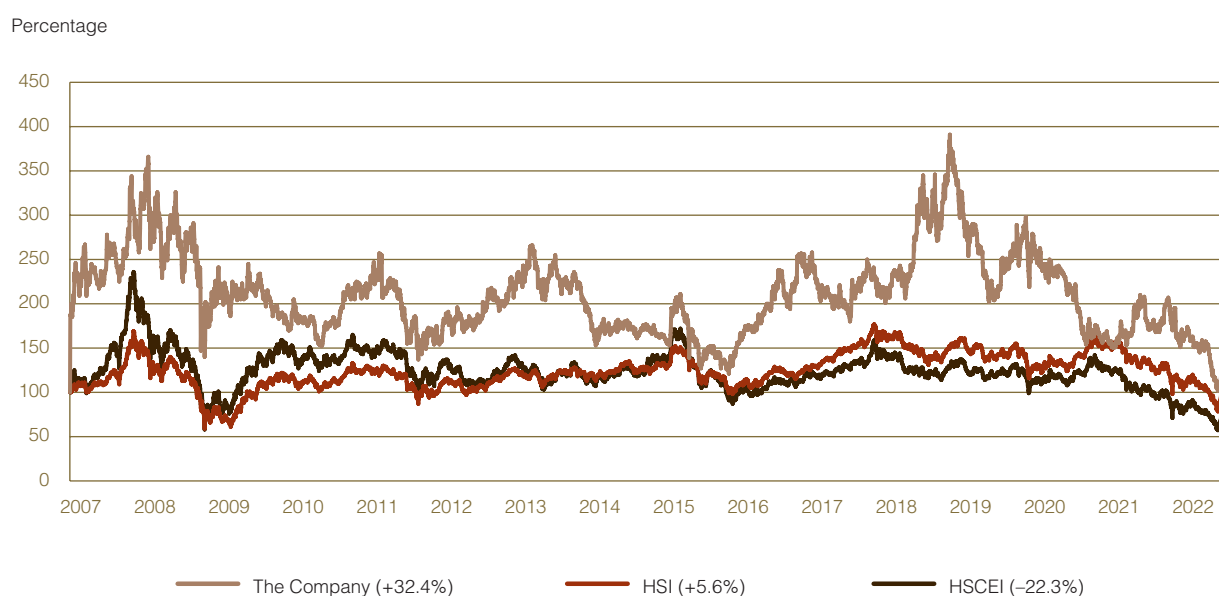
SHARE PRICE PERFORMANCE

The H shares issued by the Company were listed on the Hong Kong Stock Exchange on 8 December 2006 at an offer price of HK\$2.2 per share. Since its listing, the Company has firmly captured industry and technology development trend, elevated competitiveness continuously through the implementation of forward-looking development strategies, enhancing efforts on technological innovation and promoting transformation, facilitated sustainable development by grasping market opportunities of digital economy. At the same time, the Company adhered to the principle of sound corporate governance and implemented practical and effective investor relations initiatives that supported the stock price performance of the Company.

Share Price Performance Since Listing

(Performance relative to indexes)

From 8 December 2006 to 31 December 2022



In 2022, changes in macro environment such as the US interest rate rise and the conflict between Russia and Ukraine led to the weak performance of most of the stock markets including the Hong Kong stock market. The Hong Kong stock market rebounded during the last two months of the year due to factors including market expectation of an economic recovery, but Hang Seng Index still recorded a significant decline for the year. Amid the impact from various external factors, the Company still achieved favourable results with its fundamentals remaining stable. However, stock price of the Company was under pressure amid the unfavorable investment sentiment in Hong Kong stock market, decreased year-on-year compared to that at the year end of 2021.

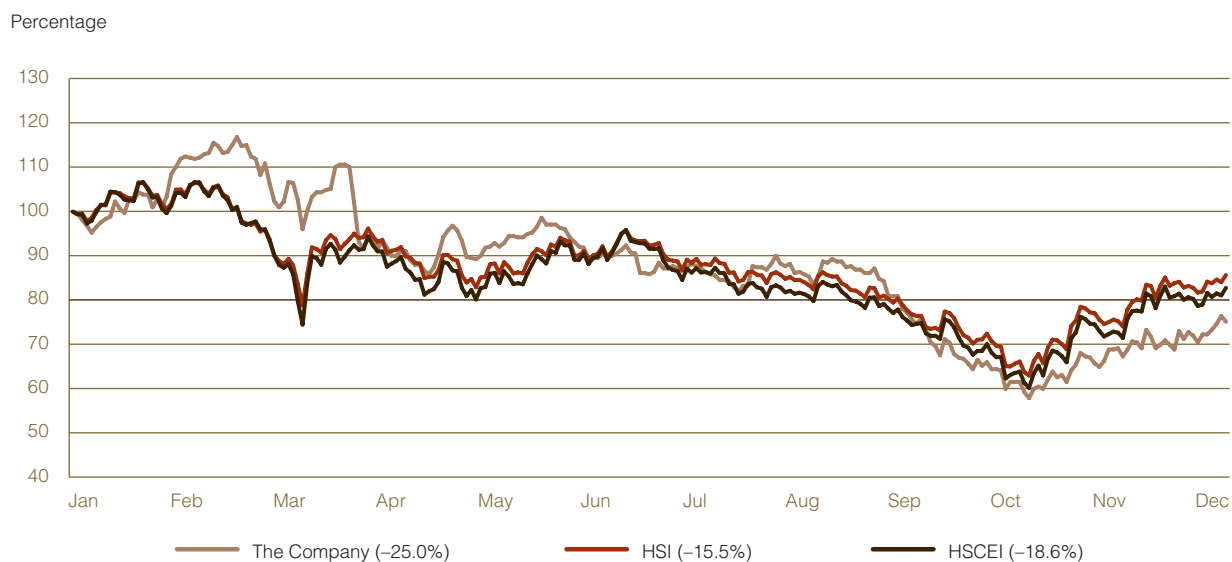
2022	Highest	Lowest	Closing
Price per H share of the Company (HK\$)	4.50	2.16	2.85

INVESTOR RELATIONS

Share Price Performance in 2022

(Performance relative to indexes)

From 1 January 2022 to 31 December 2022



As at 31 December 2022, the total number of shares of the Company was 6,926,018,400 shares, including 4,534,598,160 domestic shares and 2,391,420,240 H shares, both at nominal value of RMB1.00 each. All the H shares of the Company are listed on the Hong Kong Stock Exchange, representing approximately 34.5% of the total number of shares of the Company. Based on the closing price as of 31 December 2022, the Company's total market capitalization was about HK\$19.7 billion.

MAJOR AWARDS AND RECOGNITIONS IN 2022

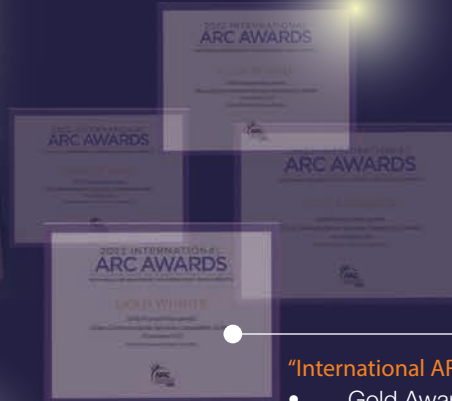


“2022 Asia Executive Team Rankings” by Institutional Investor

- Most Honored Company
- Rank 1st in the Overall (Small & Midcap) category rankings in the telecommunications sector
- Best CEO
- Best CFO
- Best IR Professional
- Best IR Program
- Best ESG

“12th Asian Excellence Award” by Corporate Governance Asia

- Asia's Best CEO
- Asia's Best CFO
- Best Investor Relations Company



“International ARC Awards”

- Gold Award in “Traditional Annual Report”
- Gold Award in “Cover Photo & Design”
- Gold Award in “Printing & Production”

The Asset ESG Corporate Awards 2022” by The Asset

- Gold Award
- Best Initiative in Technological Innovation Award
- Best Investor Relations Team



The “7th Zhitong Finance Listed Company Awards” by Zhitong Finance and Tonghuashun Finance

- The Best TMT Company

“Vision Awards” by LACP

- Platinum Award
- Rank 33rd in the Top 100 Annual Reports Worldwide

“2022 FORTUNE China ESG Influence List” by FORTUNE

- One of the 40 Chinese companies on the List

“2022 FORTUNE China 500” by FORTUNE China

- Rank 102nd

“2022 Forbes Global 2000” by Forbes

- Rank 1,649th

INVESTOR RELATIONS

RECOGNITIONS AND HONOURS IN THE CAPITAL MARKET

The Company has always been well recognized by the capital market. It has been admitted in certain indices in Hong Kong, including the “Hang Seng Composite Index”, “Hang Seng China State-holding Enterprises Index”, “Hang Seng Composite Industry Index – Information Technology”, “Hang Seng Stock Connect Hong Kong Index” and “Hang Seng SCHK China Technology Index”. The Company has been optimizing its ESG performance. In 2022, it was also admitted to “Hang Seng Corporate Sustainability Benchmark Index”.

The Company has been the focus of and recognized by the capital market, as of the date of this report, about 10 international and mainland investment banks and institutions prepared and published research reports for the Company on a regular basis, major research institutions maintained positive investment ratings such as “Buy”, “Overweight” or “Hold” on the Company.

The Company has been dedicated to improving its management and operation in all aspects, and was recognized by many domestic and overseas organizations and institutions. In 2022, authoritative institutions such as *Institutional Investor*, *Corporate Governance Asia* and *FORTUNE* offered recognitions and awards to the Company in respect of its corporate management, ESG and investor relations. The Company was named as “Most Honored Company” by *Institutional Investor*. The management of the Company also ranked the first in the “Best CEO” and “Best CFO” in the Overall (Small & Midcap) rankings in the telecommunications sector, while the Company was also recognized in the fields of ESG and investor relations. *Corporate Governance Asia* awarded “Asia’s Best CEO” and “Asia’s Best CFO” to the management of the Company. These awards demonstrated the capital market’s recognition to our management and corporate governance. Also, the Company’s performance in ESG is recognized as it was elected as one of the 40 Chinese companies on the “2022 FORTUNE China ESG Influence List”. At the “7th Zhitong Finance Listed Company Awards”, the Company was granted “The Best TMT Company”. Furthermore, the Company received various awards from international assessment institutions in respect of the Company’s annual report.

OTHER INFORMATION FOR SHAREHOLDERS

Shareholder services

Any matters relating to shareholding, such as transfer of shares, change of name or address, and loss of share certificates should be addressed in writing to the Registrar:

Computershare Hong Kong Investor Services Limited
Shops 1712–1716, 17/F., Hopewell Centre, 183 Queen’s Road East, Wanchai, Hong Kong
Telephone: (852) 2862 8628
Facsimile: (852) 2529 6087

Shareholder enquiries

Enquiry hotline during office hours (Monday to Friday: 9:00–18:00):
Telephone: (852) 3699 0000

Investor relations enquiries

For enquiries from institutional investors and securities analysts, please contact:

Investor Relations Department, China Communications Services Corporation Limited
Room 1101–1102, 11/F., Great Eagle Centre, 23 Harbour Road, Wanchai, Hong Kong
Telephone: (852) 3699 0000
Facsimile: (852) 3699 0120
Email: ir@chinaccs.com.hk

INDEPENDENT AUDITOR'S REPORT



**To the Shareholders of
China Communications Services Corporation Limited**
(incorporated in the People's Republic of China with limited liability)

羅兵咸永道

OPINION

What we have audited

The consolidated financial statements of China Communications Services Corporation Limited (the "Company") and its subsidiaries (the "Group"), which are set out on pages 157 to 239, comprise:

- the consolidated statement of financial position as at 31 December 2022;
- the consolidated statement of profit or loss for the year then ended;
- the consolidated statement of profit or loss and other comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include significant accounting policies and other explanatory information.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with International Standards on Auditing ("ISAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants ("IESBA Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

INDEPENDENT AUDITOR'S REPORT

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Revenue recognition of construction services from non-telecom operators
- Revenue recognition of system integration services
- Expected credit losses of accounts receivable and contract assets

Key Audit Matter**How our audit addressed the Key Audit Matter****Revenue recognition of construction services from non-telecom operators**

Refer to Note 2(q) Significant accounting policies and Note 4 Revenues to the consolidated financial statements, respectively.

Revenue derived from construction services from non-telecom operators amounted to RMB29,993 million in 2022. The Group generally recognised revenue over a period of time according to the progress towards completion agreed with the customers based on the output method.

Such revenue was provided to a large number of customers in different industries. The number of contracts was large and the revenue recognised had a significant impact on the financial statements, we were required to put in significant audit efforts on it, therefore, we identified the revenue recognition of construction services from non-telecom operators as a key audit matter.

We performed the following procedures in relation to revenue recognition of construction services from non-telecom operators:

1. Obtained an understanding, and evaluated and tested the applicable internal controls relevant to the revenue recognition of construction services from non-telecom operators;
2. Selected a number of service contracts on a sample basis, performed contract reviews on major terms and assessed the reasonableness of the basis adopted by management in relation to the revenue recognition method.
3. Performed the following procedures for contracts on a sample basis:
 - Discussed with project management personnel to obtain an understanding of the progress towards completion of the construction projects;
 - Examined the supporting documents, such as certificate of the progress towards completion, project settlement statement etc., obtained by the Group; and
 - Tested the mathematical accuracy of the revenue based on the progress towards completion and the contract revenue.
4. Performed cut-off tests by examining the supporting documents that management used to recognise the revenue before and after the balance sheet date, such as certificate of the progress towards completion and project settlement statement to assess whether the revenue had been recognised in the correct accounting period.

Based on our work performed, we found that the revenue recognition of construction services from non-telecom operators made by management is supported by available evidence.

KEY AUDIT MATTERS (Continued)

Key Audit Matter	How our audit addressed the Key Audit Matter
<p>Revenue recognition of system integration services</p>	
<p>Refer to Note 2(q) Significant accounting policies, Note 4 Revenues and Note 45(a) Significant accounting estimates and judgements to the consolidated financial statements, respectively.</p> <p>Revenue from system integration amounted to RMB15,211 million in 2022.</p> <p>Contracts for system integration services of the Group are mostly non-standard contracts. The management had to make significant judgement when identifying performance obligations and significant estimation when allocating the transaction price to each performance obligation on relative stand-alone selling price basis. Therefore, we identified revenue recognition of system integration services as a key audit matter.</p>	<p>We performed the following procedures in relation to revenue recognition of system integration services:</p> <ol style="list-style-type: none"> 1. Obtained an understanding, and evaluated and tested the applicable internal controls relevant to the revenue recognition of system integration services; 2. Selected a number of contracts on a sample basis and performed the following procedures: <ul style="list-style-type: none"> • Reviewed the contract terms to evaluate the reasonableness of the performance obligations identified by the management; • Obtained the supporting evidence, such as market price information or benchmarked to the gross profit margin of similar business by the Group to evaluate the reasonableness of transaction price allocated to each performance obligation on relative stand-alone selling price basis; and • Evaluated the reasonableness of the method of revenue recognition for each performance obligation based on the provisions laid down in the contract terms. 3. Performed the following procedures for contracts, on a sample basis, to determine if the revenue had been recognised properly over a period of time according to the relevant performance obligations: <ul style="list-style-type: none"> • Discussed with the project management personnel to understand the progress towards completion of the contract work; • Examined the supporting documents, such as confirmation of the progress towards completion, project settlement statement etc, obtained by the Group; and • Tested the mathematical accuracy of the revenue recognised based on the progress towards completion and the contract revenue. 4. Examined the supporting documents for a sample of contracts, such as receipt notes and acceptance notes issued by the customers, to assess if revenue recognised at a point in time upon the fulfillment of the relevant performance obligation, was supported by adequate evidence to prove that the control of the relevant products had been properly transferred to the respective customers. <p>Based on our work, we found that the revenue of system integration services recognised by management is supported by available evidence.</p>

KEY AUDIT MATTERS (Continued)

Key Audit Matter

How our audit addressed the Key Audit Matter

Expected credit losses of accounts receivable and contract assets

Refer to Note 2(l) Significant accounting policies, Note 28 Accounts and bills receivable, net, Note 29 Contract assets, net, Note 44(a) Financial risk management and fair values, and Note 45(b) Significant accounting estimates and judgements to the consolidated financial statements, respectively.

As at 31 December 2022 the carrying amounts of accounts receivable and contract assets amounted to RMB21,748 million and RMB25,552 million, respectively, with loss allowances amounted to RMB1,946 million and RMB283 million, respectively.

Provision for credit loss allowance of accounts receivable and contract assets was made based on an assessment of the lifetime expected credit losses. When measuring expected credit losses, the Group had considered credit losses incurred in the past, and adjusted it by taking into consideration of the present conditions and forward looking factors. In assessing forward-looking information, the Group considered factors including economic policies, macroeconomic indicators, industry risks and changes in customers' conditions.

We focused on auditing the expected credit losses of accounts receivable and contract assets because the judgement and estimation of expected credit losses is subject to high degree of estimation uncertainty. The inherent risk in relation to the expected credit losses of accounts receivable and contract assets is considered significant due to the subjectivity of significant assumptions and estimates used. Therefore, we identified the expected credit losses of accounts receivable and contract assets as a key audit matter.

We performed the following procedures in relation to expected credit losses of accounts receivable and contract assets:

1. Obtained an understanding, and evaluated the applicable internal control relevant to management assessment of expected credit losses of accounts receivable and contract assets;
2. For accounts receivable and contract assets assessed individually, we reviewed, on a sample basis, documents for supporting management's assessment of the respective financial position and creditworthiness of the customers, historical payment and settlement records, and forecasted future economic conditions, in order to assess the reasonableness of expected credit loss allowance provided by management;
3. For accounts receivable and contract assets assessed collectively by making reference to the credit risk characteristics, we assessed the reasonableness of the grouping, and the respective expected credit losses provision made by management by reviewing, on a sample basis, documents and information, aging profile of accounts receivable and contract assets, current conditions and forward looking factors;
4. Tested the accuracy of the aging analysis of the accounts receivable and contract assets on a sample basis and recalculated the historical default rate, evaluated the basis adopted by management in determining the forward looking adjustment with the assistance of our internal valuation specialists, and tested the mathematical accuracy of calculation of the expected credit loss allowance.

Based on our work, we considered that the significant judgments and estimates made by management in relation to the expected credit losses of accounts receivable and contract assets were supportable by the evidence obtained and procedures performed.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRSs and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

INDEPENDENT AUDITOR'S REPORT

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Wilson W.Y. Chow.

PricewaterhouseCoopers
Certified Public Accountants

Hong Kong, 29 March 2023

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

For the year ended 31 December 2022

	Notes	2022 RMB'000	2021 RMB'000
Revenues	4	140,745,755	133,991,317
Cost of revenues	5	(124,765,212)	(119,206,899)
Gross Profit		15,980,543	14,784,418
Other income	6	1,954,228	1,946,396
Selling, general and administrative expenses		(13,960,199)	(12,951,723)
Other expenses	7	(140,956)	(213,956)
Finance costs	8	(90,986)	(78,624)
Share of profits of associates and joint ventures		92,747	91,923
Profit before tax	9	3,835,377	3,578,434
Income tax	10	(356,096)	(392,673)
Profit for the year		3,479,281	3,185,761
Attributable to:			
Equity shareholders of the Company		3,358,149	3,157,434
Non-controlling interests		121,132	28,327
		3,479,281	3,185,761
Basic/diluted earnings per share (RMB)	15	0.485	0.456

The above consolidated statement of profit or loss should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2022

	Note	2022 RMB'000	2021 RMB'000
Profit for the year		3,479,281	3,185,761
Other comprehensive (expense)/income for the year (after tax)	11		
Item that will not be reclassified to profit or loss (after tax):			
Equity instruments at fair value through other comprehensive income:			
Net movements in the fair value reserve		(242,483)	(517,677)
Item that may be subsequently reclassified to profit or loss (after tax):			
Exchange differences on translation of financial statements of subsidiaries outside of Mainland China		26,141	(25,337)
		(216,342)	(543,014)
Total comprehensive income for the year		3,262,939	2,642,747
Attributable to:			
Equity shareholders of the Company		3,141,239	2,614,500
Non-controlling interests		121,700	28,247
		3,262,939	2,642,747

The above consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2022

	Notes	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current assets			
Property, plant and equipment, net	16	6,269,187	6,212,786
Right-of-use assets	17	2,402,559	2,422,952
Investment properties	18	1,715,147	1,729,906
Construction in progress	19	427,691	576,405
Goodwill	20	103,005	103,005
Intangible assets	21	724,013	683,477
Interests in associates and joint ventures	22	1,307,945	1,285,547
Financial assets at fair value through profit or loss	31	275,804	111,330
Equity instruments at fair value through other comprehensive income	23	3,336,403	3,672,472
Deferred tax assets	24	941,879	758,187
Deposits at financial institutions with original maturity more than one year	25	7,651,866	2,563,841
Other non-current assets	26	908,016	632,317
Total non-current assets		26,063,515	20,752,225
Current assets			
Inventories	27	1,367,311	1,492,011
Accounts and bills receivable, net	28	20,309,943	18,254,155
Contract assets, net	29	25,268,821	21,534,745
Current portion of deposits at financial institutions with original maturity more than one year	25	221,188	–
Prepayments and other current assets	30	12,717,632	11,102,020
Financial assets at fair value through profit or loss	31	61,556	3,364,554
Short-term bank deposits and restricted cash	32	2,168,795	2,357,234
Cash and cash equivalents	33	22,085,344	21,171,025
Total current assets		84,200,590	79,275,744
Total assets		110,264,105	100,027,969
Current liabilities			
Interest-bearing borrowings	34	752,001	723,024
Accounts and bills payable	35	44,611,295	36,319,980
Current portion of lease liabilities	36	513,223	490,859
Contract liabilities	37	10,867,975	11,449,171
Accrued expenses and other payables	38	9,499,470	9,090,865
Income tax payable		351,104	239,624
Total current liabilities		66,595,068	58,313,523
Net current assets		17,605,522	20,962,221
Total assets less current liabilities		43,669,037	41,714,446

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

At 31 December 2022

	Notes	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current liabilities			
Interest-bearing borrowings	34	129,120	89,808
Lease liabilities	36	1,066,892	1,071,944
Other non-current liabilities	39	217,628	197,623
Deferred tax liabilities	24	632,747	744,951
Total non-current liabilities		2,046,387	2,104,326
Total liabilities		68,641,455	60,417,849
Equity			
Share capital	40	6,926,018	6,926,018
Reserves		33,433,344	31,481,196
Equity attributable to equity shareholders of the Company		40,359,362	38,407,214
Non-controlling interests		1,263,288	1,202,906
Total equity		41,622,650	39,610,120
Total liabilities and equity		110,264,105	100,027,969

The above consolidated statement of financial position should be read in conjunction with the accompanying notes.

The consolidated financial statements on pages 157 to 239 were approved and authorised for issue by the board of directors on 29 March 2023 and are signed on its behalf by:

Liu Guiqing

Chairman and Executive Director

Zhang Xu

*Executive Vice President and
Chief Financial Officer, Executive Director*

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2022

Equity attributable to equity shareholders of the Company												
Notes	Statutory									Total	Non-controlling interests	Total equity
	Share capital	Share premium	Capital reserve	Statutory surplus reserve	Specific reserve	Fair value reserve	Exchange reserve	Other reserve	Retained earnings			
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Balance as at 1 January 2022	6,926,018	4,529,310	2,036,326	1,706,073	359,093	2,149,333	(47,892)	(68,310)	20,817,263	38,407,214	1,202,906	39,610,120
Changes in equity for the year ended 31 December 2022												
Profit for the year	-	-	-	-	-	-	-	-	3,358,149	3,358,149	121,132	3,479,281
Other comprehensive (expense)/ income for the year	-	-	-	-	-	(242,699)	25,789	-	-	(216,910)	568	(216,342)
Total comprehensive (expense)/ income for the year	-	-	-	-	-	(242,699)	25,789	-	3,358,149	3,141,239	121,700	3,262,939
Dividend declared	14(b)	-	-	-	-	-	-	-	(1,199,587)	(1,199,587)	-	(1,199,587)
Distribution to non-controlling interests		-	-	-	-	-	-	-	-	-	(51,972)	(51,972)
Appropriation		-	-	-	154,176	-	-	-	(154,176)	-	-	-
Appropriation of specific reserve		-	-	-	-	42,267	-	-	(42,267)	-	-	-
Capital contribution from non-controlling interests		-	-	-	-	-	-	-	-	-	215	215
Others		-	-	10,496	-	-	(6,354)	-	6,354	10,496	(9,561)	935
Balance as at 31 December 2022	6,926,018	4,529,310	2,046,822	1,860,249	401,360	1,900,280	(22,103)	(68,310)	22,785,736	40,359,362	1,263,288	41,622,650
Balance as at 1 January 2021	6,926,018	4,529,310	1,851,748	1,560,954	313,782	2,666,260	(22,635)	(68,310)	18,960,557	36,717,684	469,290	37,186,974
Changes in equity for the year ended 31 December 2021												
Profit for the year	-	-	-	-	-	-	-	-	3,157,434	3,157,434	28,327	3,185,761
Other comprehensive expense for the year	-	-	-	-	-	(517,677)	(25,257)	-	-	(542,934)	(80)	(543,014)
Total comprehensive income/ (expense) for the year	-	-	-	-	-	(517,677)	(25,257)	-	3,157,434	2,614,500	28,247	2,642,747
Dividend declared	14(b)	-	-	-	-	-	-	-	(1,109,548)	(1,109,548)	-	(1,109,548)
Distribution to non-controlling interests		-	-	-	-	-	-	-	-	-	(8,606)	(8,606)
Appropriation		-	-	-	145,119	-	-	-	(145,119)	-	-	-
Appropriation of specific reserve		-	-	-	-	45,311	-	-	(45,311)	-	-	-
Capital contribution from non-controlling interests		-	-	185,191	-	-	-	-	-	185,191	714,239	899,430
Others		-	-	(613)	-	-	750	-	(750)	(613)	(264)	(877)
Balance as at 31 December 2021	6,926,018	4,529,310	2,036,326	1,706,073	359,093	2,149,333	(47,892)	(68,310)	20,817,263	38,407,214	1,202,906	39,610,120

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2022

	2022 RMB'000	2021 RMB'000
Operating activities		
Profit before tax	3,835,377	3,578,434
Adjustments for:		
Depreciation and amortisation	1,597,474	1,528,771
Impairment losses on accounts receivable, other receivables and contract assets, net	333,085	67,643
Write-down of inventories, net	26,835	26,188
Interest income	(590,891)	(372,221)
Finance costs	90,986	78,624
Share of profits of associates and joint ventures	(92,747)	(91,923)
Dividend income	(178,234)	(163,731)
Investment income and fair value gains of financial instruments at fair value through profit or loss	(63,777)	(214,092)
Loss/(Gain) on disposal of an associate and a subsidiary	36	(6,285)
Gain on disposal of property, plant and equipment, intangible assets, construction in progress and termination of lease, net	(20,115)	(105,702)
Foreign exchange loss, net	158	15,883
Write-back of non-payable liabilities	(50,506)	(35,708)
Operating profit before changes in working capital	4,887,681	4,305,881
Decrease in inventories	97,865	158,745
Increase in accounts and bills receivable	(2,314,832)	(82,243)
Increase in contract assets	(3,777,614)	(1,769,444)
Increase in prepayments and other current assets	(1,978,901)	(1,530,852)
Increase in accounts and bills payable	8,323,462	2,980,722
(Decrease)/Increase in contract liabilities	(581,196)	471,526
Increase in accrued expenses and other payables	428,658	190,874
Net cash inflow from operations	5,085,123	4,725,209
Interest paid	(134,522)	(90,503)
Interest received	449,796	346,743
Income tax paid	(492,114)	(475,492)
Net cash generated from operating activities	4,908,283	4,505,957

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2022

	Note	2022 RMB'000	2021 RMB'000
Investing activities			
Payments for purchase of property, plant and equipment, construction in progress, intangible assets and investment properties		(1,226,002)	(1,769,213)
Proceeds from disposal of property, plant and equipment, intangible assets and construction in progress		32,434	24,156
Restricted bank deposits received		515,937	309,107
Dividends received		258,029	324,961
Proceeds from disposal of equity instruments/subsidiary		7,539	6,262
Payments for acquisition of equity investments		(147,390)	(76,575)
Payments for acquisition of wealth management products and structured deposits		–	(7,588,000)
Proceeds from disposal of wealth management products and structured deposits		3,355,829	7,566,024
Payments for acquisition of associates and joint ventures		(9,414)	(7,660)
Proceeds from disposal of associates and joint ventures		1,030	3,561
Payments for acquisition of deposits at financial institutions with original maturity more than one year		(5,077,193)	(2,359,000)
Other cash paid relating to investing activities		–	(138,173)
Other cash received relating to investing activities		–	35,001
Net cash used in investing activities		(2,289,201)	(3,669,549)
Financing activities			
Proceeds from bank and other loans		240,183	430,415
Capital injection from non-controlling interests		215	900,000
Repayments of bank and other loans		(197,122)	(301,915)
Repayments of leases liabilities		(529,557)	(526,134)
Dividends paid		(1,257,596)	(1,130,717)
Net cash used in financing activities		(1,743,877)	(628,351)
Net increase in cash and cash equivalents		875,205	208,057
Cash and cash equivalents at beginning of year		21,171,025	21,008,490
Effect of foreign exchange rate changes		39,114	(45,522)
Cash and cash equivalents at end of year	33	22,085,344	21,171,025

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

1. PRINCIPAL ACTIVITIES AND ORGANISATION

(a) Principal activities

China Communications Services Corporation Limited (the “Company”) and its subsidiaries (hereinafter collectively referred to as the “Group”) is a leading service provider in the People’s Republic of China (the “PRC”) that provides integrated comprehensive smart solutions in the field of informatization and digitalization. The Group offers telecommunications infrastructure services, including design, construction and project supervision and management; business process outsourcing services, including management of infrastructure for information technology, general facilities management, supply chain and products distribution; and applications, contents and other services, including system integration, software development and system support, and value-added services.

(b) Organisation

The Company was established in the PRC on 30 August 2006 as a joint stock limited company under the Company Law of the PRC as part of the restructuring of China Telecommunications Corporation (“CTC”), a state-owned enterprise under the direct supervision of the State Council of the PRC. The H shares of the Company have been listed on the Main Board of The Stock Exchange of Hong Kong Limited since 8 December 2006.

The address of the Company’s registered office is Block No.1, Compound No.1, Fenghuangzui Street, Fengtai District, Beijing, PRC 100073. At 31 December 2022, the directors of the Company consider the immediate and ultimate holding company of the Group to be CTC.

The Company established China Comservice Smart Property Development Co., Ltd. in August 2022. The registered capital is RMB50 million. The Company has paid the contribution of RMB50 million on 27 October 2022.

2. SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

The consolidated financial statements of the Group have been prepared in accordance with International Financial Reporting Standards (“IFRSs”) as issued by the International Accounting Standards Board (the “IASB”). IFRSs include all applicable individual IFRSs, International Accounting Standards (“IASs”) and related interpretations. The consolidated financial statements also comply with the disclosure requirements of the Hong Kong Companies Ordinance and the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (“Listing Rules”). A summary of the significant accounting policies adopted by the Group is set out below.

The IASB has issued certain revised IFRSs that are first effective or available for early adoption for the current year of the Group. Note 3 provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior years reflected in these consolidated financial statements.

(b) Basis of preparation of consolidated financial statements

The consolidated financial statements for the year ended 31 December 2022 comprise the Group and its interests in associates and joint ventures.

For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(b) Basis of preparation of consolidated financial statements (Continued)

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of IFRS 2 *Share-based Payment*, leasing transactions that are within the scope of IFRS 16 *Leases* ("IFRS 16"), and measurements that have some similarities to fair value but are not fair value, such as net realisable value in IAS 2 *Inventories* or value in use in IAS 36 *Impairment of Assets*.

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1: inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2: inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3: inputs are unobservable inputs for the asset or liability.

The preparation of the consolidated financial statements in accordance with IFRSs requires management to make judgements, estimates and assumptions that affect the application of accounting policies and reported amounts of assets, liabilities, income and expenses. The estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances, the results of which form the basis of making the judgements about carrying amounts of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates.

The estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the consolidated financial statements and major sources of estimation uncertainty are discussed in note 45.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(c) Basis of consolidation****(i) Business combinations involving enterprises under common control**

A business combination involving enterprises under common control is a business combination in which all of the combining enterprises are ultimately controlled by the same party or parties both before and after the business combination, and that control is not transitory. The assets and liabilities obtained are measured at the carrying amounts in the consolidated financial statements of the ultimate controlling party at the combination date. The difference between the carrying amount of the net assets obtained and the carrying amount of consideration paid for the combination (or the total face value of shares issued) is adjusted to capital reserve. The combination date is the date on which one combining enterprise effectively obtains control of the other combining enterprises.

(ii) Business combinations involving entities not under common control

A business combination involving entities not under common control is a business combination in which all of the combining entities are not ultimately controlled by the same party or parties before the business combination.

The acquirer, at the acquisition date, allocates the consideration of the business combination by recognising the acquiree's identifiable asset, liabilities and contingent liabilities at their fair value at that date. The excess of the consideration over the fair value of the net identifiable assets acquired is recorded as goodwill (see note 2(d)).

Except for certain recognition exemptions, the identifiable assets acquired and liabilities assumed must meet the definitions of an asset and a liability in the International Accounting Standards Committee's *Framework for the Preparation and Presentation of Financial Statements* (replaced by the *Conceptual Framework for Financial Reporting* issued in September 2010).

(iii) Subsidiaries and non-controlling interests

The consolidated financial statements incorporate the financial statements of the Company and entities controlled by the Company and its subsidiaries. Control is achieved when the Company:

- a. has power over the investee;
- b. is exposed, or has rights, to variable returns from its involvement with the investee; and
- c. has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on a transaction-by-transaction basis.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(c) Basis of consolidation (Continued)

(iii) Subsidiaries and non-controlling interests (Continued)

Profit or loss and each item of other comprehensive income are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests. Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interests (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the owners of the Company. All amounts previously recognised in other comprehensive income in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9 *Financial Instruments* ("IFRS 9"), or when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

(iv) Investments in associates and joint ventures

Associates are entities in which the Group has significant influence, but not control or joint control, over its management, including participation in the financial and operating decisions.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(c) Basis of consolidation** (Continued)**(iv) Investments in associates and joint ventures** (Continued)

Investments in associates or joint ventures are accounted for in the consolidated financial statements under the equity method. Under the equity method, the investments are initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investees' identifiable net assets over the cost of the investment (if any, after reassessment) which is recognised in the consolidated statement of profit or loss. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's profit or loss and other comprehensive income. The Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the investee.

Unrealised profits and losses resulting from transactions between the Group and its associates or joint ventures are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

When the Group reduces its ownership interest in an associate or a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in other comprehensive income relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

(d) Goodwill

Goodwill represents the excess of

- (i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over
- (ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

When (ii) is greater than (i), then this excess is recognised immediately in profit or loss as a gain on a bargain purchase after reassessment.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(d) Goodwill (Continued)

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination involving entities not under common control is allocated to each cash-generating unit, or group of cash generating units, which is expected to benefit from the synergies of the combination and is tested annually for impairment, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment (see note 2(j)).

On disposal of the relevant cash-generating unit or any of the cash-generating unit within the group of cash-generating units, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the cash-generating unit (or a cash-generating unit within a group of cash-generating units), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the cash-generating unit) disposed of and the portion of the cash-generating unit (or the group of cash-generating units) retained.

(e) Investment properties

Investment properties are buildings which are owned to earn rental income and/or for capital appreciation.

Investment properties are stated in the consolidated statement of financial position at cost less accumulated depreciation and impairment losses (see note 2(j)). Depreciation is calculated to write off the cost less estimated residual value if applicable and is charged to profit or loss on a straight-line basis over the estimated useful lives ranging from 20 years to 30 years.

When an item of property, plant and equipment is transferred to investment property evidenced by end of owner-occupation or when an investment property commencement of owner-occupation and reclassified as property, plant and equipment, its costs at the date of reclassification becomes its cost for accounting purposes.

(f) Property, plant and equipment

Property, plant and equipment are initially recorded at cost, less subsequent accumulated depreciation and impairment losses (see note 2(j)). The cost of an asset comprises its purchase price, any directly attributable costs of bringing the asset to working condition and location for its intended use and the cost of borrowed funds used during the periods of construction. Expenditure incurred after the asset has been put into operation, including cost of replacing part of such an item, is capitalised only when it increases the future economic benefits embodied in the item of property, plant and equipment and the cost can be measured reliably. All other expenditure is expensed as incurred.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(f) Property, plant and equipment** (Continued)

Depreciation is provided to write off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight-line method over their estimated useful lives as follows:

Buildings	5–30 years
Building improvements	5–8 years
Motor vehicles	6–10 years
Furniture, fixtures and other equipment	3–10 years

The useful life of an asset and its residual value, if any, and depreciation method are reviewed annually.

(g) Construction in progress

Construction in progress is stated at cost less impairment losses (see note 2(j)). Cost comprises direct costs of construction, capitalisation of interest charge and foreign exchange differences on related borrowed funds to the extent that they are regarded as an adjustment to interest charges, during the period of construction.

Capitalisation of these costs ceases and the construction in progress is transferred to property, plant and equipment when substantially all the activities necessary to prepare the asset for its intended use are completed. No depreciation is provided in respect of construction in progress until it is completed and ready for its intended use.

(h) Intangible assets (other than goodwill)

Expenditure on research activities is recognised as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development activities (or from the development phase of an internal project) is recognised if, and only if, all of the following have been demonstrated:

- a. the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- b. the intention to complete the intangible asset and use or sell it;
- c. the ability to use or sell the intangible asset;
- d. how the intangible asset will generate probable future economic benefits;
- e. the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and
- f. the ability to measure reliably the expenditure attributable to the intangible asset during its development.

The expenditure capitalised includes the costs of materials, direct labour and an appropriate proportion of overheads and borrowing costs, where applicable (see note 2(t)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 2(j)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 2(j)).

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(h) Intangible assets (other than goodwill) (Continued)

Amortisation of intangible assets with finite useful lives is charged to profit or loss from the date they are available for use on a straight-line basis over the assets' estimated useful lives.

Both the period and method of amortisation are reviewed annually.

(i) Leases

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable,
- variable lease payment that are based on an index or a rate, initially measured using the index or rate as at the commencement date,
- amounts expected to be payable by the group under residual value guarantees,
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the group exercising that option.

Lease payments to be made under reasonably certain extension options are also included in the measurement of the liability.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used, being the rate that the individual lessee would have to pay to borrow the funds necessary to obtain an asset of similar value to the right-of-use asset in a similar economic environment with similar terms, security and conditions.

To determine the incremental borrowing rate, the Group:

- where possible, uses recent third-party financing received by the individual lessee as a starting point, adjusted to reflect changes in financing conditions since third party financing was received
- uses a build-up approach that starts with a risk-free interest rate adjusted for credit risk for leases held by the Group, which does not have recent third party financing, and
- makes adjustments specific to the lease, e.g. term, country, currency and security.

If a readily observable amortising loan rate is available to the individual lessee (through recent financing or market data) which has a similar payment profile to the lease, then the Group entities use that rate as a starting point to determine the incremental borrowing rate.

The Group is exposed to potential future increases in variable lease payments based on an index or rate, which are not included in the lease liability until they take effect. When adjustments to lease payments based on an index or rate take effect, the lease liability is reassessed and adjusted against the right-of-use asset.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(i) Leases (Continued)

Lease payments are allocated between principal and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis. If the Group is reasonably certain to exercise a purchase option, the right-of-use asset is depreciated over the underlying asset's useful life.

Payments associated with short-term leases and leases of low-value assets are recognised on a straight-line basis as an expense in profit or loss. Short-term leases are leases with a lease term of 12 months or less without a purchase option.

Except for the practical expedient rent concessions, the Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

For the lessor, the Group derecognises assets held under a finance lease in balance sheet and present them as a receivable at the present value of the lease payments. Lease income from operating leases is recognised in the consolidated income statement on a straight-line basis over the lease term. Initial direct costs incurred in obtaining an operating lease are added to the carrying amount of the underlying asset and recognised as expense over the lease term on the same basis as lease income. The respective leased assets are included in the balance sheet based on their nature.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(j) Impairment of long-lived assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following long-lived assets may be impaired, except in the case of goodwill:

- property, plant and equipment;
- right-of-use assets;
- investment properties;
- construction in progress;
- goodwill; and
- Intangible assets with finite useful lives.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, intangible assets that are not yet available for use and intangible assets that have indefinite useful lives, the recoverable amount is estimated annually whether or not there is any indication of impairment.

– Calculation of recoverable amount

The recoverable amount of an asset is the greater of its fair value less costs of disposal and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of time value of money and the risks specific to the asset for which the future cash flow estimates have not been adjusted. Where an asset does not generate cash inflows largely independent of those from other assets, the recoverable amount is determined for the smallest group of assets that generates cash inflows independently (i.e. a cash-generating unit).

– Recognition of impairment losses

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount.

Impairment losses recognised in respect of cash-generating units are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of cash-generating units) and then, to reduce the carrying amount of the other assets in the unit (or group of cash-generating units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal, or value in use, if determinable or zero.

– Reversals of impairment losses

In respect of assets other than goodwill, an impairment loss is reversed if there has been a favourable change in the estimates used to determine the recoverable amount. An impairment loss in respect of goodwill is not reversed.

A reversal of impairment losses is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years. Reversals of impairment losses are credited to profit or loss in the year in which the reversals are recognised.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(k) Inventories

Inventories are carried at the lower of cost and net realisable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase and other costs incurred in bringing the inventories to their present location and condition.

Net realisable value is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. The amount of any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognised as a reduction in the amount of inventories recognised as an expense in the period in which the reversals occurs.

(l) Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for accounts receivable arising from contracts with customers which are initially measured in accordance with IFRS 15. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets or financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Financial instruments (Continued)

Financial assets (Continued)

Classification and subsequent measurement of financial assets (Continued)

All other financial assets are subsequently measured at FVTPL, except that at initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity investment in other comprehensive income ("OCI") if that equity investment is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which IFRS 3 *Business Combinations* ("IFRS 3") applies.

(i) *Amortised cost and interest income*

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit impaired.

(ii) *Equity instruments designated as at fair value through other comprehensive income ("FVTOCI")*

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the fair value reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity investments, and will be transferred to retained earnings.

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income" line item in profit or loss.

(iii) *Financial assets at FVTPL*

Financial assets that does not meet the criteria for being measured at amortised cost or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9

The Group performs impairment assessment under expected credit losses (“ECL”) model on financial assets (including accounts and bills receivable, financial assets included in prepayments and other current assets, long term receivables, short-term bank deposits and restricted cash, cash and cash equivalents), lease receivables and contract assets which are subject to impairment assessment under IFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL (“12m ECL”) represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessment are done based on the Group’s historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for accounts receivable, lease receivables and contract assets. The ECL on these assets are assessed individually for debtors with significant risk, and collectively using a provision matrix with appropriate groupings based on shared credit risk characteristics and type of customers, such as receivables from telecommunications operators and non-telecom operators. Telecommunications operators include China Telecommunications Corporation and its subsidiaries (excluding the Group) (“CTC Group”), China Mobile Communications Group Co., Ltd. and its subsidiaries (“CM Group”), China Unicom Group and China Tower Corporation Limited, non-telecom operators refer to all of the other customers.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless when there has been a significant increase in credit risk and credit-impaired since initial recognition, in which case the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

(i) *Significant increase in credit risk*

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

In particular, the following information is taken into account when assessing whether credit risk has increased significantly:

- failure to make payments of principal or interest on their contractually due dates;
- an actual or expected significant deterioration in the financial instrument's external (if available);

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Financial instruments (Continued)

Financial assets (Continued)

Impairment of financial assets and other items subject to impairment assessment under IFRS 9 (Continued)

(i) *Significant increase in credit risk (Continued)*

- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor; and
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk.

(ii) *Definition of default*

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

(iii) *Credit-impaired financial assets*

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider;
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation; or
- the disappearance of an active market for that financial asset because of financial difficulties.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(I) Financial instruments** (Continued)**Financial assets** (Continued)*Impairment of financial assets and other items subject to impairment assessment under IFRS 9* (Continued)*(iv) Write-off policy*

The Group writes off a financial asset when there is information indicating that the counterparty is in severe financial difficulty and there is no realistic prospect of recovery, for example, when the counterparty has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. A write-off constitutes a derecognition event. Any subsequent recoveries are recognised in profit or loss.

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with the respective risks of default occurring as the weights. The Group uses a practical expedient in estimating ECL on accounts receivable using a provision matrix taking into consideration historical credit loss experience, adjusted for forward looking information that is available without undue cost or effort.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. For a lease receivable, the cash flows used for determining the ECL is consistent with the cash flows used in measuring the lease receivable in accordance with IFRS 16.

Interest income is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit impaired, in which case interest income is calculated based on amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of accounts and bills receivable, contract assets, lease receivables and other receivables where the corresponding adjustment is recognised through a loss allowance account.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the fair value reserve is not reclassified to profit or loss, but is transferred to retained earnings.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Financial instruments (Continued)

Financial liabilities and equity

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognised at the proceeds received, net of direct issue costs.

Financial liabilities

All financial liabilities are subsequently measured at FVTPL or at amortised cost using the effective interest method.

(i) Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) contingent consideration of an acquirer in a business combination to which IFRS 3 applies, (ii) held for trading or (iii) it is designated as at FVTPL.

A financial liability is held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term; or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profit-taking; or
- it is a derivative, except for a derivative that is a financial guarantee contract or a designated and effective hedging instrument.

(ii) Financial liabilities at amortised cost

Financial liabilities including interest-bearing borrowings, accounts and bills payable, financial liabilities included in accrued expenses and other payables are subsequently measured at amortised cost, using the effective interest method.

(iii) Derecognition of financial liabilities

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(m) Cash and cash equivalents**

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of original maturity at acquisition.

(n) Employee benefits**(i) Short-term employee benefits and contributions to defined contribution retirement plans**

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits are accrued in the year in which the associated services are rendered by employees.

(ii) Termination benefits

A liability for a termination benefit is recognised at the earlier of when the Group can no longer withdraw the offer of the termination benefit and when it recognises any related restructuring costs.

(iii) Share appreciation rights scheme

Compensation expense in respect of the share appreciation rights granted is accrued as a charge to profit or loss over the applicable vesting period based on the fair value of the stock appreciation rights. The liability of the accrued compensation expense is remeasured to fair value at each end of the reporting period until the liability is settled with the effect of changes in the fair value of the liability is charged or credited to profit or loss. Further details of the Group's share appreciation rights scheme are set out in note 42.

(o) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively. Where current tax or deferred tax arises from the initial recognition for a business combination, the tax effect is included in the accounting for the business combination.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(o) Income tax (Continued)

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination).

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group first determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies IAS 12 *Income Taxes* requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities resulting in net deductible temporary differences.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)**(o) Income tax** (Continued)

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or
- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
 - the same taxable entity; or
 - different taxable entities which, intend either to realise the current tax assets and settle the current tax liabilities on a net basis or to realise the assets and settle the liabilities simultaneously, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered.

(p) Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

(q) Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied. i.e. when “control” of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a piece of goods or service (or a bundle of goods or services) that is distinct or a series of a piece of distinct goods or services that are substantially the same.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(q) Revenue from contracts with customers (Continued)

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

As such, revenues from contracts with customers of major telecommunications support services, including construction (included in the revenue from telecommunications infrastructure services described in note 4), management of infrastructure for information technology (included in the revenue from business process outsourcing services described in note 4) are generally recognised over time during which the services are provided to customers.

Otherwise, revenue is recognised at a point in time when the customer obtains control of a piece of distinct goods or services.

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with IFRS 9 (see note 2(l)). In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

Contracts with multiple performance obligations (including allocation of transaction price)

For contracts that contain more than one performance obligations, the Group allocates the transaction price to each performance obligation on relative stand-alone selling price basis.

The stand-alone selling price of a piece of distinct goods or a distinct service underlying each performance obligation is determined at contract inception. It represents the price at which the Group would sell a promised goods or service separately to a customer. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(q) Revenue from contracts with customers (Continued)

Revenue recognised over time: measurement of progress towards complete satisfaction of a performance obligation

The progress towards complete satisfaction of a performance obligation is mainly measured based on the output method, which is to recognise revenue on the basis of direct measurement of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depict the Group's performance in transferring control of goods or services.

Warranties

If a customer has the option to purchase a warranty separately, the Group accounts for the warranty as a separate performance obligation and allocates a portion of the transaction price to that performance obligation.

If a customer does not have the option to purchase a warranty separately, the Group accounts for the warranty in accordance with IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* unless the warranty provides the customer with a service in addition to the assurance that the product complies with agreed-upon specification (i.e. service-type warranties).

For service-type warranties, the promised service is a performance obligation. In that case, the Group allocates a portion of the transaction price to the warranty.

Existence of significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

For contract where the period between payment and transfer of the associated goods or services is less than one year, the Group applies the practical expedient of not adjusting the transaction price for any significant financing component.

Principal versus agent

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the Group is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the Group is an agent).

The Group is a principal if it controls the specified goods or service before that goods or service is transferred to a customer.

The Group is an agent if its performance obligation is to arrange for the provision of the specified goods or service by another party. In this case, the Group does not control the specified goods or service provided by another party before that goods or service is transferred to the customer. When the Group acts as an agent, it recognises revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(r) Government grants

Government grants are recognised in the consolidated statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are recognised in profit or loss over the useful life of the asset.

(s) Translation of foreign currencies

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates ("the functional currency"). The functional currency of the Company and the presentation currency of the Group is Renminbi ("RMB"). Foreign currency transactions during the year are translated at the applicable rates of exchange quoted by the People's Bank of China prevailing on the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the applicable rates ruling at the end of the reporting period. Foreign currency differences, other than those capitalised as construction in progress (see note 2(g)), are recognised in profit or loss. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was determined.

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Assets and liabilities of foreign operations are translated into RMB at the foreign exchange rates ruling at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the exchange reserve. Upon the disposal of a foreign operation (that is, a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation), all of the currency translation differences accumulated in equity in respect of that operation attributable to the equity shareholders of the Company are reclassified to profit or loss.

(t) Borrowing costs

Borrowing costs that directly attributable to the acquisition, construction or production of qualifying assets, which are asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and development activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

2. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(u) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated financial statements, are identified from the financial information provide regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

The Group principally has one operating segment and hence no segment information is provided (see note 47).

(v) Dividends or profit distributions

Dividends or profit distributions are recognised as a liability in the period in which they are declared.

(w) Related parties

- (a) A person, or a close member of that person's family, is related to the Group if that person:
 - (i) has control or joint control of the Group;
 - (ii) has significant influence over the Group; or
 - (iii) is a member of the key management personnel of the Group or the Group's parent.
- (b) An entity is related to the Group if any of the following conditions applies:
 - (i) The entity and the Group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others);
 - (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member);
 - (iii) Both entities are joint ventures of the same third party;
 - (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity;
 - (v) The entity is controlled or jointly controlled by a person identified in (a);
 - (vi) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

3. CHANGES IN ACCOUNTING POLICIES

In the current year, the Group has applied, for the first time, the following amendments to IFRSs issued by the IASB that are mandatorily effective for the current year:

Amendments to IFRS3	Reference to the Conceptual Framework
Amendments to IAS16	Property, Plant and Equipment – Proceeds before Intended Use
Amendments to IAS37	Onerous Contracts – Cost of Fulfilling a Contract
Amendments to IFRS Standards	Annual Improvements to IFRS Standards 2018–2020

The application of the above amendments to IFRSs in the current year has had no material effect on the Group's consolidated financial statements.

4. REVENUES

Revenues are derived from the provision of integrated comprehensive smart solutions.

The Group's revenues by business nature can be summarised as follows:

	2022 RMB'000	2021 RMB'000
Revenue from telecommunications infrastructure services	72,906,517	71,889,248
Revenue from business process outsourcing services	43,072,446	40,623,583
Revenue from applications, content and other services	24,766,792	21,478,486
	140,745,755	133,991,317

The Group's major customers are telecommunications operators mainly including CTC Group and CM Group. Revenues from the provision of integrated telecommunications support services to CTC Group and CM Group for the year ended 31 December 2022 amounted to RMB50,268 million and RMB17,415 million, respectively (2021: RMB46,047 million and RMB18,186 million, respectively) being 35.7% and 12.4% of the Group's total revenues, respectively (2021: 34.4% and 13.6%, respectively). The revenues derived from areas outside Mainland China for the year ended 31 December 2022 amounted to RMB2,998 million (2021: RMB2,742 million).

For the year ended 31 December 2022, the Group's top three business lines that contributed to the overall revenues were construction included in telecommunications infrastructure services, management of infrastructure for information technology included in business process outsourcing services and system integration included in applications, content and other services, the revenues from which amounted to RMB59,231 million, RMB18,158 million and RMB15,211 million, respectively (2021: The Group's top three business lines that contributed to the overall revenues were construction, management of infrastructure for information technology and system integration, the revenues from which amounted to RMB57,310 million, RMB16,678 million and RMB13,278 million, respectively). Revenues from contracts with non-telecom operators for construction included in telecommunications infrastructure services amounted to RMB29,993 million (2021: RMB28,664 million).

The Group generally accounts for major telecommunications support services, including construction, management of infrastructure for information technology, logistics and warehousing in supply chain, as performance obligations satisfied over time, when the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs, or the Group's performance creates or enhances an asset that the customer controls as the Groups performs, revenue is recognised for these services by measuring the progress towards complete satisfaction of each performance obligation mainly using the output method. For other goods or services, the revenue recognition method is determined based on the specific contract terms.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

4. REVENUES (Continued)

As of 31 December 2022, the total transaction price of RMB96,652 million (31 December 2021: RMB76,535 million) allocated to the Group's remaining performance obligations under existing contracts is expected to be recognised as revenue in 2023 and subsequent periods (31 December 2021: 2022 and subsequent periods) in accordance with the terms of the contract and the provision of services. These amounts disclosed above do not include contracts with an original expected duration of one year or less.

5. COST OF REVENUES

	2022 RMB'000	2021 RMB'000
Subcontracting charges	76,546,469	71,239,853
Materials costs	21,657,339	19,166,225
Direct personnel costs	8,558,051	8,804,676
Direct costs of products distribution	4,065,197	4,614,143
Expense relating to short-term leases and leases of low-value assets	1,184,887	1,114,587
Depreciation and amortisation	960,995	908,323
Others	11,792,274	13,359,092
	124,765,212	119,206,899

6. OTHER INCOME

	2022 RMB'000	2021 RMB'000
Interest income	590,891	372,221
Management fee income	386,733	403,877
Input tax credits	313,019	301,821
Government grants	280,771	261,145
Dividend income from equity instruments at FVTOCI	178,234	163,731
Investment income and fair value gains on wealth management products and structured deposits	51,888	193,894
Write-back of non-payable liabilities	50,506	35,708
Gain on disposal of property, plant and equipment, intangible assets and right-of-use assets	26,936	115,973
Others	75,250	98,026
	1,954,228	1,946,396

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

7. OTHER EXPENSES

	2022 RMB'000	2021 RMB'000
Bank handling fees	81,897	73,399
Penalty charge and compensation	23,976	70,858
Loss on disposal of property, plant and equipment, construction in progress and intangible assets	6,821	10,271
Donations	2,779	2,796
Net foreign exchange loss	158	15,883
Others	25,325	40,749
	140,956	213,956

8. FINANCE COSTS

	2022 RMB'000	2021 RMB'000
Interest on bank and other borrowings	33,342	24,552
Interest on lease liabilities	57,644	54,072
	90,986	78,624

For the year ended 31 December 2022, no borrowing costs were capitalised in relation to construction in progress (2021: Nil).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

9. PROFIT BEFORE TAX

Profit before tax has been arrived at after charging the following items:

	2022 RMB'000	2021 RMB'000
(a) Staff costs:		
Salaries, wages and other benefits	16,207,176	15,932,148
Contributions to defined contribution retirement schemes	1,776,161	1,703,830
	17,983,337	17,635,978
(b) Other items:		
Depreciation		
– Property, plant and equipment (note 16)	744,841	746,188
– Right-of-use assets (note 17)	583,559	549,885
– Investment properties (note 18)	87,503	58,377
Amortisation		
– Intangible assets (note 21)	181,571	174,321
Auditors' remuneration	28,499	27,187
Materials costs	21,657,339	19,166,225
Direct costs of products distribution	4,065,197	4,614,143
Write-down of inventories, net	26,835	26,188
Impairment losses recognised and reversed on accounts receivable, other receivables, contract assets and others, net	333,085	67,643
Expense relating to short-term leases and leases of low-value assets	1,403,579	1,340,856

The selling expenses, general and administrative expenses, research and development costs and others of the Group are RMB2,654 million, RMB5,623 million, RMB4,952 million and RMB731 million (2021: RMB2,778 million, RMB5,486 million, RMB4,233 million and RMB455 million), respectively for the year ended 31 December 2022.

10. INCOME TAX

(a) Income tax in the consolidated statement of profit or loss represents:

	2022 RMB'000	2021 RMB'000
Current tax	566,816	428,763
Deferred tax (note 24)	(210,720)	(36,090)
Total income tax	356,096	392,673

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

10. INCOME TAX (Continued)

(b) Reconciliation between income tax expense and accounting profit at applicable tax rates:

	2022 RMB'000	2021 RMB'000
Profit before tax	3,835,377	3,578,434
Expected income tax expense at a statutory tax rate of 25% (2021: 25%)	958,844	894,609
Differential/preferential tax rates on subsidiaries' income (note (i)(ii))	(176,342)	(177,809)
Non-deductible expenses (note (iii))	239,494	208,190
Non-taxable income	(107,391)	(99,407)
Tax losses not recognised	64,043	119,652
Utilisation of previously unrecognised tax losses	(13,089)	(9,286)
Over provision in respect of prior years	(3,964)	(40,503)
Additional deduction of research and development expenses (note (iv))	(605,499)	(502,773)
Income tax	356,096	392,673

Notes:

- (i) The provision for income tax of the Group is calculated based on a statutory tax rate of 25% of the assessable profit of the Group as determined in accordance with the relevant PRC income tax rules and regulations for the year ended 31 December 2022 (2021: 25%), except for certain domestic subsidiaries of the Group, which are taxed at preferential rates (refer to note (ii) below), where applicable; and for certain overseas subsidiaries of the Group, which are taxed at their respective statutory rates.
- (ii) According to the PRC enterprise income tax law and its relevant regulations, certain subsidiaries that are qualified as High and New Technology Enterprise, enterprises under the Western Region Development Program, and Small and Micro enterprises as defined under the tax law are entitled to a preferential income tax rate of 15%, 15% and 20% (2021: 15%, 15%, 20%).
- (iii) The amounts represent staff costs in excess of the statutory deductible limits for tax reporting purposes and other non-deductible expenses.
- (iv) According to the PRC enterprise income tax law and its relevant regulations, certain research and development expenses of Group's PRC subsidiaries are qualified for an additional deduction of 75% and 100% for tax reporting purposes, from 1 January 2022 to 30 September 2022, and from 1 October 2022 to 31 December 2022 respectively (2021: 75%).

11. OTHER COMPREHENSIVE (EXPENSE)/INCOME

	2022 RMB'000	2021 RMB'000
Changes in fair value of equity instruments at fair value through other comprehensive expense recognised during the year	(326,391)	(689,997)
Net deferred tax credited to other comprehensive expense	83,908	172,320
Exchange differences on translation of financial statements	26,141	(25,337)
Other comprehensive expense for the year	(216,342)	(543,014)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

12. DIRECTORS' AND SUPERVISORS' EMOLUMENTS

The names of the directors and the supervisors of the Company and their remuneration for the year ended 31 December 2022 are as follows:

	Fees RMB'000	Salaries, allowances and other benefits in kind RMB'000	Discretionary bonus RMB'000 (note)	Pension scheme contributions RMB'000	Expenses related to share appreciation contributions RMB'000	2022 Total RMB'000
Executive Directors						
Liu Guiqing	-	-	-	-	-	-
Huang Xiaoqing	-	242	997	132	4	1,375
Zhang Xu	-	184	882	128	3	1,197
	-	426	1,879	260	7	2,572
Non-Executive Directors						
Gao Tongqing	-	-	-	-	-	-
Mai Yanzhou (resigned on 30 May 2022)	-	-	-	-	-	-
Huang Zhen	-	-	-	-	-	-
	-	-	-	-	-	-
Independent Non-Executive Directors						
Siu Wai Keung, Francis	328	-	-	-	-	328
Lv Tingjie	193	-	-	-	-	193
Wang Qi	92	-	-	-	-	92
Wang Chungue	92	-	-	-	-	92
Wu Taishi (resigned on 17 June 2022)	85	-	-	-	-	85
Liu Linfei (resigned on 17 June 2022)	85	-	-	-	-	85
	875	-	-	-	-	875
Supervisors						
Cai Manli	92	-	-	-	-	92
Ye Lichun	-	-	-	-	-	-
Liu Lian	-	59	151	36	1	247
Si Jianfei (resigned on 17 June 2022)	-	100	336	56	-	492
Hai Liancheng (resigned on 17 June 2022)	42	-	-	-	-	42
	134	159	487	92	1	873
Total directors' and supervisors' emoluments						4,320

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

12. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (Continued)

The names of the directors and the supervisors of the Company and their remuneration for the year ended 31 December 2021 are as follows:

	Fees RMB'000	Salaries, allowances and other benefits in kind RMB'000	Discretionary bonus RMB'000 (note)	Pension scheme contributions RMB'000	2021 Total RMB'000
Executive Directors					
Zhang Zhiyong (resigned on 30 September 2021)	-	-	-	-	-
Huang Xiaoqing	-	245	759	92	1,096
Zhang Xu	-	178	763	96	1,037
	-	423	1,522	188	2,133
Non-Executive Directors					
Gao Tongqing	-	-	-	-	-
Mai Yanzhou	-	-	-	-	-
	-	-	-	-	-
Independent Non-Executive Directors					
Siu Wai Keung, Francis	300	-	-	-	300
Lv Tingjie	170	-	-	-	170
Wu Taishi	170	-	-	-	170
Liu Linfei	170	-	-	-	170
	810	-	-	-	810
Supervisors					
Han Fang (resigned on 22 December 2021)	-	-	-	-	-
Hai Liancheng	85	-	-	-	85
Si Jianfei	-	200	548	97	845
	85	200	548	97	930
Total directors' and supervisors' emoluments					3,873

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

12. DIRECTORS' AND SUPERVISORS' EMOLUMENTS (Continued)

Note:

The discretionary bonus is determined based on the individual performance of the directors and supervisors and the Group's overall operating results.

The emoluments of certain executive director or supervisor, and non-executive directors were not borne by the Group and they received remunerations from the parent company and/or from other shareholders. The directors of the Company are of the opinion that the services provided to the Group only occupy an insignificant amount of their time and therefore it is concluded that those directors or supervisors are not remunerated for such services.

The emoluments of executive directors were for their services rendered in connection with the management of the affairs of the Group.

The independent non-executive directors' emoluments shown above were in connection with their services rendered as directors of the Company.

The emoluments of supervisors were in connection with their services rendered as a supervisor of the Company or as an employee of the Group.

13. INDIVIDUALS WITH HIGHEST EMOLUMENTS AND SENIOR MANAGEMENT'S REMUNERATION

(a) The five highest paid employees of the Group

The five highest paid employees of the Group are as follows:

	2022	2021
Directors and supervisors	1	–
Non-director and non-supervisor employees	4	5
	5	5

The remuneration paid to the above highest paid employees are as follows:

	2022 RMB'000	2021 RMB'000
Salaries, allowances and other benefits in kind	2,017	2,026
Discretionary bonuses	5,129	4,668
Pension scheme contributions	533	679
	7,679	7,373

The number of these highest paid employees whose remuneration fell within the following bands:

	2022	2021
RMB equivalent		
1,000,001 to 1,500,000	3	3
1,500,001 to 2,000,000	2	2

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

13. INDIVIDUALS WITH HIGHEST EMOLUMENTS AND SENIOR MANAGEMENT'S REMUNERATION (Continued)

(b) Senior management's remuneration

The number of the senior management (excluding non-director and non-supervisor employees presented in note 13 (a)) whose remuneration fell within the following bands:

	2022	2021
RMB equivalent		
Nil to 1,000,000	11	15
1,000,001 to 2,000,000	10	6

14. DIVIDENDS

(a) Dividends attributable to the year

	2022 RMB'000	2021 RMB'000
Final dividend proposed after the end of reporting period of RMB0.1939 per share (2021: RMB0.1732 per share, including final dividend RMB0.1641 per share and special dividend RMB0.0091 per share)	1,342,955	1,199,587

(b) Dividends attributable to the previous financial year, approved and paid during the year

	2022 RMB'000	2021 RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of RMB0.1641 per share (2021: RMB0.1335 per share)	1,136,560	924,623
Special dividend in respect of the previous financial year, approved and paid during the year, of RMB0.0091 per share (2021: RMB0.0267 per share)	63,027	184,925
	1,199,587	1,109,548

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

15. EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to equity shareholders of the Company for the year ended 31 December 2022 of RMB3,358,149 thousand (2021: RMB3,157,434 thousand) and number of shares in issue during the year ended 31 December 2022 of 6,926,018 thousand shares (2021: 6,926,018 thousand shares).

Diluted earnings per share is the same as basic earnings per share as there were no potential dilutive ordinary shares outstanding during both years.

16. PROPERTY, PLANT AND EQUIPMENT, NET

	Buildings RMB'000	Building improvements RMB'000	Motor vehicles RMB'000	Furniture, fixtures and other equipment RMB'000	Total RMB'000
Cost					
As at 1 January 2022	6,083,646	858,030	1,529,200	4,095,815	12,566,691
Transfer to investment properties (note 18)	(80,186)	–	–	–	(80,186)
Transfer from investment properties (note 18)	356	–	–	–	356
Transfer from construction in process (note 19)	86,830	21,155	997	310,989	419,971
Additions	7,438	57,925	124,874	275,907	466,144
Disposals	(571)	(2,744)	(140,939)	(215,503)	(359,757)
As at 31 December 2022	6,097,513	934,366	1,514,132	4,467,208	13,013,219
Accumulated depreciation and impairment losses					
As at 1 January 2022	1,841,453	718,317	1,039,568	2,754,567	6,353,905
Transfer to investment properties (note 18)	(22,436)	–	–	–	(22,436)
Transfer from investment properties (note 18)	181	–	–	–	181
Depreciation charge	208,174	63,234	113,282	360,151	744,841
Depreciation written back on disposals	(164)	(1,987)	(129,353)	(200,907)	(332,411)
Impairment loss	–	–	–	(48)	(48)
As at 31 December 2022	2,027,208	779,564	1,023,497	2,913,763	6,744,032
Net carrying value					
As at 31 December 2022	4,070,305	154,802	490,635	1,553,445	6,269,187
As at 1 January 2022	4,242,193	139,713	489,632	1,341,248	6,212,786

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

16. PROPERTY, PLANT AND EQUIPMENT, NET (Continued)

	Buildings RMB'000	Building improvements RMB'000	Motor vehicles RMB'000	Furniture, fixtures and other equipment RMB'000	Total RMB'000
Cost					
As at 1 January 2021	4,016,592	804,747	1,558,450	4,045,931	10,425,720
Transfer to investment properties (note 18)	(1,280,912)	–	–	–	(1,280,912)
Transfer from investment properties (note 18)	9,824	–	–	–	9,824
Transfer from construction in process (note 19)	3,282,887	24,933	494	94,222	3,402,536
Additions	57,223	43,408	113,925	274,819	489,375
Disposals	(1,968)	(15,058)	(143,669)	(319,157)	(479,852)
As at 31 December 2021	6,083,646	858,030	1,529,200	4,095,815	12,566,691
Accumulated depreciation and impairment losses					
As at 1 January 2021	1,657,896	669,396	1,056,809	2,710,886	6,094,987
Transfer to investment properties (note 18)	(44,368)	–	–	–	(44,368)
Transfer from investment properties (note 18)	7,722	–	–	–	7,722
Depreciation charge	222,036	63,605	118,369	342,178	746,188
Depreciation written back on disposals	(1,833)	(14,684)	(135,610)	(298,497)	(450,624)
Impairment loss	–	–	–	–	–
As at 31 December 2021	1,841,453	718,317	1,039,568	2,754,567	6,353,905
Net carrying value					
As at 31 December 2021	4,242,193	139,713	489,632	1,341,248	6,212,786
As at 1 January 2021	2,358,696	135,351	501,641	1,335,045	4,330,733

All the Group's buildings are located in the PRC.

Up to the date of issuance of these consolidated financial statements, the Group is still in the process of applying for or changing registration of the title certificates of certain of its properties with an aggregate carrying amount of approximately RMB103 million as at 31 December 2022 (2021: RMB212 million) to be under its name. The directors of the Company are of the opinion that the Group is entitled to lawfully and validly occupy or use the above mentioned properties.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

17. RIGHT-OF-USE ASSETS

	Leasehold lands RMB'000	Buildings RMB'000	Motor vehicles RMB'000	Other equipment RMB'000	Total RMB'000
As at 31 December 2022					
Carrying amount	882,005	1,434,953	6,613	78,988	2,402,559
As at 31 December 2021					
Carrying amount	849,340	1,474,705	1,576	97,331	2,422,952
For the year ended 31 December 2022					
Depreciation charge	25,852	506,303	2,772	48,632	583,559
For the year ended 31 December 2021					
Depreciation charge	25,476	493,822	1,317	29,270	549,885
				2022 RMB'000	2021 RMB'000
Expense relating to short-term leases				1,377,202	1,282,376
Expense relating to leases of low-value assets, excluding short-term leases of low-value assets				26,377	58,480
Total cash outflow for leases				1,910,919	1,828,483
Additions to right-of-use assets				697,216	1,067,021

The Group leases leasehold lands, buildings, motor vehicles and other equipment for its operations. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of the terms under the contract and determines the period for which the contract is enforceable.

The Group entered into short-term leases mainly for buildings, motor vehicles and other equipment. As at 31 December 2022 and 2021, the portfolio of short-term leases is similar to the portfolio of short-term leases to which the short-term lease expense disclosed above.

As at 31 December 2022, the Group entered into new leases for buildings, motor vehicles and other equipment that had not yet commenced, the total future undiscounted cash flows over the non-cancellable period amounted to RMB137 million (2021: RMB174 million).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

18. INVESTMENT PROPERTIES

	2022 RMB'000	2021 RMB'000
Cost		
As at 1 January	2,529,073	1,250,786
Additions	15,169	159
Transfer from property, plant and equipment (note 16)	80,186	1,280,912
Transfer from right-of-use assets	–	7,040
Transfer to property, plant and equipment (note 16)	(356)	(9,824)
As at 31 December	2,624,072	2,529,073
Accumulated depreciation		
As at 1 January	799,167	700,764
Transfer from property, plant and equipment (note 16)	22,436	44,368
Transfer from right-of-use assets	–	3,380
Transfer to property, plant and equipment (note 16)	(181)	(7,722)
Depreciation charge	87,503	58,377
As at 31 December	908,925	799,167
Net carrying value		
As at 31 December	1,715,147	1,729,906
As at 1 January	1,729,906	550,022
Fair value (as at 31 December)	6,265,977	4,287,597

All the Group's investment properties are located in the PRC.

The fair value measurement of the Group's investment properties is categorised as Level 3 of fair value measurement. The fair value was determined based on the income approach, where the market rentals of all lettable units of the properties are assessed and discounted at the market yield expected by investors for this type of properties. The market rentals are assessed by making reference to the rentals achieved in the lettable units of the properties, as well as lettings of other similar properties in the neighbourhood. The discount rate is determined by making reference to the yields derived from analysing the sales transactions of similar commercial properties in the PRC and adjusted by taking into account the market expectation from property investors which reflect factors specific to the Group's investment properties.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

18. INVESTMENT PROPERTIES (Continued)

The Group leases out its properties under operating leases. The leases typically run for period of one year to ten years, with an option to renew the lease after that date at which time all terms are renegotiated. None of the leases includes contingent rentals. At the end of the reporting period, the total future minimum lease payments receivable under non-cancellable period were as follows:

	2022 RMB'000	2021 RMB'000
Within one year	176,613	120,905
In the second year	104,630	77,665
In the third year	90,802	66,028
In the fourth year	81,856	55,613
In the fifth year	65,982	47,022
After five years	143,933	180,862
As at 31 December	663,816	548,095

During the year ended 31 December 2022, RMB179 million (2021: RMB176 million) had been recognised as rental income in the consolidated statement of profit or loss and RMB28 million (2021: RMB74 million) in respect of direct operating costs relating to investment properties had been recognised as costs in the consolidated statement of profit or loss.

Up to the date of issuance of these consolidated financial statements, the Group was still in the process of applying for or changing the registration of the title certificates of certain of its properties with an aggregate carrying value of approximately RMB44 million as at 31 December 2022 (2021: RMB33 million) to its name. The directors of the Company are of the opinion that the Group is entitled to lawfully and validly occupy or use the above mentioned properties.

19. CONSTRUCTION IN PROGRESS

	2022 RMB'000	2021 RMB'000
Cost:		
As at 1 January	576,405	3,468,094
Additions	320,259	561,328
Disposals	(4,063)	(2,424)
Transfer to intangible assets (note 21)	(44,939)	(48,057)
Transfer to property, plant and equipment (note 16)	(419,971)	(3,402,536)
As at 31 December	427,691	576,405

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

20. GOODWILL

	2022 RMB'000	2021 RMB'000
Cost and carrying amount	103,005	103,005
	2022 RMB'000	2021 RMB'000
Impairment testing for group of cash-generating units containing goodwill China International Telecommunications Construction Corporation ("CITCC")	103,005	103,005

The recoverable amount of group of cash-generating units relates to goodwill arising from the acquisition of CITCC which was determined based on value in use calculation. The calculation uses cash flow projection based on financial budget approved by management covering a five-year period and pre-tax discount rate adopted is 11.01% (2021: 11.00%). The financial budgets and discount rate had been assessed by the Group as at 31 December 2022, taking into consideration a higher degree of estimation uncertainties in the current year due to uncertainty of volatility in the financial markets.

Cash flows beyond the five years period are extrapolated using zero growth rate.

Key assumptions used for the value in use calculations are the gross margin and revenue growth rate. Management determined the budgeted gross margin based on the gross margin achieved in the period immediately before the budget period and its expectation of the trend of major telecommunication operators' capital expenditure. Revenue growth was budgeted based on the actual revenue achieved in the period immediately before the budget period. Management believes any reasonably possible change in the key assumptions would not cause the group of cash-generating units' carrying amount to exceed its recoverable amount.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

21. INTANGIBLE ASSETS

	2022 RMB'000	2021 RMB'000
Cost:		
As at 1 January	1,694,034	1,415,315
Additions	191,075	275,687
Transfer from construction in progress (note 19)	44,939	48,057
Disposals	(32,181)	(45,025)
As at 31 December	1,897,867	1,694,034
Accumulated amortisation:		
As at 1 January	1,010,557	879,605
Amortisation charge	181,571	174,321
Written back on disposals	(18,274)	(43,369)
As at 31 December	1,173,854	1,010,557
Net carrying value:		
As at 31 December	724,013	683,477
As at 1 January	683,477	535,710

Intangible assets mainly represent computer software.

22. INTERESTS IN ASSOCIATES AND JOINT VENTURES

	2022 RMB'000	2021 RMB'000
Share of associates	1,204,430	1,190,683
Share of joint ventures	103,515	94,864
	1,307,945	1,285,547

The Group's associates and joint ventures are established and operated in the PRC. The Group's interests in associates and joint ventures are individually and in aggregate not material to the Group's financial condition or results of operation for the year.

Aggregate financial information of the Group's associates and joint ventures that are not individually material is disclosed below:

	2022 RMB'000	2021 RMB'000
The Group's share of profit of associates	84,569	87,775
The Group's share of total comprehensive income of associates	84,569	87,775
The Group's share of profit of joint ventures	8,178	4,148
The Group's share of total comprehensive income of joint ventures	8,178	4,148

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

23. EQUITY INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

The equity instruments mainly represent ordinary shares of entities listed in stock exchanges of Mainland China. These investments are not held for trading, instead, they are held for long-term strategic purposes. The directors of the Company have elected to designate these investments in equity instruments as at FVTOCI as they believe that recognizing short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realizing their performance potentials in the long run.

24. DEFERRED TAX ASSETS AND LIABILITIES

Deferred tax assets and liabilities are attributable to the following:

	Assets		Liabilities	
	31 December 2022 RMB'000	31 December 2021 RMB'000	31 December 2022 RMB'000	31 December 2021 RMB'000
Impairment losses, primarily for receivables and inventories	388,401	347,306	–	–
Tax losses	42,580	58,802	–	–
Changes in fair values of FVTPL and FVTOCI	195	–	(641,114)	(739,944)
Accrued expenses	540,479	356,715	–	–
Others	–	3,482	(21,409)	(13,125)
	971,655	766,305	(662,523)	(753,069)
Offsetting	(29,776)	(8,118)	29,776	8,118
Deferred tax assets/(liabilities)	941,879	758,187	(632,747)	(744,951)

Movements in deferred tax assets and liabilities for the year ended 31 December 2022 are as follows:

	As at 1 January 2022 RMB'000	Recognised in profit or loss RMB'000 (note 10(a))	Recognised in other comprehensive income RMB'000 (note 11)	Others RMB'000	As at 31 December 2022 RMB'000
Impairment losses, primarily for receivables and inventories	347,306	41,095	–	–	388,401
Tax losses	58,802	(16,222)	–	–	42,580
Changes in fair value of FVTPL and FVTOCI	(739,944)	13,849	83,908	1,268	(640,919)
Accrued expenses	356,715	183,764	–	–	540,479
Others	(9,643)	(11,766)	–	–	(21,409)
	13,236	210,720	83,908	1,268	309,132

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

24. DEFERRED TAX ASSETS AND LIABILITIES (Continued)

	As at 1 January 2021 RMB'000	Recognised in profit or loss RMB'000 (note 10(a))	Recognised in other comprehensive income RMB'000 (note 11)	Others RMB'000	As at 31 December 2021 RMB'000
Impairment losses, primarily for receivables and inventories	348,742	(1,436)	–	–	347,306
Tax losses	29,393	29,409	–	–	58,802
Changes in fair value of FVTPL and FVTOCI	(894,674)	(17,590)	172,320	–	(739,944)
Accrued expenses	327,476	29,239	–	–	356,715
Others	(6,111)	(3,532)	–	–	(9,643)
	(195,174)	36,090	172,320	–	13,236

Note:

As at 31 December 2022, the Group had not recognised deferred tax assets in respect of tax losses of RMB1,685.6 million (2021: RMB1,514.7 million) as it is not probable that future taxable profits, against which the losses can be utilized, will be available. According to the PRC enterprise income tax law and its relevant regulations, the tax losses of certain subsidiaries that are qualified as High and New Technology Enterprise can be carried forward for ten years from the year they are incurred. As for other subsidiaries, the tax losses can be carried forward for five years from the year they are incurred.

25. DEPOSITS AT FINANCIAL INSTITUTIONS WITH ORIGINAL MATURITY MORE THAN ONE YEAR

	2022 RMB'000	2021 RMB'000
Total deposits at financial institutions with original maturity more than one year	7,873,054	2,563,841
Less: Current portion	221,188	–
	7,651,866	2,563,841

26. OTHER NON-CURRENT ASSETS

	2022 RMB'000	2021 RMB'000
Long-term receivables	586,620	515,280
Others	321,396	117,037
	908,016	632,317

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

27. INVENTORIES

	2022 RMB'000	2021 RMB'000
Goods for resale	713,013	849,760
Construction materials	572,673	585,109
Spare parts and consumables	81,625	57,142
	1,367,311	1,492,011

28. ACCOUNTS AND BILLS RECEIVABLE, NET

	2022 RMB'000	2021 RMB'000
Bills receivable	508,294	405,956
Accounts receivable	21,748,133	19,542,192
	22,256,427	19,948,148
Less: allowance for credit losses	(1,946,484)	(1,693,993)
	20,309,943	18,254,155

- (a) The amounts due from CTC Group, associates of CTC Group and associates of the Group (see note 46) are unsecured, interest-free and are expected to be recovered within one year.
- (b) The ageing analysis of accounts and bills receivable (net of allowance for credit losses) based on credit terms is as follows:

	2022 RMB'000	2021 RMB'000
Current	1,897,638	1,112,606
Within 1 year	15,650,729	14,636,676
After 1 year but less than 2 years	2,026,546	1,729,092
After 2 years but less than 3 years	513,913	542,481
After 3 years but less than 4 years	139,131	99,950
After 4 years but less than 5 years	33,512	36,257
Over 5 years	48,474	97,093
	20,309,943	18,254,155

(c) Credit losses of accounts and bills receivable

Credit losses in respect of accounts and bills receivable are recorded using an allowance account unless the Group is satisfied that recovery of the amount is remote, in which case the credit loss is written off against accounts and bills receivable directly (see note 2(l)).

Details of impairment assessment of accounts receivable are set out in note 44(a).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

29. CONTRACT ASSETS, NET

	2022 RMB'000	2021 RMB'000
Telecommunications infrastructure services	21,099,704	17,771,357
Business process outsourcing services	1,114,789	1,381,365
Applications, contents and other services	3,337,797	2,621,771
	25,552,290	21,774,493
Less: allowance for credit losses	(283,469)	(239,748)
	25,268,821	21,534,745

The contract assets relate to the rights of the Group to considerations receivable for work completed and not billed because the rights are conditional upon the Group's future performance in achieving specified milestones on construction, design and other service contracts. The contract assets are transferred to accounts receivable when the rights become unconditional. The Group typically transfers the contract assets to accounts receivable within one year when the specific milestones are met.

30. PREPAYMENTS AND OTHER CURRENT ASSETS

	2022 RMB'000	2021 RMB'000
Prepayments in connection with construction work and equipment purchases	6,115,312	5,368,905
Other receivables	4,504,116	3,625,219
Input VAT deductible	834,169	1,074,711
Long-term receivables due within 1 year	718,425	477,580
Others	545,610	555,605
	12,717,632	11,102,020

Included in other receivables are mainly deposits. The amounts due from CTC Group, associates of CTC Group and associates of the Group (see note 46) are unsecured, interest free and are expected to be recovered within one year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

31. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2022 RMB'000	2021 RMB'000
Equity instruments	337,360	171,943
Wealth management products	–	2,281,755
Structured deposits	–	1,022,186
	337,360	3,475,884
Analysed for reporting purpose as:		
Current assets	61,556	3,364,554
Non-current assets	275,804	111,330
	337,360	3,475,884

32. SHORT-TERM BANK DEPOSITS AND RESTRICTED CASH

Short-term bank deposits and restricted cash represent cash in bank pledged as deposits for bills payable and cash held in dedicated bank accounts for certain construction projects, and deposits with original maturity over three months and within one year. Short-term bank deposits and restricted cash carry interest at prevailing market interest rates.

33. CASH AND CASH EQUIVALENTS

	2022 RMB'000	2021 RMB'000
Cash at bank and in hand	17,070,073	15,116,312
Cash at China Telecom Group Finance Co., Ltd. ("China Telecom Finance")	5,013,495	5,964,400
Deposits at bank with original maturity less than three months	1,776	90,313
Cash and cash equivalents	22,085,344	21,171,025

Bank balances carry interest at prevailing market interest rates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

34. INTEREST-BEARING BORROWINGS

The Group's short-term interest-bearing borrowings comprise:

	2022 RMB'000	2021 RMB'000
RMB denominated		
Borrowings from CTC Group		
– unsecured	–	13,280
Borrowings from banks		
– unsecured	77,017	33,330
– secured	8,055	21,033
Other RMB denominated borrowings		
– unsecured	8,634	–
USD denominated		
Borrowings from banks		
– unsecured	548,810	528,514
– secured (note)	20,058	18,478
Other denominated		
Borrowings from banks		
– unsecured	84,906	108,389
Interest payable on short-term borrowings	4,521	–
	752,001	723,024

Note:

As at 31 December 2022, the amount of secured USD denominated borrowings from banks, RMB20,058 thousand (31 December 2021: RMB18,478 thousand), was the current portion of long-term borrowings.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

34. INTEREST-BEARING BORROWINGS (Continued)

The Group's short-term borrowings bearing interest rate per annum are as follows:

	2022	2021
RMB denominated		
Borrowings from CTC Group		
– unsecured	N/A	2.39%
Borrowings from banks		
– unsecured	1.50%–3.80%	1.50%
– secured	3.50%–3.90%	4.00%
Other RMB denominated borrowings		
– unsecured	8.50%	N/A
USD denominated		
Borrowings from banks		
– unsecured	4.53%	2.50%
– secured	3.50%	3.50%
– unsecured (floating interest rate)	London Interbank Offered Rate ("Libor") +1.00%–1.35% AND Secured Overnight Financing Rate ("SOFR") +1.1%.p.a	Libor +1.00%–1.35%
Other denominated		
Borrowings from banks		
– unsecured	7.88%	6.25%–8.57%
– unsecured (floating interest rate)	Base Rate of Nepal Rastra Bank +3.00%	N/A

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

34. INTEREST-BEARING BORROWINGS (Continued)

The Group's long-term interest-bearing borrowings comprise:

	2022 RMB'000	2021 RMB'000
USD denominated		
Borrowings from banks		
– secured	149,178	108,286
Less: Current portion	(20,058)	(18,478)
	129,120	89,808

The Group's long-term borrowings bearing interest rate per annum are as follows:

	2022	2021
USD denominated		
Borrowings from banks		
– secured	3.50%	3.50%

The Group's borrowings were repayable as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	752,001	723,024
After 1 year but within 2 years	20,058	18,362
After 2 years but within 5 years	109,062	71,446
	881,121	812,832

As at 31 December 2022, no borrowings from bank were subject to financial covenants (31 December 2021: Nil).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

35. ACCOUNTS AND BILLS PAYABLE

Accounts and bills payable comprise:

	2022 RMB'000	2021 RMB'000
Accounts payable	40,985,965	32,759,611
Bills payable	3,625,330	3,560,369
	44,611,295	36,319,980

The ageing analysis of accounts and bills payable based on the invoice date is as follows:

	2022 RMB'000	2021 RMB'000
Within 1 year	42,062,776	34,147,550
After 1 year but less than 2 years	1,414,963	1,226,760
After 2 years but less than 3 years	450,309	459,884
After 3 years	683,247	485,786
	44,611,295	36,319,980

The amounts due to CTC Group, associates of CTC Group and associates of the Group (see note 46) are unsecured, interest-free and are expected to be settled within one year.

36. LEASE LIABILITIES

	2022 RMB'000	2021 RMB'000
Lease liabilities payable:		
Within 1 year	513,223	490,859
After 1 year but within 2 years	393,882	310,607
After 2 years but within 5 years	450,084	474,133
After 5 years	222,926	287,204
	1,580,115	1,562,803
Less: Amount due for settlement within 12 months shown under current liabilities	513,223	490,859
Amount due for settlement after 12 months shown under non-current liabilities	1,066,892	1,071,944

The weighted average lessee's incremental borrowing rate applied to lease liabilities is 3.6% (2021: 3.6%).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

37. CONTRACT LIABILITIES

	2022 RMB'000	2021 RMB'000
Telecommunications infrastructure services	8,526,663	8,626,944
Other services	2,341,312	2,822,227
	10,867,975	11,449,171

When the Group receives advance payments from customers before the performance obligation is satisfied, the amounts will give rise to contract liabilities, until the performance obligation is satisfied.

The following table shows how much of the revenue recognised relates to carried-forward contract liabilities.

	Telecommunications infrastructure services RMB'000	Other services RMB'000
For the year ended 31 December 2022		
Revenue recognised that was included in the contract liability balance at the beginning of the year	7,960,808	2,524,162
For the year ended 31 December 2021		
Revenue recognised that was included in the contract liability balance at the beginning of the year	5,205,633	2,186,145

38. ACCRUED EXPENSES AND OTHER PAYABLES

	2022 RMB'000	2021 RMB'000
Wages and welfare payable	1,550,784	1,570,459
Output VAT payable	1,441,097	1,318,720
Other taxes payable	710,535	692,149
Amounts due to CTC Group, associates of CTC Group and associates of the Group (note (i))	373,530	415,858
Advance lease payments received	34,733	44,633
Dividend payable	7,156	11,716
Payables for construction and purchase of property, plant and equipment	4,244	40,582
Others (note (ii))	5,377,391	4,996,748
	9,499,470	9,090,865

Notes:

- (i) The amounts due to CTC Group, associates of the Group and associates of CTC Group (see note 46) are unsecured, interest-free and are expected to be settled within one year.
- (ii) The amounts mainly include payables to suppliers for purchases on behalf of CTC Group, deposits received from subcontractors and others.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

39. OTHER NON-CURRENT LIABILITIES

Other non-current liabilities mainly represent the deferred income arising from government grants and termination benefits.

40. SHARE CAPITAL

	2022 RMB'000	2021 RMB'000
Registered, issued and fully paid:		
4,534,598,160 (31 December 2021: 4,534,598,160) domestic shares of RMB1.00 each	4,534,598	4,534,598
2,391,420,240 (31 December 2021: 2,391,420,240) H shares of RMB1.00 each	2,391,420	2,391,420
	6,926,018	6,926,018
	2022 Thousand shares	2021 Thousand shares
At 1 January and 31 December	6,926,018	6,926,018

All shareholders are entitled to receive dividends as declared from time to time and are entitled to one vote per share at meetings of the Company. All shares rank equally in all material respects.

(a) Capital management

The Group's primary objectives of managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by strengthening their leading position as an integrated service provider to the telecommunications industry and achieving economies of scale in the market.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between higher shareholder returns that might be possible with higher levels of borrowings, and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

The Group monitors its capital using a gearing ratio which is defined as total debts divided by the sum of total debts and equity attributable to equity shareholders of the Company. For this purpose, the Group defines total debts as the sum of short-term interest bearing borrowings and long-term interest bearing borrowings. The Group aims to maintain the gearing ratio at a reasonable level. The Group's ratio as at 31 December 2022 was 2.1% (2021: 2.1%). In order to maintain or adjust the ratio, the Group may adjust the amount of dividends to be paid to shareholders, issue new shares, return capital to shareholders or sell assets to reduce the gearing ratio.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

41. RETIREMENT BENEFIT OBLIGATIONS

In accordance with the labour regulations of the PRC, the Group participates in various defined contribution retirement schemes organised by the municipal and provincial governments for its employees. The Group is required to make contributions to the retirement schemes at rates ranging from 8% to 20% (2021: 8% to 20%) of the salaries, bonuses and certain allowances of the employees.

The Group has no other material obligations for the payment of pension benefits associated with these schemes beyond the annual contributions described above.

42. SHARE APPRECIATION RIGHTS SCHEME

The Group implemented a share appreciation rights scheme for members of its management to provide incentives to them. Under this plan, share appreciation rights are granted in units with each unit representing one H share. No shares will be issued under the share appreciation rights scheme. Upon exercise of the share appreciation rights, a recipient will receive, subject to any applicable withholding tax, a cash payment in RMB, translated from the Hong Kong dollars amount equal to the product of the number of share appreciation rights exercised and the difference between the exercise price and market price of the Company's H shares at the date of exercise based on the applicable exchange rate between RMB and Hong Kong dollars at the date of the exercise. The Company recognises compensation expense of the share appreciation rights over the applicable vesting period.

On 22 December 2021 (note (i)), the Company's remuneration Committee approved the granting of 207,270 thousand share appreciation right units to eligible employees. Under the terms of this grant, all share appreciation rights had a contractual life of 5 years from the date of grant and the exercise price is HKD3.68 per unit. Participants can only vest if certain performance standards are met.

A recipient of share appreciation rights cannot exercise the rights in the first 24 months after the date of grant. As at each of the third, fourth and fifth anniversary of the date of grant, the total number of share appreciation rights exercisable cannot in aggregate exceed one-third, two-thirds and 100%, respectively, of the total share appreciation rights granted to such person.

The expense recognised in the Consolidated statement of profit or loss for the year ended 31 December 2022 was RMB827 thousand (2021: Not applicable).

The fair value of the accretive rights was determined using the Black-Scholes model using the following inputs as at 31 December 2022:

	31 December 2022
Share price at measurement date	HKD2.85
Expected volatility	34.97%
Dividend yield	—
Risk-free interest rate	4.77%
Carrying amount of liability	RMB826,837

None of the share appreciation rights had vested as at 31 December 2022.

Note:

- (i) The actual grant date of the share appreciation rights was 23 December 2022, because eligible employees signed an agreement with the Company on this day. The actual granted number of share appreciation rights was 207,270 thousand.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

43. COMMITMENTS AND CONTINGENT LIABILITIES

(a) Capital commitments

As at 31 December 2022, the Group had capital commitments for acquisition and construction of property, plant and equipment and other non-current assets as follows:

	2022 RMB'000	2021 RMB'000
Contracted for but not provided	217,583	160,510

(b) Contingent liabilities

As at 31 December 2022, the Group had no material contingent liabilities and no financial guarantees issued.

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES

Exposure to credit, interest rate, liquidity and currency risks arises in the normal course of the Group's business. The Group is also exposed to equity price risk arising from its equity investments in other entities.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

(a) Credit risk and impairment assessment

The Group's credit risk is primarily attributable to accounts receivable and contract assets arising from contracts with customers and other receivables. Management has a credit policy in place and the exposure to credit risks is monitored on an ongoing basis. Normally, the Group does not obtain collateral from customers.

The Group's major customers are CTC Group and CM Group. The Group has a certain concentration of credit risk as the Group's major customers accounted for 47% of the total accounts and bills receivable as at 31 December 2022 (2021: 50%). The Group has no significant credit risk with any of these customers since they are large state-owned companies in the telecommunications industry.

The credit risk on bank deposits is limited because the counterparties are financial institutions with high credit rankings, mainly the four large state-owned banks in the PRC, China Telecom Finance and other reputable commercial banks.

The amounts of cash and cash equivalents, short-term bank deposits and restricted cash, accounts and bills receivable, contract assets, other receivables and long-term receivables in the consolidated statement of financial position after deducting impairment allowance represent the Group's maximum exposure to the credit risk in relation to financial assets and contract assets.

The Group recognises a loss allowance for ECL on financial assets and contract assets. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition. Assessment is performed and done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions as at the reporting date, as well as the forecasted future economic conditions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(a) Credit risk and impairment assessment (Continued)

Accounts receivable and contract assets arising from contracts with customers

The Group applied the IFRS 9 simplified approach to measure ECL which uses a lifetime ECL for all accounts receivable and contract assets. To measure the ECL, accounts receivable and contract assets have been grouped together based on their shared credit risk characteristics.

The contract assets relate to unbilled revenues due to the same group of customers reported as accounts receivable and have substantially the same risk characteristics as the accounts receivable for the same type of contracts. The Group has therefore concluded that the expected loss rates for the accounts receivable are a reasonable approximation of the loss rates for the contract assets.

The following table provides information about the exposure to credit risk for accounts receivable which are assessed based on a provision matrix within lifetime ECL. Debtors with significant risk with gross carrying amounts of RMB811 million as at 31 December 2022 were assessed individually (31 December 2021: RMB998 million), the loss allowance provision was RMB734 million (31 December 2021: RMB623 million).

	2022			2021		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance provision RMB'000	Expected loss rate	Gross carrying amount RMB'000	Loss allowance provision RMB'000
Telecommunications operators						
Within 1 year	0.2%	9,622,233	(19,244)	0.2%	8,862,024	(17,724)
After 1 year but within 2 years	5.9%	948,956	(55,988)	5.9%	953,014	(56,228)
After 2 years but within 3 years	17.7%	305,456	(54,066)	17.7%	399,713	(70,749)
After 3 years but within 4 years	46.1%	160,310	(73,903)	46.1%	122,138	(56,306)
After 4 years but within 5 years	71.3%	73,902	(52,692)	71.3%	91,970	(65,575)
Over 5 years	100.0%	183,813	(183,813)	100.0%	162,397	(162,397)
		11,294,670	(439,706)		10,591,256	(428,979)
Non-telecom operators						
Within 1 year	0.5%	7,449,971	(37,250)	0.5%	6,265,049	(31,325)
After 1 year but within 2 years	14.1%	1,317,107	(185,712)	14.1%	966,096	(136,220)
After 2 years but within 3 years	36.3%	411,818	(149,490)	36.3%	332,021	(120,524)
After 3 years but within 4 years	63.0%	141,191	(88,950)	63.0%	73,321	(46,192)
After 4 years but within 5 years	73.6%	46,601	(34,298)	73.6%	35,699	(26,275)
Over 5 years	100.0%	275,915	(275,915)	100.0%	280,565	(280,565)
		9,642,603	(771,615)		7,952,751	(641,101)

Expected loss rates were assessed based on actual loss experienced over the past 1 to 5 years. These rates had been adjusted to reflect differences between economic conditions during the period over which the historic data was collected, current conditions and the Group's view of economic conditions over the expected lives of the receivable balances.

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For the year ended 31 December 2022

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(a) Credit risk and impairment assessment (Continued)

Accounts receivable and contract assets arising from contracts with customers (Continued)

The Group adjusted the macro factors and weights in ECL model by taking into account the changes of the macro environment.

The following table shows the movement in lifetime ECL that has been recognised for accounts receivable under the simplified approach.

	2022 RMB'000	2021 RMB'000
As at 1 January	1,693,284	1,666,866
Changes due to financial assets recognised during the year		
– Impairment loss recognised	434,749	297,637
– Impairment loss reversed	(175,720)	(264,886)
– Uncollectible amounts written off	(6,651)	(6,333)
As at 31 December	1,945,662	1,693,284

The Group writes off an accounts receivable when there is information indicating that the specific debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy process.

The following table shows the movement in lifetime ECL that has been recognised for contract assets under the simplified approach.

	2022 RMB'000	2021 RMB'000
As at 1 January	239,748	220,019
Changes due to financial assets recognised during the year		
– Impairment loss recognised	70,967	69,120
– Impairment loss reversed	(27,150)	(49,181)
– Uncollectible amounts written off	(96)	(210)
As at 31 December	283,469	239,748

(b) Interest rate risk

The Group is exposed to fair value interest rate risk primarily from its short-term and long-term debts carrying interests at fixed rates. The Group manages its exposure to fair value interest rate risk by maintaining high proportion of fixed rate debts with maturity within one year. Details of the interest rates of interest-bearing borrowings are disclosed in note 34.

The Group is also exposed to cash flow interest rate risk in relation to short-term debts carrying interests at variable rates. The Group manages its exposure to interest rate risk by closely monitoring the change in the market interest rates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(b) Interest rate risk (Continued)

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates (“IBORs”) with alternative nearly risk-free rates. As disclosed in note 34, the Group’s Libor bank loans will not be subject to the interest rate benchmark reform since the loans will become mature within one year. The Group is closely monitoring the transition to new benchmark interest rates.

The management of the Group considers the fluctuation in interest rates on short-term debts carrying interests at variable rates is insignificant due to short maturity. Therefore, no sensitivity analysis is presented.

(c) Liquidity risk

Individual operating entities within the Group are responsible for their own cash management, including the short term investment of cash surpluses and the raising of loans to cover expected cash demands, subject to approval by the Company’s board when the borrowings exceed certain predetermined levels of authority. The Group’s policy is to regularly monitor its liquidity requirements, to ensure that it maintains sufficient reserves of cash and readily realisable marketable securities and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer terms.

The following table shows the remaining contractual maturities at the end of the reporting period of the Group’s non-derivative financial liabilities and lease liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on interest rates at the end of the reporting period) and the earliest date the Group would be required to repay:

	31 December 2022					
	Carrying amount RMB’000	Total contractual undiscounted cash flow RMB’000	Within 1 year or on demand RMB’000	More than 1 year but within 2 years RMB’000	More than 2 years but within 5 years RMB’000	More than 5 years RMB’000
Short-term interest-bearing borrowings (notes 34)	752,001	758,761	758,761	–	–	–
Long-term interest-bearing borrowings (notes 34)	129,120	142,049	–	23,713	66,926	51,410
Accounts and bills payable (notes 35)	44,611,295	44,611,295	44,611,295	–	–	–
Lease liabilities (notes 36)	1,580,115	1,709,303	565,121	419,942	491,272	232,968
Accrued expenses and other payables	5,746,964	5,746,964	5,746,964	–	–	–
	52,819,495	52,968,372	51,682,141	443,655	558,198	284,378

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44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(c) Liquidity risk (Continued)

	31 December 2021					
	Carrying amount RMB'000	Total contractual undiscounted cash flow RMB'000	Within 1 year or on demand RMB'000	More than 1 year but within 2 years RMB'000	More than 2 years but within 5 years RMB'000	More than 5 years RMB'000
Short-term interest-bearing borrowings (notes 34)	723,024	725,441	725,441	–	–	–
Long-term interest-bearing borrowings (notes 34)	89,808	101,439	3,144	21,345	60,178	16,772
Accounts and bills payable (notes 35)	36,319,980	36,319,980	36,319,980	–	–	–
Lease liabilities (notes 36)	1,562,803	1,714,253	538,064	341,098	525,115	309,976
Accrued expenses and other payables	5,438,856	5,438,856	5,438,856	–	–	–
	44,134,471	44,299,969	43,025,485	362,443	585,293	326,748

(d) Currency risk

Foreign currency exchange rate risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. As at 31 December 2022, the Group's foreign currency risk exposure mainly relates to bank deposits and borrowings denominated primarily in USD, the aggregate net liabilities are RMB305 million. To manage the impact of currency exchange rate fluctuations, the Group continually assesses its exposure to foreign currency risks, and a portion of those risks is hedged by using derivative financial instruments, when management considers it necessary. The Group does not expect the appreciation or depreciation of the RMB against foreign currency will materially affect the Group's financial position and result of operations.

(e) Price risk

The Group is exposed to equity price changes arising from equity investments at FVTPL and designated as at FVTOCI.

The Group's listed investments are listed on the Shanghai Stock Exchange and Shenzhen Stock Exchange. Listed investments held in the investment portfolio have been chosen based on their longer term growth potentials and are monitored regularly for performance against expectations.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(e) Price risk (Continued)

At 31 December 2022, it is estimated that an increase/(decrease) of 5% (2021: 5%) in the relevant share price (for listed investments) as applicable, with all other variables held constant, would have increased/(decreased) the Group's other components of consolidated equity as follows:

	2022		2021	
	Increase/ (decrease) in equity price	Effect on other components of equity RMB'000	Increase/ (decrease) in equity price	Effect on other components of equity RMB'000
Changes in the relevant equity price risk variable:				
Increase	5%	126,368	5%	139,684
Decrease	(5%)	(126,368)	(5%)	(139,684)

The above sensitivity analysis indicates the instantaneous change in the Group's other components of consolidated equity that would result, assuming that the changes in the share price had occurred at the end of the reporting period and had been applied to remeasure those financial instruments held by the Group which expose the Group to equity price risk at the end of the reporting period.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(f) Fair value

(i) Financial instruments carried at fair value on a recurring basis

Some of the Group's financial instruments are measured at fair value at the end of each reporting period.

	2022			
	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial Assets				
Equity instruments at fair value through other comprehensive income (note (i))	395,680	–	2,940,723	3,336,403
Financial assets at fair value through profit or loss				
– Equity instruments at fair value through profit or loss (note (ii))	42,018	–	295,342	337,360
	2021			
	Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000	Total RMB'000
Financial Assets				
Equity instruments at fair value through other comprehensive income (note (i))	435,963	–	3,236,509	3,672,472
Financial assets at fair value through profit or loss				
– Wealth management products and structured deposits (note (iii))	–	–	3,303,941	3,303,941
– Equity instruments at fair value through profit or loss (note (ii))	–	–	171,943	171,943

Notes:

- (i) One of the invested entities was listed on Shanghai Stock Exchange in 2018 and the Group is contractually prevented from selling the shares held immediately following the initial public offering for a period of 5 years. At the end of each reporting period, the Group appointed an external valuer to determine the fair value of the listed equity security which was still within the restriction period. Based on the quoted price of the identical unrestricted shares traded on the stock exchange, adjusted to reflect the effect of restriction computed based on a discount rate determined by the external valuer. An increase in the discount rate attributable to lack of marketability used in isolation would result in a decrease in the fair value measurement of this equity instrument and vice versa, and the discount rate is 4.10% (2021: 8.50%). The carrying amount is RMB2,925 million (2021: RMB3,222 million), and a 5% increase in the discount rate, holding all other variables constant, would have decreased the carrying amount of this equity instrument by RMB6 million as at 31 December 2022 (2021: RMB15 million).

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For the year ended 31 December 2022

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(f) Fair value (Continued)

(i) Financial instruments carried at fair value on a recurring basis (Continued)

Notes: (Continued)

- (ii) The invested entities in Level 3 were private companies. At the end of 31 December 2022, the Group appointed an external valuer to determine the fair value of the invested entity in Level 3 based on discounted cash flows. The future cash flows had been estimated based on long-term revenue growth rates, taking into management's experience and knowledge of market conditions.
- (iii) At the end of each reporting period, the Group determined the fair value of the wealth management products and structured deposits by estimating the discounted cash flow derived from them. The future cash flows had been estimated based on expected returns, and discounted at a rate that reflects the credit risk of various counterparties.

(ii) Reconciliation of level 3 fair value measurement

	Equity instruments at fair value through other comprehensive income RMB'000	Wealth management products and structured deposits RMB'000	Equity instruments at fair value through profit or loss RMB'000
As at 1 January 2022	3,236,509	3,303,941	171,943
Purchases	–	–	147,390
Disposals/settlements	(409)	(3,355,829)	–
Transferred to level 1	–	–	(35,880)
Total gains/(losses)			
– in profit or loss	–	51,888	11,889
– in other comprehensive income	(295,377)	–	–
As at 31 December 2022	2,940,723	–	295,342

	Equity instruments at fair value through other comprehensive income RMB'000	Wealth management products and structured deposits RMB'000	Equity instruments at fair value through profit or loss RMB'000
As at 1 January 2021	4,316,673	3,098,634	64,567
Purchases	–	7,588,000	76,575
Disposals/settlements	(750)	(7,566,024)	–
Transferred to level 1	(430,260)	–	–
Total gains/(losses)			
– in profit or loss	–	183,331	30,801
– in other comprehensive income	(649,154)	–	–
As at 31 December 2021	3,236,509	3,303,941	171,943

44. FINANCIAL RISK MANAGEMENT AND FAIR VALUES (Continued)

(f) Fair value (Continued)

(iii) Fair values of financial instruments carried at other than fair value

The fair values of financial assets and financial liabilities recorded at amortised cost are not materially different from their carrying amounts, which are determined in accordance with generally accepted pricing models based on discounted cash flow analysis.

45. SIGNIFICANT ACCOUNTING ESTIMATES AND JUDGEMENTS

In addition to those disclosed in note 20, the estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(a) Revenue recognition of system integration services

The Group assesses the contracts for system integration services to identify each performance obligation contained in the contracts. Identifying the performance obligations requires judgment in some situations to determine whether multiple promised goods or services in a contract should be accounted for separately or as a group. For the contracts that contain more than one performance obligation, the Group allocates the transaction price to each performance obligation on a relative stand-alone selling price basis. The stand-alone selling price is the price of selling a piece of distinct goods or service underlying each performance obligation. If a stand-alone selling price is not directly observable, the Group estimates it using appropriate techniques such that the transaction price ultimately allocated to any performance obligation reflects the amount of consideration to which the Group expects to be entitled in exchange for transferring the promised goods or services to the customer.

(b) Provision of ECL for accounts receivable and contract assets

Accounts receivable and contract assets with significant risk are assessed for ECL individually. In addition, the Group uses a provision matrix to calculate ECL for the accounts receivable and contract assets by groupings of various debtors that have similar loss patterns. The provision matrix is based on the Group's historical loss rates, taking into consideration reasonable and supportable forward-looking information that is available without undue costs or efforts. At every reporting date, the historical loss rates are reassessed and changes in the forward-looking information are considered. The provision of ECL is sensitive to changes in estimates. The Group has considered the uncertainty under different macroeconomics scenarios and the risk of increased credit default rates appropriately. The information about the ECL and the Group's accounts receivable and contract assets are disclosed in notes 44(a), 28 and 29 respectively.

(c) Fair value measurement of financial instruments

Certain of the Group's equity investments are measured at fair values with fair values being determined based on unobserved inputs using valuation techniques. Judgement and estimation are required in establishing the relevant valuation techniques and the relevant inputs thereof. Changes in assumptions relating to these factors could affect the reported fair values of these instruments. See note 44(f) for further disclosures.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES

The Group has undertaken significant transactions and maintained relationships with members of CTC Group, the material related party transactions are as below:

(a) Transactions with CTC Group

Because of the relationship between the Group and CTC Group, the terms of these transactions were negotiated between the Group with GTC Group.

The principal transactions with CTC Group which were carried out in the ordinary course of business are as follows:

	2022 RMB'000	2021 RMB'000
Engineering related services revenue (note (i))	18,933,546	18,540,108
IT application services revenue (note (ii))	5,822,815	3,984,124
Provision of ancillary telecommunications services revenue (note (iii))	17,825,467	16,775,318
Provision of operation support services revenue (note (iv))	4,377,560	3,838,440
Supplies procurement services revenue (note (v))	3,121,815	2,769,531
Property leasing services revenue (note (vi))	186,562	139,361
Management fee income (note (vii))	386,733	403,877
Property leasing services charges (note (viii))	155,223	126,829
IT application services charges (note (ix))	331,278	97,067
Operation support services charges (note (x))	969,922	787,387
Supplies procurement services charges (note (xi))	2,636,383	2,482,872
Interest expenses (note (xii))	30,577	30,944
Net deposits placed with China Telecom Finance (note (xiii))	1,004,094	1,963,134
Interest income of deposits placed with China Telecom Finance (note (xiv))	56,098	12,829
Net lending funds (note (xv))	—	67,000
Interest income of lending funds (note (xvi))	2,366	1,819

Notes:

- (i) The amount represents telecommunications infrastructure services such as design, construction and project management provided to CTC Group.
- (ii) The amount represents the telecommunications network support services, software and hardware development and other IT related services provided to CTC Group.
- (iii) The amount represents ancillary telecommunications services such as maintenance of network facilities (including optical ducts and cables, exchange buildings and base stations), operation of distribution channels, fixed line and wireless value-added service, internet contents and information services provided to CTC Group.
- (iv) The amount represents the facilities management, advertising, conferencing services and certain repair and leasing of equipment services provided to CTC Group.
- (v) The amount represents supplies procurement service such as warehousing, transportation and installation and other related services provided to CTC Group.

46. RELATED PARTIES (Continued)

(a) Transactions with CTC Group (Continued)

Notes: (Continued)

- (vi) The amount represents rentals from operating leases in respect of business premises leased to CTC Group.
- (vii) The amount represents management fee in respect of headquarters management function services ("Centralised Services") provided to CTC Group.
- (viii) The amount represents rentals from short-term leases in respect of business premises paid and payable to CTC Group.
- (ix) The amount represents the charge paid and payable to CTC Group for basic telecommunications service, value-added service and information application service.
- (x) The amount represents the charge paid and payable to CTC Group for logistics, labor resources, cultural, educational, hygiene and other supporting services.
- (xi) The amount represents the charge paid and payable to CTC Group for supplies procurement services, warehousing, transportation and installation services.
- (xii) The amount represents the interest paid and payable to CTC Group in respect of the loans and lease liabilities from CTC Group.
- (xiii) The amount represents net deposit under deposit services provided by China Telecom Finance.
- (xiv) The amount represents the interest income from deposit services provided by China Telecom Finance.
- (xv) The amount represents the net lending of funds to CTC Group.
- (xvi) The amount represents the interest income arising from lending funds to CTC Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES (Continued)

(a) Transactions with CTC Group (Continued)

Amounts due from/to CTC Group included in respective balances are summarised as follows:

	2022 RMB'000	2021 RMB'000
Cash and cash equivalents	5,013,495	5,964,400
Accounts and bills receivable, net	7,562,052	7,259,911
Contract assets, net	11,549,415	9,947,108
Prepayments and other current assets	1,670,309	1,216,411
Deposits at financial institutions with original maturity more than one year	2,066,259	69,000
Other non-current assets	192,063	144,503
Total amounts due from CTC Group	28,053,593	24,601,333
Interest-bearing borrowings	—	13,280
Accounts and bills payable	500,729	261,457
Current portion of lease liabilities	172,001	161,904
Contract liabilities	595,613	845,854
Accrued expenses and other payables	288,931	335,403
Lease liabilities	614,489	699,814
Total amounts due to CTC Group	2,171,763	2,317,712

As at 31 December 2022, the Group had recognised credit losses of RMB399 million (2021: RMB391 million) in respect of amounts due from CTC Group.

For the year ended 31 December 2022, additional amount of RMB119 million of right-of-use assets had been recognised under new lease contracts entered into with CTC Group (2021: RMB560 million).

The directors of the Company are of the opinion that the above transactions with related parties were conducted on normal commercial terms in the ordinary course of business and the terms are reasonable so far as the shareholders of the Company are concerned.

46. RELATED PARTIES (Continued)

(a) Transactions with CTC Group (Continued)

The terms of the principal agreements agreed with CTC impacting the results of operations of the Group are summarised as follows:

- (1) The Group has entered into agreements with CTC pursuant to which the Group provides CTC Group with construction, design and project supervision and management for telecommunications infrastructure projects. In addition, the Group has entered into information technology service agreements with CTC pursuant to which the Group provides CTC Group with telecommunications network support services, software and hardware development and other IT related services. The amounts charged for these services are determined by reference to market rates as reflected in prices obtained through tender processes.
- (2) The Group has entered into facilities leasing agreements with CTC pursuant to which the Group leases certain premises and other facilities to CTC Group, and vice versa. The rental charges are negotiated based on market rates, with reference made to amounts stipulated by local price bureau.
- (3) The Group has entered into operation support services agreements for facilities management, advertising, conferencing, logistics, cultural, educational, hygiene and other community services with CTC. In addition, the Group has entered into ancillary services agreements with CTC. The ancillary services provided to CTC Group include repairs and maintenance of telecommunications equipment and facilities and provision of certain customer services. Pursuant to these agreements, the Group charges CTC Group, and vice versa, for these services in accordance with the following terms:
 - market price. In determining the market price, the Group primarily considers the following factors: (i) cost of services; (ii) prices of the same or similar type of services provided to CTC Group by other service providers in the market; (iii) prices of the same or similar type of services provided to CTC Group and independent third parties previously by the Group.
 - in the absence of market price or where the market price cannot be determined, the price shall be agreed between both parties, which shall be the aggregate amount of reasonable costs, the relevant taxes in sales and reasonable profits. “Reasonable costs” means the costs confirmed by both parties after negotiations, and “reasonable profit” means a profit ratio confirmed by both parties during the course of normal commercial negotiation, taking into account factors such as historical price, transaction size, average profit ratio within the relevant industry, supply and demand, labor costs, local commodity prices and economic development levels.
- (4) The Group has entered into agreement with CTC pursuant to which the Group takes up the role of providing headquarter management functions to manage assets of the telecommunications support businesses of provinces, municipalities and autonomous regions (“Centralised Services”). The aggregate administrative costs incurred by the Group for the provision of the Centralised Services are apportioned pro rata between the Group and CTC Group according to the net asset ratio of each of the relevant parties.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES (Continued)

(a) Transactions with CTC Group (Continued)

- (5) The Group has entered into Supplies Procurement Services Framework agreement for procurement of telecommunication and non-telecommunication supplies, provision of agency services of supplies procurement, sales of telecommunication supplies and management of biddings, verification of technical specifications, warehousing transportation and installation services. Pursuant to the agreement, the Group charges CTC Group for these services in accordance with the following terms:
- maximum 1% of the contract value for procurement services on imported telecommunication supplies;
 - maximum 3% of the contract value for procurement services on domestic telecommunication and non-telecommunication supplies and materials;
 - market price. In determining the market price, the Group primarily considers the following factors: (i) cost of services; (ii) prices of the same or similar type of services provided to CTC Group or the Group by other service providers in the market; (iii) prices of the same or similar type of services provided to CTC Group and independent third parties by the Group, or prices of the same or similar type of services provided to the Group by CTC Group and independent third parties;
 - in the absence of market price or where the market price cannot be determined, the price shall be agreed between both parties, which shall be the aggregate amount of reasonable costs, the taxes on sales and reasonable profits. “Reasonable costs” means the costs confirmed by both parties after negotiations, and “reasonable profit” means a profit ratio confirmed by both parties during the course of normal commercial negotiation, taking into account factors such as historical price, transaction size, average profit ratio within the relevant industry, supply and demand, labor costs, local commodity prices and economic development levels.

The Group and China Telecom Finance entered into the Financial Services Framework Agreement, pursuant to which China Telecom Finance has agreed to provide financial services to the Group, including deposit services, loan services and other financial services.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES (Continued)

(b) Transactions with associates of the Group and associates of CTC Group

The Group has entered into transactions with associates over which the Group or CTC Group can exercise significant influence. The transactions entered into by the Group and the associates are as follows:

	2022 RMB'000	2021 RMB'000
Engineering related service revenue (note (i))	3,592,264	4,224,040
IT application service revenue (note (ii))	274,224	247,179
Provision of ancillary telecommunications service revenue (note (iii))	1,685,313	1,767,348
Provision of operation support service revenue (note (iv))	123,892	136,671
Supplies procurement service revenue (note (v))	180,319	230,189
Property leasing service revenue (note (vi))	5,864	3,584
Property leasing service charges (note (vii))	384	2,574
IT application service charges (note (viii))	857,144	479,203
Operation support service charges (note (ix))	2,871,019	2,574,729
Supplies procurement service charges (note (x))	127,469	66,064
Interest expenses (note (xi))	6	18

Notes:

- (i) The amount represents telecommunications infrastructure services such as design, construction and project management provided to associates of the Group and associates of CTC Group.
- (ii) The amount represents the telecommunications network support services, software and hardware development and other IT related services provided to associates of the Group and associates of CTC Group.
- (iii) The amount represents ancillary telecommunications services such as maintenance of network facilities (including optical ducts and cables, exchange buildings and base stations); operation of distribution channels; fixed line and wireless value-added services; internet contents and information services provided to associates of the Group and associates of CTC Group.
- (iv) The amount represents facilities management, advertising, conferencing services and certain repair and leasing of equipment services provided to associates of the Group and associates of CTC Group.
- (v) The amount represents supplies procurement services such as warehousing, transportation and installation and other related services provided to associates of the Group and associates of CTC Group.
- (vi) The amount represents rental received/receivable from operating leases in respect of business premises entered into with associates of the Group and associates of CTC Group.
- (vii) The amount represents rentals from short-term lease in respect of business premises paid and payable to associates of the Group.
- (viii) The amount represents charges paid and payable to associates of the Group and associates of CTC Group for basic telecommunications services, value-added services and information application services.
- (ix) The amount represents charges paid and payable to associates of the Group and associates of CTC Group for logistics, labour resources, cultural, educational, hygiene and other supporting services.
- (x) The amount represents the charge paid and payable to associates of the Group and associates of CTC Group for supplies procurement services, warehousing, transportation and installation services.
- (xi) The amount represents interest paid and payable to associates of CTC Group in respect of lease liabilities from associates of CTC Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES (Continued)

(b) Transactions with associates of the Group and associates of CTC Group (Continued)

Amounts due from/to associates of the Group and associates of CTC Group included in respective account balances are summarised as follows:

	2022 RMB'000	2021 RMB'000
Accounts and bills receivable, net	282,770	250,307
Contract assets, net	375,710	292,757
Prepayments and other current assets	1,083,392	894,883
Other non-current assets	6	363
Total amounts due from associates of the Group and associates of CTC Group	1,741,878	1,438,310
Accounts and bills payable	1,451,956	1,009,561
Contract liabilities	343,193	391,765
Current portion of lease liabilities	85	104
Lease liabilities	—	206
Accrued expenses and other payables	84,599	80,455
Total amounts due to associates of the Group and associates of CTC Group	1,879,833	1,482,091

The directors of the Company are of the opinion that the above transactions undertaken with related parties were conducted on normal commercial terms in the ordinary course of business.

(c) Transactions with other government-related entities in the PRC

The Company is a state-controlled enterprise and operates in an economic regime currently dominated by entities directly or indirectly controlled by the PRC through government authorities, agencies, affiliations and other organisations (collectively referred to as "government-related entities").

Apart from transactions with parent company and its affiliates (note 46(a)), the Group has collectively, but not individually significant transactions with other government-related entities, which include but are not limited to the following:

- Rendering and receiving services, including but not limited to telecommunications services
- Sales and purchases of goods, properties and other assets
- Leasing of assets
- Depositing and borrowing money
- Use of public utilities

These transactions are conducted in the ordinary course of the Group's business on terms comparable to the terms of transactions with other entities that are not government-related. The Group prices its telecommunications services rendered and products sold based on government-regulated tariff rates, where applicable, or based on commercial negotiations. The Group has also established its procurement policies and approval processes for purchases of products and services, which do not depend on whether the counterparties are government-related entities or not.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

46. RELATED PARTIES (Continued)

(c) Transactions with other government-related entities in the PRC (Continued)

The directors of the Company believe the above information provides meaningful disclosure of related party transactions.

(d) Transactions with key management personnel

Remuneration for key management personnel, including amounts paid to the Company's directors and supervisors as disclosed in note 12 and certain of the highest paid employees as disclosed in note 13, is as follows:

	2022 RMB'000	2021 RMB'000
Salaries and other emoluments	6,836	6,915
Retirement benefits	2,755	2,680
Discretionary bonuses	19,557	17,922
	29,148	27,517

(e) Applicability of the Listing Rules relating to connected transactions

The related party transactions with CTC Group disclosed in note 46(a) above constitute continuing connected transactions as defined in Chapter 14A of the Listing Rules.

47. SEGMENT REPORTING

The Group principally has one operating segment, which is the provision of integrated comprehensive smart solutions in the field of informatization and digitalization. Therefore, no additional segment information has been presented. Additional information about major customers and geographical areas of the Group has been disclosed in note 4.

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48. SUBSIDIARIES

The following list contains only the particulars of subsidiaries at 31 December 2022 which principally affected the results, assets or liabilities of the Group.

Name of company	Type of legal entity	Place of incorporation/ establishment	Proportion of ownership interest and voting rights held by the Company		Issued and paid up capital	Principal activities
			31 December 2022 Directly %	31 December 2021 Directly %		
Guangdong Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB2,688 million	Provision of integrated telecommunications support services through its subsidiaries in Guangdong Province
Zhejiang Communications Services Holdings Group Company Limited	Limited Liability Company	The PRC	100	100	RMB998 million	Provision of integrated telecommunications support services through its subsidiaries in Zhejiang Province
Shanghai Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB1,286 million	Provision of integrated telecommunications support services through its subsidiaries in Shanghai Municipality
Fujian Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB281 million	Provision of integrated telecommunications support services through its subsidiaries in Fujian Province
Hubei Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB317 million	Provision of integrated telecommunications support services through its subsidiaries in Hubei Province
Jiangsu Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB578 million	Provision of integrated telecommunications support services through its subsidiaries in Jiangsu Province
Anhui Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB420 million	Provision of integrated telecommunications support services through its subsidiaries in Anhui Province

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For the year ended 31 December 2022

48. SUBSIDIARIES (Continued)

Name of company	Type of legal entity	Place of incorporation/ establishment	Proportion of ownership interest and voting rights held by the Company		Issued and paid up capital	Principal activities
			31 December 2022 Directly %	31 December 2021 Directly %		
Jiangxi Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB200 million	Provision of integrated telecommunications support services through its subsidiaries in Jiangxi Province
Hunan Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB886 million	Provision of integrated telecommunications support services through its subsidiaries in Hunan Province
Guangxi Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB192 million	Provision of integrated telecommunications support services through its subsidiaries in Guangxi Zhuang Autonomous Region
Chongqing Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB209 million	Provision of integrated telecommunications support services through its subsidiaries in Chongqing Municipality
Sichuan Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB798 million	Provision of integrated telecommunications support services through its subsidiaries in Sichuan Province
Guizhou Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB131 million	Provision of integrated telecommunications support services through its subsidiaries in Guizhou Province
Yunnan Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB238 million	Provision of integrated telecommunications support services through its subsidiaries in Yunnan Province
Shaanxi Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB145 million	Provision of integrated telecommunications support services through its subsidiaries in Shaanxi Province

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For the year ended 31 December 2022

48. SUBSIDIARIES (Continued)

Name of company	Type of legal entity	Place of incorporation/ establishment	Proportion of ownership interest and voting rights held by the Company		Issued and paid up capital	Principal activities
			31 December 2022 Directly %	31 December 2021 Directly %		
Gansu Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB129 million	Provision of integrated telecommunications support services through its subsidiaries in Gansu Province
Qinghai Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB68 million	Provision of integrated telecommunications support services through its subsidiaries in Qinghai Province
Xinjiang Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB195 million	Provision of integrated telecommunications support services through its subsidiaries in Xinjiang Uygur Autonomous Region
China International Telecommunication Construction Corporation	Limited Liability Company	The PRC	100	100	RMB550 million	Provision of integrated telecommunications support services through its subsidiaries in Northern China Provinces
China Communications Services International Limited	Limited Liability Company	Hong Kong	100	100	HKD846.87 million	Provision of integrated telecommunications support services through its subsidiaries in Hong Kong
Zhongshutong Information Co., Ltd.	Limited Liability Company	The PRC	60.38	60.38	RMB120 million	Provision of integrated telecommunications support services
China Comservice Software Tech. Co., Ltd	Limited Liability Company	The PRC	60	60	USD25 million	Provision of integrated telecommunications support services
Ningxia Hui Autonomous Region Communications Industrial Services Company Limited	Limited Liability Company	The PRC	100	100	RMB106 million	Provision of integrated telecommunications support services through its subsidiaries in Ningxia Hui Autonomous Region

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48. SUBSIDIARIES (Continued)

Name of company	Type of legal entity	Place of incorporation/ establishment	Proportion of ownership interest and voting rights held by the Company		Issued and paid up capital	Principal activities
			31 December 2022 Directly %	31 December 2021 Directly %		
Shandong Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB100 million	Provision of integrated telecommunications support services in Shandong Province
Sino-British Submarine System Co., Ltd.	Limited Liability Company	The PRC	51	51	RMB327 million	Provision of submarine cable installation and other related services
Hainan Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB141 million	Provision of integrated telecommunications support services through its subsidiaries in Hainan Province
China Comservice Supply Chain Management Company Ltd.	Limited Liability Company	The PRC	73.985	73.985	RMB1,255 million	Provision of integrated telecommunications support services
Inner Mongolia Autonomous Region Communications Services Company Limited	Limited Liability Company	The PRC	100	100	RMB10 million	Provision of integrated telecommunications support services in Inner Mongolia Autonomous Region
Comservice Capital Holding Company Limited	Limited Liability Company	The PRC	100	100	RMB500 million	Management of Group capital
China Comservice Smart Property Development Co., Ltd.	Limited Liability Company	The PRC	100	NA	RMB50 million	Provision of property services

China Comservice Supply Chain Management Company Ltd., Sino-British Submarine System Co., Ltd., China Comservice Software Tech. Co., Ltd., and Zhongshutong Information Co., Ltd. are non-wholly owned subsidiaries of the Group. The cumulative carrying amount of the Group's non-controlling interests was RMB1,263 million as at 31 December 2022 (2021: RMB1,203 million). The non-controlling interests were individually and in aggregate not material to the Group's financial conditions or results of operations for both 2021 and 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

49. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	31 December 2022 RMB'000	31 December 2021 RMB'000
Non-current assets		
Property, plant and equipment, net	1,585,933	1,684,338
Investment properties	1,542,924	1,548,314
Construction in progress	158	16,517
Intangible assets	98,794	131,807
Investments in subsidiaries	14,237,534	13,897,534
Interests in associates and joint ventures	816,159	796,254
Deposits at financial institutions with original maturity more than one year	5,249,225	2,100,000
Total non-current assets	23,530,727	20,174,764
Current assets		
Inventories	310	312
Accounts and bills receivable, net	4,226	50
Current portion of deposits at financial institutions with original maturity more than one year	110,587	–
Prepayments and other current assets	2,018,186	2,167,319
Short-term bank deposits and restricted cash	185	503,015
Cash and cash equivalents	14,135,829	132,562
Total current assets	16,269,323	2,803,258
Total assets	39,800,050	22,978,022
Current liabilities		
Contract liabilities	481	481
Accrued expenses and other payables	20,894,588	4,412,537
Income tax payable	2,936	5,136
Total current liabilities	20,898,005	4,418,154
Net current assets (note (i))	(4,628,682)	(1,614,896)
Total assets less current liabilities	18,902,045	18,559,868
Non-current liabilities		
Other non-current liabilities	–	–
Total non-current liabilities	–	–
Total liabilities	20,898,005	4,418,154
Equity		
Share capital	6,926,018	6,926,018
Reserves	11,976,027	11,633,850
Total equity	18,902,045	18,559,868
Total liabilities and equity	39,800,050	22,978,022

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

49. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (Continued)

Note:

- (i) The current assets of the Company were less than the current liabilities as at December 31, 2022. The current liabilities of RMB20,855 million were debts arising from amounts due to the subsidiaries of the Group, the Company will be able to decide the repayment plans at its own discretion to enable the Company to meet the liabilities as they fall due and carry on the business without a significant curtailment of operations.

The movements of equity of the Company are as follows:

	Share capital RMB'000 (note 40)	Share premium RMB'000	Capital reserve RMB'000	Statutory Surplus reserve RMB'000	Retained earnings RMB'000	Total RMB'000
At 1 January 2021	6,926,018	4,529,310	1,966,293	1,560,954	3,235,655	18,218,230
Profit for the year	–	–	–	–	1,451,186	1,451,186
Distribution of dividends (note 14(b))	–	–	–	–	(1,109,548)	(1,109,548)
Appropriations	–	–	–	145,119	(145,119)	–
At 31 December 2021	6,926,018	4,529,310	1,966,293	1,706,073	3,432,174	18,559,868
Profit for the year	–	–	–	–	1,541,764	1,541,764
Distribution of dividends (note 14(b))	–	–	–	–	(1,199,587)	(1,199,587)
Appropriations	–	–	–	154,176	(154,176)	–
At 31 December 2022	6,926,018	4,529,310	1,966,293	1,860,249	3,620,175	18,902,045

According to the Company's Articles of Association, the amount of retained earnings available for distribution to equity shareholders of the Company is the lower of the amount determined in accordance with the PRC Accounting Rules and Regulations and the amount determined in accordance with IFRSs after the appropriations made to statutory surplus reserve as detailed in notes to the consolidated statement of changes in equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

50. POSSIBLE IMPACT OF AMENDMENTS TO STANDARDS AND NEW STANDARD ISSUED BUT NOT YET EFFECTIVE FOR THE ANNUAL ACCOUNTING YEAR ENDED 31 DECEMBER 2022

Up to the date of issue of these consolidated financial statements, the IASB has issued the following amendments to standards and new standard which are not yet effective for the year ended 31 December 2022 and which have not been adopted in these consolidated financial statements.

IFRS 17 Amendments to IFRS 10 and IAS 28	Insurance Contracts and the related Amendments ¹ Sale or Contribution of Assets between an Investor and its Associate or Joint Venture ²
Amendments to IAS 1 Amendments to IAS 1 and IFRS Practice Statement 2	Classification of Liabilities as Current or Non-current ³ Disclosure of Accounting Policies ¹
Amendments to IAS 8 Amendments to IAS 12	Definition of Accounting Estimates ¹ Deferred Tax related to Assets and Liabilities arising from a Single Transaction ¹
Amendments to IFRS 16	Lease Liability in a Sale and Leaseback ³

¹ Effective for annual periods beginning on or after 1 January 2023

² Effective for annual periods beginning on or after a date to be determined

³ Effective for annual periods beginning on or after 1 January 2024

The Group is in the process of making an assessment of the impact that will result from adopting the amendments to standards and new standard issued by the IASB which are not yet effective for the accounting period ended on 31 December 2022. Up to the date of approval of these financial statements, the Group believes that the adoption of these amendments to standards and new standard is unlikely to have a significant impact on its financial position and the results of operations.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2022

51. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	As at 1 January 2022 RMB'000	Accruals RMB'000	Financing cash flows RMB'000	Foreign exchange translation RMB'000	Lease modified RMB'000	As at 31 December 2022 RMB'000
Borrowings (note 34)	812,832	–	43,061	25,228	–	881,121
Dividends payable	31,016	1,251,559	(1,257,596)	1,477	–	26,456
Lease liabilities (note 36)	1,562,803	672,516	(529,557)	–	(125,647)	1,580,115
	2,406,651	1,924,075	(1,744,092)	26,705	(125,647)	2,487,692

	As at 1 January 2021 RMB'000	Accruals RMB'000	Financing cash flows RMB'000	Foreign exchange translation RMB'000	Lease modified RMB'000	As at 31 December 2021 RMB'000
Borrowings (note 34)	704,401	–	128,500	(20,069)	–	812,832
Dividends payable	40,901	1,118,154	(1,130,717)	2,678	–	31,016
Lease liabilities (note 36)	1,169,289	1,067,021	(526,134)	–	(147,373)	1,562,803
	1,914,591	2,185,175	(1,528,351)	(17,391)	(147,373)	2,406,651

FINANCIAL SUMMARY

(Amounts in thousands, except per share data)

	2022 RMB	2021 RMB	2020 RMB	2019 RMB	2018 RMB
Results					
Revenue from telecommunications infrastructure services	72,906,517	71,889,248	67,164,571	64,688,815	57,359,436
Revenue from business process outsourcing services	43,072,446	40,623,583	37,276,879	36,637,180	35,102,822
Revenue from applications, content and other services	24,766,792	21,478,486	18,207,494	16,087,094	13,714,379
Total Revenues	140,745,755	133,991,317	122,648,944	117,413,089	106,176,637
Depreciation and amortisation	(960,995)	(908,323)	(827,413)	(756,976)	(466,096)
Direct personnel costs	(8,558,051)	(8,804,676)	(8,300,338)	(9,111,016)	(8,747,317)
Materials costs	(21,657,339)	(19,166,225)	(15,057,234)	(12,838,003)	(9,783,239)
Direct costs of products distribution	(4,065,197)	(4,614,143)	(4,067,599)	(4,167,579)	(4,629,177)
Subcontracting charges	(76,546,469)	(71,239,853)	(67,166,028)	(64,462,508)	(57,555,216)
Lease charges and others	(12,977,161)	(14,473,679)	(13,492,696)	(12,390,048)	(12,110,626)
Cost of revenues	(124,765,212)	(119,206,899)	(108,911,308)	(103,726,130)	(93,291,671)
Gross profit	15,980,543	14,784,418	13,737,636	13,686,959	12,884,966
Other income	1,954,228	1,946,396	1,687,789	1,554,755	1,244,889
Selling, general and administrative expenses	(13,960,199)	(12,951,723)	(11,826,471)	(11,494,404)	(10,611,071)
Other expenses	(140,956)	(213,956)	(216,802)	(333,299)	(173,722)
Finance costs	(90,986)	(78,624)	(63,482)	(68,888)	(25,179)
Share of profits of associates and joint ventures	92,747	91,923	168,928	148,478	105,421
Profit before tax	3,835,377	3,578,434	3,487,598	3,493,601	3,425,304
Income tax	(356,096)	(392,673)	(398,278)	(463,802)	(497,405)
Profit for the year	3,479,281	3,185,761	3,089,320	3,029,799	2,927,899
Attributable to:					
Equity shareholders of the Company	3,358,149	3,157,434	3,081,475	3,049,229	2,901,324
Non-controlling interests	121,132	28,327	7,845	(19,430)	26,575
Profit for the year	3,479,281	3,185,761	3,089,320	3,029,799	2,927,899
Basic/diluted earnings per share (RMB)	0.485	0.456	0.445	0.440	0.419

FINANCIAL SUMMARY

(Amounts in thousands, except per share data)

	2022 RMB	2021 RMB	2020 RMB	2019 RMB	2018 RMB
Financial position					
Property, plant and equipment, net	6,269,187	6,212,786	4,330,733	4,369,251	4,384,700
Right-of-use assets	2,402,559	2,422,952	2,046,005	1,895,996	–
Equity instruments at fair value through other comprehensive income	3,336,403	3,672,472	4,362,469	4,088,204	3,737,553
Deposits at financial institutions with original maturity more than one year	7,651,866	2,563,841	200,000	–	–
Other non-current assets	6,403,500	5,880,174	7,287,143	3,935,232	4,289,914
Inventories	1,367,311	1,492,011	1,676,943	1,974,150	2,253,027
Accounts and bills receivable, net	20,309,943	18,254,155	18,208,251	19,092,825	18,668,024
Contract assets, net	25,268,821	21,534,745	19,786,576	17,153,529	15,664,758
Current portion of deposits at financial institutions with original maturity more than one year	221,188	–	–	–	–
Prepayments and other current assets	12,717,632	11,102,020	9,618,272	8,771,768	8,646,123
Financial assets at fair value through profit or loss	61,556	3,364,554	3,098,634	4,567,824	5,046,898
Cash and cash equivalents	22,085,344	21,171,025	21,008,490	19,220,764	16,106,246
Short-term bank deposits and restricted cash	2,168,795	2,357,234	2,865,265	2,471,515	2,128,757
Total assets	110,264,105	100,027,969	94,488,781	87,541,058	80,926,000
Interest-bearing borrowings	752,001	723,024	704,401	511,234	462,003
Accounts and bills payable	44,611,295	36,319,980	33,363,786	30,674,619	28,279,533
Current portion of lease liabilities	513,223	490,859	400,627	343,281	–
Contract liabilities	10,867,975	11,449,171	10,977,645	10,087,102	8,648,060
Accrued expenses and other payables	9,499,470	9,090,865	9,499,772	8,730,235	9,017,427
Income tax payable	351,104	239,624	282,597	337,372	323,514
Non-current liabilities	2,046,387	2,104,326	2,072,979	1,819,443	1,366,602
Total liabilities	68,641,455	60,417,849	57,301,807	52,503,286	48,097,139
Equity attributable to equity shareholders of the Company	40,359,362	38,407,214	36,717,684	34,563,910	32,331,323
Non-controlling interests	1,263,288	1,202,906	469,290	473,862	497,538
Total equity	41,622,650	39,610,120	37,186,974	35,037,772	32,828,861
Total liabilities and equity	110,264,105	100,027,969	94,488,781	87,541,058	80,926,000



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