

# Environmental, Social and Governance Report

As a large-scale and leading integrated information services operator in the world, China Telecom all along persists in incorporating the environmental, social and governance (“ESG”) responsibilities into corporate operation and management, and has established and continues to optimise effective risk management and internal control systems in relation to ESG. With rapid development of mobile Internet and swift upgrade of information consumption, the Company continues to promote corporate transformation and accelerates business upgrade, endeavouring to provide premium network information services for users and striving to be a leading integrated intelligent information services operator.

The Company has strictly complied with the provisions of the *Environmental, Social and Governance (ESG) Reporting Guide* as set out in Appendix 27 to the Listing Rules of The Stock Exchange of Hong Kong Limited in 2018, and considers the concerns of stakeholders and the environmental, social and governance issues identified by the Company in the course of operations as a basis for reporting. In 2018, the Company further refined its own *System of Environmental, Social and Governance (ESG) Indicators*, improved the internal process for collecting and monitoring the data on ESG performance and strengthened procedures on ESG data collection, review and application to ensure detailed information on how the Company fulfills its responsibility in the aspect of environmental, social and governance as required under the relevant provisions has been disclosed. This report is a yearly report which covers the Company and its subsidiaries (branches) for the period from 1 January 2018 to 31 December 2018. For details of compliance with ESG Reporting Guide, please see the ESG Reporting Guide Index in this report. There are no significant changes in the scope of this report from the ESG Report published in the 2017 annual report.

This report has been reviewed and approved by the Board of Directors of the Company for publication.

# Environmental, Social and Governance Report

## Corporate Social Responsibility Report

By adhering to the core values of “comprehensive innovation, pursuing truth and pragmatism, people-oriented approach and creating shared value”, China Telecom persists in incorporating corporate responsibilities in the aspect of Environmental, Social and Governance (ESG) into development strategy, daily operation and management activities. The Company also perseveres in the fulfillment of its responsibilities for the stakeholders, while committing to step on a responsible development path and continuously enhancing corporate comprehensive values.



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## Corporate Social Responsibility Report

### Inherent corporate responsibilities:

As a national mainstream telecommunications operator, there are inherent corporate responsibilities towards the fundamental network, new style communication facilities, universal services, network information security, emergency communications, technology innovation and value chain development. China Telecom unwaveringly exerts the backbone function and persistently contributes to the establishment of "Cyberpower".

### Responsibilities towards shareholders:

Shareholders are investors of a corporation. China Telecom insists on carrying out robust operations, striving to honour its commitment to shareholders through achieving excellent operating results and continuously enhancing its corporate values.

### Responsibilities towards customers:

Customers are the foundation for corporate sustainable development. China Telecom strives to protect customers' rights in accordance with law, gain in-depth understanding of customers' need, unwaveringly innovate products for customers, and provide heartfelt services to customers, all of which enable our customers to fully enjoy their digital lives.

### Responsibilities towards employees:

Employees are the most valuable assets of a corporation. China Telecom safeguards the interests of its employees in accordance with laws, promotes staff development, encourages employees to participate in management, takes care of its employees' well-being, and strives to enable employees and the Company to grow together.

### Environmental responsibilities:

It is a mission of all mankind to develop a green and environmentally friendly environment. Through promoting green elements in management, procurement, operation, office administration and community welfare activities, China Telecom strives to achieve an environmentally friendly green development to assist the green development of economy and society.

### Social welfare responsibilities:

Commitment to charitable social activities facilitates a better society. China Telecom takes the initiatives to give back to society by enthusiastically participating in community charity affairs.

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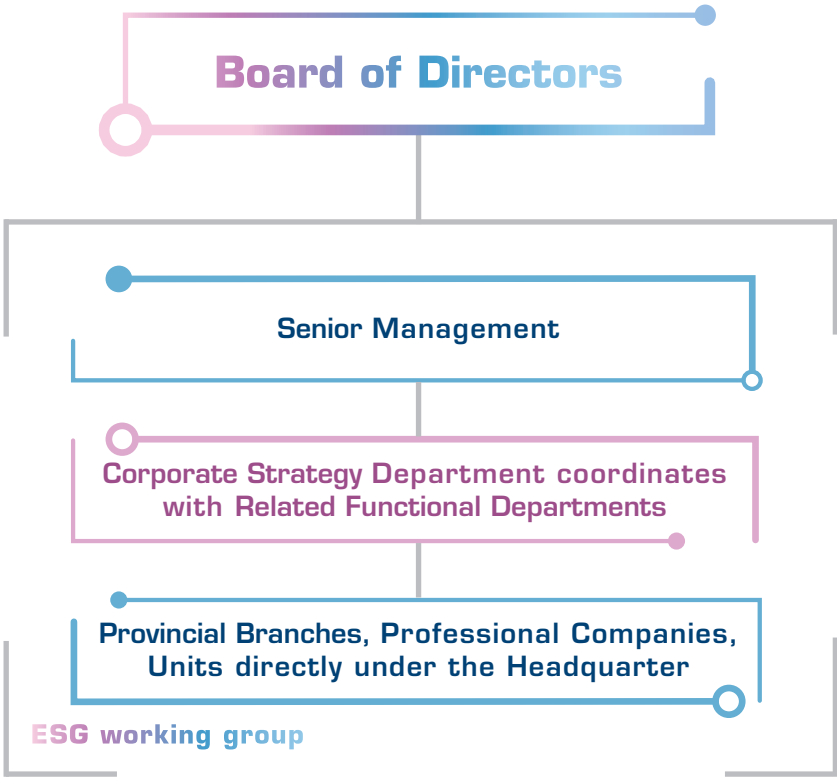
## Corporate Social Responsibility Report

### I. Promoting responsibility management

The Company strictly complies with the provisions of the *Environmental, Social and Governance Reporting Guide* as set out in Appendix 27 to the Listing Rules of The Stock Exchange of Hong Kong Limited. The Board of Directors of the Company attaches high importance to the work on Environmental, Social and Governance (“ESG”), and is responsible to evaluate and determine the Company’s ESG-related risks, ensuring the Company has established effective ESG risk management and internal control systems and formulated the Company’s ESG management policy and strategy. The Board also regularly reviews the Company’s performance and approves

the disclosure of ESG reports to ensure the Company’s level in fulfilling ESG responsibility is persistently improved. This report has been reviewed and approved by the Board of Directors for publication.

The Company establishes an ESG working group which is managed by senior management, while the corporate strategy department coordinates the daily work of ESG with relevant departments in the headquarters, provincial branches, professional companies and units directly under the headquarter. ESG working group is authorised to be responsible for the implementation of the Company’s ESG strategies, continuously promoting ESG performance management and monitoring, information disclosure and relevant fundamental management work.



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The Company established its own system of ESG Indicators, set up the internal process of collecting and monitoring the data on ESG performance and refined procedures on ESG data's collection, review and application. In accordance with *A Step-By-Step Guide to ESG Reporting* issued by the Hong Kong Stock Exchange in 2018, the Company perfected its information disclosure and regulated the disclosure of detailed information on how the Company fulfills its responsibility in the aspect of ESG governance.

The Company promotes communication with its investors, customers, employees, government and regulatory institutions, communities and other stakeholders through various channels including announcements, reports, meetings, seminars, visits, service hotlines, questionnaires and events. The Company earnestly listens to the expectations, interests and needs of the stakeholders, sorts out the opinions and suggestions from all parties and actively respond to the concerns raised.

### Stakeholders' Expectations on the Company and Our Response

Stakeholders	Communication Mechanism and Method	Expectations on the Company	Our Response
Investors	<ul style="list-style-type: none"> <li>• Statements and announcements</li> <li>• Reports and visits</li> <li>• Daily communication</li> <li>• Investor conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Value retention and appreciation</li> <li>• Regulating corporate governance</li> <li>• Operational risk prevention</li> <li>• Regulating information disclosure</li> </ul>	<ul style="list-style-type: none"> <li>• Operate steadily and continue to create value for shareholders</li> <li>• Improve corporate governance level and continuously improve internal control system</li> <li>• Protect the rights of investors, especially small and medium investors, in accordance with laws</li> <li>• Strictly comply with the disclosure requirements of corporate information</li> </ul>
Customers	<ul style="list-style-type: none"> <li>• Customer service hotline</li> <li>• Account manager's visits</li> <li>• Customer surveys</li> <li>• Customer communication activities</li> </ul>	<ul style="list-style-type: none"> <li>• Suitable and good business products</li> <li>• Enhancement of service quality</li> <li>• Tariff charges reduction</li> <li>• Harmful information prevention</li> <li>• Personal privacy protection</li> </ul>	<ul style="list-style-type: none"> <li>• Promote business and products innovation</li> <li>• Promote transparent consumption</li> <li>• Set reasonable and preferential tariff charges</li> <li>• Regulate value-added service cooperation management</li> <li>• Protect customer information in accordance with laws</li> </ul>

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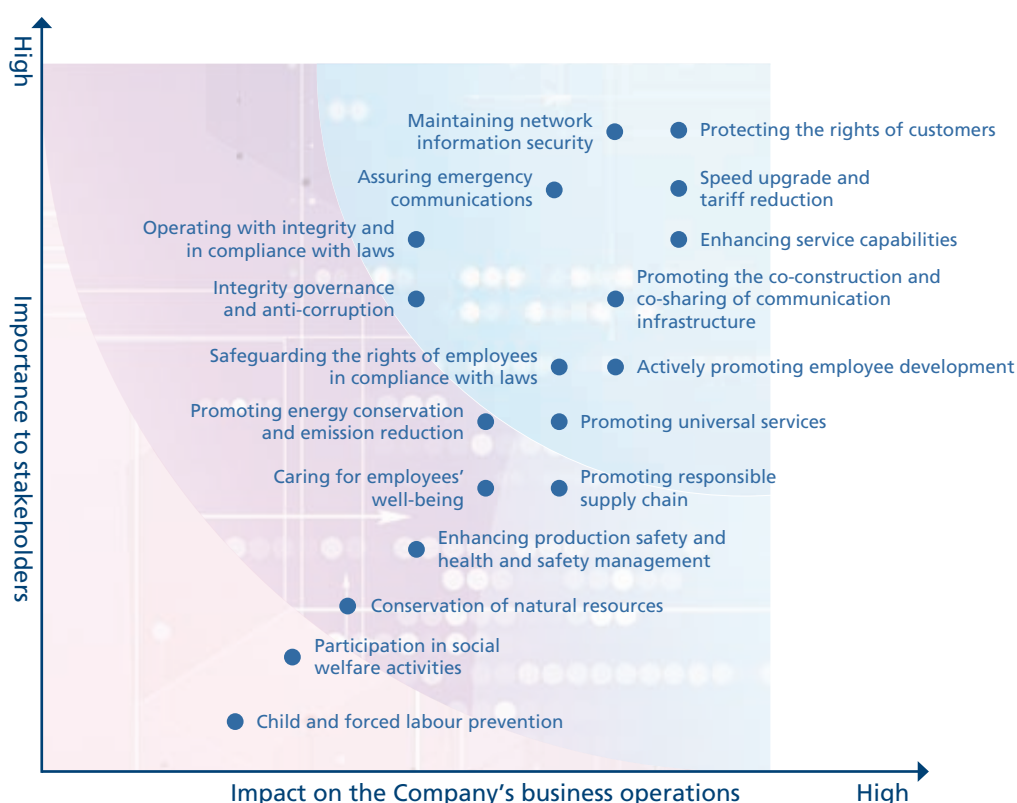
Stakeholders	Communication Mechanism and Method	Expectations on the Company	Our Response
Employees	<ul style="list-style-type: none"> <li>• Employees' representative congress</li> <li>• Employee-management conversations</li> <li>• Employee opinion surveys</li> <li>• Complaints and grievances</li> </ul>	<ul style="list-style-type: none"> <li>• Legal rights protection</li> <li>• Realisation of professional development</li> <li>• Management participation</li> <li>• Caring for employees</li> </ul>	<ul style="list-style-type: none"> <li>• Regulate labour management</li> <li>• Optimise income distribution and welfare protection mechanism</li> <li>• Reinforce employee training and improve career development</li> <li>• Exploit the function of employees' representative congress</li> <li>• Improve work conditions</li> </ul>
Government and Regulatory Institutions	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Statements or reports</li> <li>• Reports and visits</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance with laws and regulations</li> <li>• Government management requirement implementation</li> <li>• Facilitation of industry development</li> <li>• Promotion of Employment</li> </ul>	<ul style="list-style-type: none"> <li>• Govern the corporate in accordance with laws, and operate with integrity</li> <li>• Pay taxes in accordance with laws, and foster employment opportunities</li> <li>• Provide innovative informationalised products and services, promote high-quality economic development</li> <li>• Actively provide advice and suggestions</li> </ul>
Supply Chain	<ul style="list-style-type: none"> <li>• Business communication</li> <li>• Business trainings</li> <li>• Seminars or forums</li> </ul>	<ul style="list-style-type: none"> <li>• Equal and mutually beneficial cooperation</li> <li>• Co-creation of value</li> <li>• Promotion of industry development</li> </ul>	<ul style="list-style-type: none"> <li>• Cooperate with integrity, create mutual benefit and achieve win-win</li> <li>• Actively create an industrial ecosphere and promote industry development</li> </ul>
Peers	<ul style="list-style-type: none"> <li>• Forums or conferences</li> <li>• Dispute coordination and resolution</li> <li>• Working groups</li> <li>• Visits</li> </ul>	<ul style="list-style-type: none"> <li>• Lawful and fair competition</li> <li>• Reinforcement in communication and cooperation and promotion of healthy development of the industry</li> </ul>	<ul style="list-style-type: none"> <li>• Actively communicate and exchange experience</li> <li>• Promote inter-connection</li> <li>• Actively engage in co-construction and co-sharing</li> </ul>

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Stakeholders	Communication Mechanism and Method	Expectations on the Company	Our Response
Community	<ul style="list-style-type: none"> <li>Community communication activities</li> <li>Community co-construction activities</li> <li>Social welfare activities</li> </ul>	<ul style="list-style-type: none"> <li>Environment protection</li> <li>Universal services</li> <li>Emergency communications assurance</li> <li>Assisting vulnerable groups</li> </ul>	<ul style="list-style-type: none"> <li>Implement energy conservation and emission reduction as well as environmental protection measures</li> <li>Actively fulfill universal services obligation</li> <li>Maintain smooth communication</li> <li>Promote poverty alleviation and help the disabled and people in need</li> </ul>

In accordance with the ESG subject areas contained in the *Environmental, Social and Governance Reporting Guide*, while taking into consideration the expectations and needs of stakeholders based on the characteristics of our business operation and the industry as well as the impact of our business operation on the economy, environment and society, the Company assesses ESG issues that are relevant and material to the Company's operation from the dual perspectives of its importance to stakeholders and its impact on the Company's business operations, and selects and establishes a materiality matrix (see below) as the basis for the Company's ESG report's disclosure.





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The main issues of this report are presented in the following table:

<b>Environmental, social and governance areas listed in the <i>Environmental, Social and Governance Reporting Guide</i> of the Hong Kong Stock Exchange</b>		<b>Main issues of environmental, social and governance for the Company</b>
<b>Subject Area A: Environmental</b>		
A1	Emissions	<ul style="list-style-type: none"> <li>Promoting energy conservation and emission reduction</li> </ul>
A2	Use of Resources	<ul style="list-style-type: none"> <li>Conservation of natural resources</li> </ul>
A3	The Environment and Natural Resources	<ul style="list-style-type: none"> <li>Emphasising environmental protection in engineering construction</li> <li>Promoting the co-construction and co-sharing of communication infrastructure</li> </ul>
<b>Subject Area B: Social</b>		
B1	Employment	<ul style="list-style-type: none"> <li>Safeguarding the rights of employees in compliance with laws</li> <li>Caring for employees' well-being</li> </ul>
B2	Health and Safety	<ul style="list-style-type: none"> <li>Enhancing production safety and health and safety management</li> </ul>
B3	Development and Training	<ul style="list-style-type: none"> <li>Actively promoting employee development</li> </ul>
B4	Labour Standards	<ul style="list-style-type: none"> <li>Child and forced labour prevention</li> </ul>
B5	Supply Chain Management	<ul style="list-style-type: none"> <li>Promoting responsible supply chain</li> </ul>
B6	Product Responsibility	<ul style="list-style-type: none"> <li>Speed upgrade and tariff reduction</li> <li>Promoting universal services</li> <li>Maintaining network information security</li> <li>Assuring emergency communications</li> <li>Protecting the rights of customers</li> <li>Enhancing service capabilities</li> </ul>
B7	Anti-corruption	<ul style="list-style-type: none"> <li>Operating with integrity and in compliance with laws</li> <li>Integrity governance and anti-corruption</li> </ul>
B8	Community Investment	<ul style="list-style-type: none"> <li>Participation in social welfare activities</li> </ul>

This report is a yearly report which covers the policies, measures and performance on the ESG-related issues of the Company and its subsidiaries (branches) for the period from 1 January 2018 to 31 December 2018 (reporting period). For details of compliance with the *Environmental, Social and Governance Reporting Guide* of the Hong Kong Stock Exchange, please refer to the ESG Reporting Guide Index in this report.



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### II. Operating with integrity and in compliance with laws

China Telecom governs the corporate in accordance with laws and regulations, persists in operating in compliance with laws and integrity through abidance by relevant laws and regulations and industry regulations. We established an all-rounded and seamless compliance system featuring internal control, audit supervision, anti-corruption and comprehensive risk management. The Company has established a sound, long-term and effective communication mechanism in order to regulate the disclosure of corporate information, and is open to government supervision and public scrutiny.

In accordance with *Company Law of the People's Republic of China*, *Accounting Law of the People's Republic of China*, *Contract Law of the People's Republic of China*, *Cybersecurity Law of the People's Republic of China*, *Anti-Monopoly Law of the People's Republic of China*, *Anti-Unfair Competition Law of the People's Republic of China*, *Securities Law of the People's Republic of China*, *Code of Corporate Governance for Listed Companies in China* published by the China Securities Regulatory Commission and other laws and regulations and the regulatory requirements governing internal control of listed companies in capital markets such as the USA and Hong Kong, the Company established its *Internal Control Manual* to ensure that the Company's operation management is in compliance with laws and regulations, the assets are secured, and the financial reports and relevant information are accurate and complete.

In compliance with the *Trademark Law of the People's Republic of China*, *Patent Law of the People's Republic of China* and other laws and regulations, the Company implemented systems and measures including *Guidance Opinions of China Telecom on Strengthening Intellectual Property Work*, *Operation Guidelines of Intellectual Property Management in Product Development*, *Administrative Measures on Trademark Management of China Telecom Group*, *Interim Measures for the Patent Management of China Telecom Group*. The Company established a sound intellectual property management system and strengthened the protection of intellectual property rights.

The Company strictly executed the laws and regulations on integrity governance and anti-corruption, established and optimised five major mechanisms including anti-corruption education and prevention, system monitoring, discipline and accountability, fault tolerance and correction, and inspection and check. The Company formulated guidance opinions on construction of integrity culture and code of conduct such as integrity manual, and opened and operated a public WeChat account called "China Telecom with Integrity"; set up whistleblowing postal mailbox, emails and hotline to address any report of whistleblowing allegations and relevant complaints against its employees as well as relevant criticism, opinions and recommendations on integrity construction and anti-corruption work.

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In 2018, according to the laws and regulations and the requirements of regulatory authorities, in line with the changes in business operations, the Company continuously strengthened compliance management, perfected the *Internal Control Manual* and other rules and regulations, continuously assessed the implementation of rules and regulations, and timely rectified the problems once being identified.

### III. Providing high quality network assurance

China Telecom promoted the construction of fundamental network and new style fundamental infrastructure, while at the same time commencing network “Speed Upgrade and Tariff Reduction”, promoting universal services, maintaining network information security and assuring emergency communications in order to provide high quality network assurance.

#### Promoting “Speed Upgrade and Tariff Reduction”

To construct higher quality 4G and fibre broadband network, the Company enhanced in-depth coverage level of 4G network and devoted to improve network quality, particularly in traffic-intensive and voice-intensive zones such as high-speed trains, expressways, colleges and universities, high-density residential areas, high data traffic commercial areas and subways by applying dynamic bandwidth expansion in our base stations on a monthly basis, and thus enhancing customer experience. To achieve commercial trials of VoLTE (based on 4G network calls), the Company further enhanced the fibre broadband coverage in urban cities and towns, and integrated customers’ needs to actively deploy Thousand-Mbps fibre broadband network. The Company continued to reduce

handset data tariff and ceased to charge domestic data roaming fees, while the long-distance tariff charges for international, Hong Kong, Macau and Taiwan were further reduced and standard tariff for business dedicated line products was reduced. “Speed Upgrade and Tariff Reduction” has benefited a broad range of users. The requirement of reducing data tariff of mobile network by at least 30% has been accomplished, while the average wireline broadband access bandwidth increased to 104 Mbps.

#### Promoting universal services

The Company continuously promotes the construction of communication networks in rural areas and remote rural villages and strives to improve broadband access coverage in rural areas. The Company has set up local services points for rural villages, proactively promoted informatisation applications and e-commerce development in rural areas, which accelerated to promote the prosperity of rural villages. The Company also accelerated the construction of universal services projects and accomplished the construction task of building the fibre cables of approximately 50,000 administrative villages during the year. Continuing to promote network poverty alleviation, we achieved “Double 75%” coverage of fibre broadband and 4G for administrative villages in the deep poverty regions, including “Three Districts and Three Prefectures”. “Three Districts” means Tibet, Sidi Prefecture in southern Xinjiang, and Tibetan areas in Qinghai, Sichuan, Yunnan and Gansu Provinces. “Three Prefectures” means Linxia Prefecture in Gansu, Liangshan Prefecture in Sichuan, and Nujiang Prefecture in Yunnan, creating better telecommunications and network condition for poverty-stricken villages to alleviate poverty.

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### Maintaining network information security

The Company complies with the *Cybersecurity Law of the People's Republic of China* and other laws and regulatory requirements in relation to network information security, conscientiously implements the requirements of the Ministry of Industry and Information Technology, Ministry of Public Security and other authorities on prevention and cracking down on communication information frauds, and proactively takes preventative and corrective actions on various network and information security risks. In 2018, the Company further improved the network and information security management systems and perfected normalised discussion and work mechanism. The Company strengthened network and information security trainings and carried out promotion activities widely to the public through sales outlets and other channels during the promotion week for national network security. With

the implementation of the measures on preventing communication information frauds such as real name authentication of IoT cards, the accountability and punishment system has been strengthened. We also strengthened the response plan on network and information security risks and governed the network security flaws promptly. As a result, the number of network security flaws of China Telecom informed by the Ministry of Industry and Information Technology had significant decreased compared to last year. We undertook the requirement from the Ministry of Industry and Information Technology on ratification of Internet environment, with over 12,000 phishing and fraud websites disposed of during the year. In response to the network security emergency plan promulgated by the Cyberspace Administration of China and the Ministry of Industry and Information Technology, the Company formulated the public Internet network security emergency plan.

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### Assuring emergency communications

The Company is truly committed to the mission of providing safe and smooth assurance communications, and is devoted to fight against a number of severe natural disasters such as earthquake, typhoon, flood and landslide and to safeguard important events. In 2018, we successfully accomplished disaster relief and emergency telecommunications assurance for debris flow in places including Gansu and Sichuan, typhoon “Mangkhut” and typhoon “Ampil”, earthquake in Yunnan Mojiang, landslide in Jinsha River and Yarlung Zangbo River with over 80,000 relief workers, over 20,000 rescue vehicles and over 17,000 pieces of emergency communication equipments deployed and over 37 million emergency public service messages sent. We also successfully provided telecommunications assurance for important events including the Shanghai Cooperation Organisation Qingdao Summit, Beijing Summit of the Forum on China-Africa Cooperation, the first China International Import Expo, Boao Forum for Asia, World Internet Conference, the first Digital China Summit with over 150,000 assurance personnel and over 20,000 rescue vehicles were deployed.

### IV. Providing heartfelt services to customers

China Telecom has a profound understanding of the customers’ needs. While being dedicated to providing customers with fundamental service such as high-quality 4G and fibre broadband, as well as emerging businesses including HD IPTV, cloud computing, Big Data, Internet of Things, digitalised ICT industrial informatisation application and mobile payments, the Company focuses on protecting customer rights, persists in construction of service capability, promotes intelligent service, endeavouring to improve service quality and service level.



The then Chairman and CEO Mr. Yang Jie shook hands with frontline telecommunications assurance technicians in the World Internet Conference



Information and communications assurance of Shanghai Cooperation Organisation Qingdao Summit

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### Protecting the rights of customers

The Company strictly conforms to the laws and regulations regarding consumer rights and interests such as *Law of the People's Republic of China on Protection of Consumer Rights and Interests* and *Advertising Law of the People's Republic of China*, dedicates to provide products and services in compliance with laws and regulations, performs compliance checks on advertisement campaigns and continuously standardises the business tariff management.

The Company strictly complies with the *Cybersecurity Law of the People's Republic of China* and other laws and regulatory requirements, implements the relevant regulatory requirements of the government, continuously improves the users' personal information protection management system, and strengthens the protection of users' personal information. In 2018, the Company conscientiously followed the *Administrative Measures of China Telecom on Security Management of Personal Information of Users* and the *Administrative Measures of China Telecom on Security Management of Information of Users* and other regulations, carried out supervision and inspection on users' personal information and urged enterprises at all levels to implement the division of responsibility on protection of users' personal information in order to ensure that business, operations and systems must thoroughly protect information security. We regulated behaviours of collecting, storing, transmitting, using and destroying of user information and strictly controlled the authorisation permission for sales staff to access and edit customers account information in order to "collect information for a proper purpose, store and use the information properly, record the supporting for information usage, and investigate the abuse of information".

The Company collected and listened to users' opinions via channels like "Hotline 10000", online and physical stores, and continuously carried out events such as "Customer Rights Day", "General Manager's Service Day" and "Listen to Hotline 10000". In 2018, we strengthened the control and management on complaints that we received, accelerated the process on handling the complaints and established a two-level complaint tracking and improvement mechanism at headquarters and provincial branches in order to promptly rectify issues. Among them, in respect of the hot topics such as the controversial issue on the fee of value-added services and the different rights between new and old users, the Company remediated in a timely manner and carried out a "zero tolerance" policy on illegitimate deduction of tariff. The customer complaint rate of China Telecom for 2018 was lower than the target set by the Ministry of Industry and Information Technology, which remained at a relatively low level amongst its industry peers.

### Enhancing services capabilities

The Company enhanced capabilities for core services. In 2018, we endeavoured to enhance the capabilities on network connection for government-enterprise customers, cloud computing and Internet of Things services, shortened the response time of installation, transfer and repairs for normal broadband and business dedicated line, enhanced the timely provision of end-to-end services for wifi networking and enhanced the timely provision of repair services for Internet of Things services. We monitored and analysed the video quality of e-Surfing HD business to improve the quality of video streaming.

The intelligent service capability has been enhanced. We created "Smart 10000"

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hotline by continually using artificial intelligence and Big Data technology. On the one hand, the Company deepened the operation of "Smart 10000" hotline and enhanced the proportion of intelligent interactive services. On the other hand, the Company proactively developed smart tools to enhance the efficiency of handling complicated problems, of which, the smart predicative tool can effectively reduce the traffic processing time, and smart tools such as smart bill and one-click diagnosis help customer service representatives to handle questions on topics such as fee or network usage asked by the users.

The network service capability has been enhanced. We established a service model and service process named "self-service, assistance and support" to facilitate the convenience of customers, improved 46 items of service capabilities such as top-up data traffic for mobile users, change of service package and invoice and bills. We promoted and achieved the common service functions such as enquiry of broadband resources, new installation and renewal of contracts and launched special services area named "My customer services". We continually enhanced the new media customers services capabilities, introduced services robots at online service points in order to facilitate the

convenience for customers to pay bills and enable us to handle enquiries and complaints promptly. We adjusted to adapt to the video watching habits of customers, further promoted the video customers services by showing short videos directly to solve customers' problems vividly.

According to assessment conducted by the Ministry of Industry and Information Technology, in 2018, the customer satisfaction rate on handset Internet access, mobile voice, wireline broadband and wireline voice has increased at different levels compared to the previous year while the Internet access from mobile and wireline broadband of China Telecom continued to maintain leading position in the industry.

### V. Caring for employees

China Telecom safeguards the interests of its employees in accordance with laws, attaches great importance to building harmonious labour relations, supports labour unions in carrying out their functions, encourages the employees to participate in the management and actively helps the employees to improve their capabilities, so that the Company and the employees can grow together.



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### Safeguarding the rights of employees in compliance with laws

The Company strictly complies with and implements the relevant laws and regulations regarding labour and protection of the employees' rights and interests including *the Labour Law of the People's Republic of China*, *the Labour Contract Law of the People's Republic of China* and *the Trade Union Law of the People's Republic of China*, and protects the rights and interests of employees with respect to labour rights, democracy rights and spiritual culture in accordance with the laws. The Company strictly implements *the Notice on Standardisation of Labour Management in Strict Compliance with the Labour Contract Law of the People's Republic of China*, improves labour and management system conducts workforce employment in accordance with laws and regulations. The Company also ensures that all contract employees have their labour contracts signed and their social insurances paid. The Company strictly

implements *the Notice on Issues concerning Labour Dispatch Management*, improves the business operation models and job role classification, determines the employment form of each role, standardises the agreements signed with contract or agency workers and urges these dispatch units and dispatch works to sign employment contracts, pay social insurance and to protect the rights and interests of contract or agency workers. The Company adheres to principles of gender equality and equal pay for equal work, protects the privacy of employees in accordance with laws and implements the paid annual leave system. The Company prohibits child labour and forced labour in accordance with laws. In 2018, no child labour or forced labour were found. The Company supports the labour unions in



Installation and maintenance at frontline





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carrying out their functions in accordance with laws, encourages employee participation in management and continuously establishes stable and harmonious relationship with the employees.

### Actively promoting employee development

The Company strengthens the construction of the high-level professional teams. In 2018, we further implemented *China Telecom High-Level Professional Talent Management Measures*, strengthened the establishment of the professional teams equipped with abilities to support the transformation. We initialised a new session of China Telecom Chief Expert selection and carried out a project named "Spark Programme" for the cultivation of professional leading talents in the aspects of 5G, cloud computing and Big Data in order to select and cultivate outstanding young professionals. To further leverage on the professional workstation's function in cultivating and developing the potential of professionals, the new generation of business supporting system was built to operate and maintain the professional workstation, optimise the existing talent inter-changeable mechanism and the recruitment of talent team of professional workstation, encouraged professionals to develop and bring out their expertise in the important projects such as intelligent network, digitalised ICT solution plan, research and development of cloud service platform for business supporting system. We carried out the pilot programme of Talent Zone in the area of cloud computing such as the selection and management of innovative project manager, team building, talent communications, evaluation, incentivisation and services. We proactively discovered and promoted the talent development in a new approach and new model.

The Company strengthens employees' training. The Company fully exerted the online and offline training capabilities of China Telecom College and China Telecom Online College and developed training courses focusing on enhancing abilities for various job levels and skills at all levels. In 2018, we strengthened the leadership training to operation management personnel at all levels, strengthened the establishment of employees' cultivation training system, and continuously carried out training of professionals at all levels. We organised and initiated a new round of "Unit CEO" capabilities enhancement and talent cultivation work through practical curriculum built on business development needs and the career requirements of "Unit CEO" to strengthen the training of techniques of internal trainers and project managers. The training session arranged by China Telecom College has been attended over 4,600 times. China Telecom's new employees structured tutor project and the physical channel "training & promotion" practice project were awarded "2018 ATD Excellence in Practice Award".

The Company actively promotes skills and value enhancement of employees. The Company continually deepened the featured reform model of three-dimensional inter-driven forces comprising "sub-division of performance evaluation units, professional operation and top-down support", strengthened the incentivisation and support to grassroots autonomous operation entities, encouraged junior employees to fully develop their skills and continually enhance their values in the development of entrepreneurship. We implemented the revised the *Administrative Measures of China Telecom on Skills Competition* and other measures, consistently held various staff skill competitions and knowledge contests, fully mobilised the function of

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innovation workshops, guided the staff to improve their capabilities and quality and encouraged them to strive for innovations in their daily job. In 2018, cumulatively over 1,200 staff innovation workshops were built, more than 2,500 times for the selection activities for the innovations work of the staff were organised, over 19,000 innovation results or cases were collected and over 5,500 results were recognised and promoted. 18 employees were awarded the title of “Technical Master of China’s State-owned Enterprises”, 116 employees were awarded the title of “Technical/Labour Master of the Company”, and 847 employees were awarded the title of “Technical/Labour Pacesetter of the Company”.

### Enhancing production safety and health and safety management

The Company strictly implements the *Work Safety Law of the People’s Republic of China*, fully fulfills the core responsibilities for corporate safety production, develops sound accountability systems, implements safety responsibilities at all levels, strictly implements safety production assessment and punishment system and continually solidifies the foundation of safety production management. The Company continually carried out supervision and assessment on all professional categories and units of safety production, timely eliminated hazards and achieved standardisation of early elimination of hidden dangers and closed-loop management mechanism. The Company widely promoted through communication and education of relevant laws and regulations, internal policies and rules on production safety, persistently increased the employees awareness on safety and emergency prevention techniques. The Company strengthened the safety management of engineering

projects, strictly implemented licences obtaining system for special operation employees, perfected the accidents emergency drill and strengthened the emergency drill. In 2018, there has been no occurrence of severe casualties and accidents.

The Company attaches great importance to occupational health and safety by regularly organising the employee medical examination and continuously improving workplace environment, thus effectively eliminating the occurrences of occupational diseases. The Company continuously conducts counselling activities concerning mental health of the employees and assistance work, and proactively helps the employees reduce their physical stress.

### Caring for employees’ well-being

The Company perfects the closed-loop management mechanism from gathering, analysing, processing and giving feedback to understand employees’ needs and establishes communications channels such as seminars, online or offline surveys, visiting employees’ family, frontline visits, face-to-face communication, reception visits, handling incoming mail or email, striving to enhance the communications and to deeply understand the thoughts, working and living conditions of employees as well as the hot topics and problems that the employees care about. Enterprises at all levels actively helped the employees solve practical problems or difficulties through regularising visits, responding to hot issues and helping employees in need, over 18,900 employees were helped during the year. The Company continually built and promoted ‘Four-Small’ namely small canteens, small bathrooms, small washrooms and small activity rooms, built infant rooms according to the special

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needs of female employees, organised cultural and sports activities in which the employees were interested, assisting employees in achieving work-life balance and increasing their well-being.

### VI. Practicing green development

China Telecom complies with the *Environmental Protection Law of the People's Republic of China*, the *Energy Conservation Law of the People's Republic of China* and other laws and regulations related to environmental protection, practises the concept of green development and proactively devotes itself to the establishment of ecological civilisation. The Company endeavours to build a green network, pushes forward green operation, sets up environmental indicators, analyses and releases collected performance data on a regular basis, proactively communicates with the society of its environmental protection actions and effectiveness and willingly opens itself to public scrutiny. There was no violation of environmental protection laws and regulations as well as no incident having an material impact on the environment caused by the Company in 2018.

#### Promoting energy conservation and emission reduction

The Company's greenhouse gas emissions are mainly from energy use. The Company implemented measures such as the *Administrative Measures of China Telecom on Energy Conservation, Emission Reduction* and established an energy saving and emission reduction system. Through means like rules and regulations, work plans, assessment evaluation etc., the Company applies energy conservation and emission reduction requirements to link through various operational activities

such as procurement, construction, operation and office administration. The Company preferred energy-efficient products when purchasing new equipment and actively applied energy-saving technologies in the facilities of machine rooms and base stations, extended the coverage of the energy-saving technological application for fundamental ancillary facilities, constantly promoted the integration of our business platforms with 'cloud resource pool' and promoted innovation of management of energy conservation and emission reduction. The Company endeavours to reduce energy consumptions of all kinds as well as greenhouse gas emission. In 2018, the Company further increased investment in energy conservation and emission reduction — reaching RMB674 million, an increase of 26.8% over last year. Focusing on Internet data centres that consumed more energy, the Company used Big Data technology to launch intelligent energy conservation pilot programme for servers. Having accomplished efficient power saving, the Company further expanded the pilot programme to some provincial branches. The Company utilised the energy performance contracting model, actively introduced social capital and technologies to carry out the reform of energy conservation and emission reduction. The Company actively adopted cleaner energy sources and reduced coal consumption. Coal consumption in 2018 decreased by 46.2% comparing to last year. Due to business growth, total electricity consumption in 2018 had increased comparing to the previous year, with a growth rate of 5.0%. The Company carried out technical and management innovation by strengthening energy conservation and emission reduction management. In 2018, the unit energy consumption per information flow was 5.91 kgce/TB, representing a decrease of 16.8% over last year.

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### Conservation of natural resources

The Company actively takes action in promotion of corporate philosophy, policy system, and specific measures to improve resource utilisation and conserve natural resources.

The Company promotes water conservation. The Company emphasises water conservation in its daily business operations, consumes water rationally and efficiently, and reduces water consumption. The Company actively promotes and advocates water conservation, reminds employees to conserve water by posting reminders regarding water conservation near water facilities and appliances, raising employees' awareness on water conservation. The Company strengthens the management on water usage, actively carries out sewage disposal and treatment work, and promotes reuse of water. The Company encourages replacing fresh water with reclaimed water. In 2018, the Company's reclaimed water usage has increased by 22%. The Company promotes water-saving appliances, and performs regular checks and repairs on each part of the water supply system to prevent occurrences of water leakage and water wastage. In 2018, the total water consumption was 42.85 million tons, which decreased by 1.30 million tons over last year, achieving a 3% reduction while the water consumption per unit operating revenue decreased by 5.8% over last year.

The Company encourages paper saving. The Company actively promotes measurements on its paper use. According to the preliminary estimation, the amount of paper used in 2018 was approximately 2,000 tons. Advocating paper savings, the Company promotes the green office concept and advocates the use of both sides of the papers in office use. The Company, from the perspectives of

technology and institution, actively promotes reduction of paper use in operation and office facilities sites. In 2018, the Company continuously promoted electronic accounting files management, VAT invoice, electronic bills and paperless operation in order to reduce the use of papers. According to the requirement of taxation reforms of the State, the Company actively investigated the inter-connection between the enterprises financial reporting data and the declaration system of the tax bureau, and promoted automatic and paperless process of tax declaration.

The Company enhances the recycling, disposal and utilisation of waste and used materials. The Company 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. The Company implemented the *Administrative Measures of China Telecom on Reverse Logistics* and the revised *Administrative Measures of China Telecom on Waste and Idle Recycling and Disposal* in 2018, enriched the form of disposal of waste and unused materials, regulated the disposal procedures, strengthened the centralised management of provincial and municipal branches, focused on prevention of disposal risk and promotes the standardisation of the disposal. The Company formulated the incentive policy for cleaning up idle materials, which specifies the incentive standards, encourages all levels of enterprises to conserve resources and reduce environmental pollution through recycling, disposal and utilisation of the waste and used materials. In 2018, the Company constantly enhanced the professional management of waste, promoted the recycling, utilisation and harmless disposal

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of such waste and old materials as batteries, copper cable and devices. Since the traditional lead-acid battery contains large amounts of heavy metal, waste acid, waste alkali and other electrolyte solution, the battery will pollute the environment if handled inappropriately. The Company, on the one hand, conducts overall on-site inspection of environmental protection practices of the battery supplier, and constantly purchases green and energy-saving products such as lithium iron phosphate battery, and on the other hand, the Company established a management system for battery recycling and disposal to prevent pollution to the environment. The Company transfers waste copper cables generated from the "Fibre Roll-out" campaign to the third parties for recycling and disposal. The Company implemented wireline closed-loop management and strengthened the recycling and reuse of equipment like wireline terminals through measures such as refurbishment and cross provincial re-allocation, etc. Waste and used materials without recovery value are properly disposed in strict accordance with state regulations after taking full account of the environmental impact. In 2018, the Company recycled and disposed various types of waste and used materials over 100,000 tons.

The Company's main business is telecommunications information services. Therefore, the use of packaging materials for finished goods is identified as an immaterial issue.

### Emphasising environmental protection in engineering construction

China Telecom attaches great importance to protecting the ecological environment during project construction process. The Company has taken proactive environmental protection measures

regarding issues in telecommunications engineering construction responding to concerns of the government and the public, such as farmland protection, equipment pollution, construction impact and electromagnetic radiation, to minimise the negative impact on the ecological environment as much as possible.

In the area of farmland protection, the existing residence and barren land will be preferred in site selection for base stations, as much as possible no additional farmland will be occupied, to ensure the rational use of land resource.

In the area of equipment pollution, non-polluted equipment with no noise and no electromagnetic radiation and free of pollutants is preferred, in order to assure that the operating equipment does not pose a safety hazard risk to surrounding communities and the environment.

In the area of construction impact, areas such as mineral reserves, forest, grasslands, wildlife habitats, natural and cultural relics, natural reserves and scenery areas are intentionally avoided when conducting routing roll-out deployment for fibre cables, so as to avoid changing the surrounding environment as much as possible.

In the area of electromagnetic radiation, the Company continuously standardises the environmental protection management of base station electromagnetic radiation, monitors and assesses the electromagnetic radiation around the base station, enhances communication with the community, opens itself to public scrutiny, strictly controls the quality of network equipment by imposing controls from the source and actively takes advanced technical means to refine the layout of base station, ensuring the emission standard is stricter than the national emission standards.

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### Promoting co-construction and co-sharing of communication infrastructure

The Company earnestly implemented the suggestions on implementation of enhancing co-building and co-sharing of telecommunications infrastructure promulgated by the Ministry of Industry and Information Technology and the State-owned Assets Supervision and Administration Commission of the State Council. We closely worked with other telecommunications operators and China Tower Corporation Limited and actively promoted the co-construction and co-sharing of communication infrastructures such as base stations, channels and pole lines, to effectively reduce repeated construction in order to protect the natural environment and landscape, and to reduce the land use and energy and raw materials consumption. In 2018, the Company provided more than 20,000 kilometres of co-shared pole line, more than 1,300 kilometres of co-shared pipeline, and more than 900 sets of shared indoor distribution system.

### VII. Promoting responsible supply chain

The Company strictly follows the *Bidding Law of the People's Republic of China* and the purchase-related laws and regulations, implemented the regulation such as the *Administrative Measures of China Telecom on Purchase*, consistently adhered to the management concepts focusing on value-added, transparent and green procurement, committed to a trusted relationship with suppliers to achieve win-win situations and actively communicated with and encouraged its suppliers to fulfill social responsibilities together.

Regarding value-added procurement, the Company implements the requirements such as the *Administrative Measures of China Telecom on Quality of the Purchased Materials*. In 2018, the Company further enhanced the post-annual assessment on suppliers, daily review complaints to obligation fulfillment, arrival inspection and the comprehensive assessment system combined with the quality on inspection of network operation. The Company enhanced the application of data from abovementioned supplier management activities in purchase bidding evaluation, and facilitated suppliers to improve delivery performance. The formulation of the *Administrative Measures of China Telecom on IT Procurement Product Evaluation* promoted the regulation on the assessment of IT products and improved the coverage rates for the arrival inspection supplier and category coverage.

Regarding transparent procurement, the Company strictly complies with requirements of regulations on the *Administrative Measures of China Telecom on the Purchase Bidding and Tendering*, and constantly promotes open bidding and transparent sourcing. In 2018, the Company used bidding process for 100% of the projects which it ought to have used bidding process for as required by law, encouraged bidding on a consolidated basis of small value projects and bidding with pre-qualification on service projects. Public bidding rate and public procurement rate were further enhanced.

Regarding green procurement, the Company constantly promotes the application of green procurement index in the sourcing process and prioritised resources saving and environmentally friendly products. Energy efficient power modules purchased in 2018 accounted for almost 100% of all purchased modules



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and the unit energy consumption of the sourced key specialised equipment was 4.3% lower than that in 2017.

### VIII. Participation in social welfare activities

The Company participates in social welfare activities. We implemented the *Welfare Donations Law of the People's Republic of China* and other laws and regulations and the *Administrative Measures on Donation of China Telecom Group* under the principles of 'voluntariness, clear responsibility, action within capabilities, honesty and trustworthiness', supports the development of technology, education, culture, sports and health care through various ways, and actively helps the vulnerable, disabled and disadvantaged. The Company encourages its employees to carry forward the spirit of volunteerism, and actively participate in volunteering activities of different kinds.

The Company deepened its engagement in poverty alleviation and supported in targeted areas. The parent company carried out poverty alleviation in targeted areas including Yanyuan and Muli Counties of Sichuan Province, Shufu County of Xinjiang Uygur Autonomous Region, Tianlin County of Guangxi Zhuang Autonomous Region and provided support in Banbar County of Tibet Autonomous Region, Jiuzhi County of Qinghai Province, all of which were deep-poverty regions. The Company cooperated with the parent company to assign the cadre team to carry out poverty alleviation work in the above 6 counties in 2018. The Company

conducted poverty alleviation through projects focusing on network, informatisation, industry, employment, intelligence and social welfare in order to improve the living condition, develop the economy, and increase the income of local residents. In addition, the Company also cooperates with the parent company to participate in local poverty alleviation projects in other provinces (autonomous regions and municipalities).

The Company actively relieves poverty by informatisation and facilitates the development in rural areas. The Company constantly promotes the application of the Big Data Management platform for targeted poverty alleviation to all regions which makes it possible for the poverty alleviation administration authority to manage at village, household and individual levels and to facilitate the measurement implementation. By the end of 2018, the management platform was deployed to more than 930 counties in 15 provinces (autonomous regions, municipalities), benefiting more than 38 million registered population living in poverty. The Company actively supports the construction of information system for poverty alleviation developed by the State Council Leading Group Office of Poverty Alleviation and Development and actively provides technical support and expands the poverty alleviation channel to Social Participation Poverty Alleviation and Development of China. The Company constantly promotes farmer cooperatives and assists the economy development in rural areas based on their actual needs.



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### IX. Outlook

In 2019, the Company will deeply embrace new development philosophies featuring innovation, coordination, openness and co-sharing. The Company will increase communication with stakeholders and closely cooperate with all parties in the industry, endeavouring to establish advanced and developed information

infrastructure. Promoting deep integration between information technology and various sectors and industries, we persistently enhanced the efficiency of corporate operation management and the operation services level, so as to facilitate high-quality economic development and accomplish the building of well-off society.



Poverty alleviation work in Liangshan County of Sichuan Province led by management

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In 2018, our work on human resources has firmly adhered to the Company's overall strategies in transformation and upgrades. We further liberalised our thoughts, innovated mechanisms, solidified foundation, standardised management and optimised the allocation of existing resources in order to continuously enhance human resources efficiency and provide sound organisational assurance and personnel support for the corporate's sustainable and healthy development.

### **Strengthen senior management and executive team building**

We continue to promote younger cadre team and optimise the leadership structure of our provincial and municipal branches. Through methods including selection and recruitment, job exchange programme and rotation, as well as succession and retirement, we optimised our executive teams among headquarters, provincial branches and professional units. A group of well-recognised executives with superb qualities, distinguished capabilities and outstanding performance were selected and promoted to important management positions, hence the professional and age structure of our management teams became more reasonable and balanced. We increased our efforts in training excellent young cadres and development of excellent young cadres training management system, and established database of excellent young cadres talents with unified management, hierarchical implementation and dynamic adjustment, so as to provide organisational assurance for the corporate's sustainable and healthy development.

### **Strengthen the supervision and guidance on staff selection and appointment**

We established specialised cadres supervisory organisation to strengthen the supervision on staff selection and appointment. We embedded staff selection and appointment inspections into internal review, and continuously carried out special inspections, specific governance, and rectification according to categories so as to ensure specific governance work attaining effective results. By continually deepened rectification, the Company further standardised the work on staff selection and appointment, improved the quality of staff selection and appointment, enhanced the creditability on staff selection and appointment and created better employment environment.

### **Continuously promote and implement "Talent Strong Enterprise" project**

In 2018, the Company updated and published the *Measures of China Telecom on High-Level Professional Talent Management Service* and further defined work planning and development goals of "Hundred, Thousand and Ten Thousand Professional Talent Project". We improved mechanism on the talents selection and inducing, use and evaluation, nurturing and development, merit-based and dynamic management and talents services. The cloud computing branch of the Company established a pilot "Talent Zone" programme, while promoting a more proactive, open and effective talent policy. The Company further optimised system of professional workstations, broke the units, department and geographical boundaries and enhanced co-sharing of talents. With the combination of MSS centralised human resources system, we solidified talents data foundation and

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carried forward the work focusing on the enterprise's key tasks in transformation and upgrades.

### **Further solidify human resources foundation management**

In 2018, the Company optimised and perfected the function of centralised human resources system, established the master data of human resources management platform, realised convergence of key business data. The Big

Data analysis of human resources supported the establishment of resources allocation and talent teams which promoted intelligent management of human resources. The Company continued to promote intelligent human resources management projects, strengthened system modeling and analysis and application of intelligentised business and enhanced precision management level of human resources, which facilitated corporate scientific decision-making.

## Information of Employees

As at the end of 2018, the Group had 280,747 employees. The number of employees working under each classification and their respective proportions were as follows:

	Number of Employees	Percentage
Management, Finance and Administration	45,045	16.0%
Sales and Marketing	138,001	49.2%
Operations and Maintenance	87,512	31.2%
Research and Development	10,189	3.6%
Total	280,747	100.0%

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### Relationship between the Company and Employees

#### Communication between Management and Employees

We endeavour to maintain close connection with the employees, understand the employees in all aspects and do our best in relation to employee ideological work. The Company organised employee representatives to put forward proposals. The proportions of the classification of the proposals are 20% business development, 16% employee welfare, 13% business products, 11% labour, 10% talent team construction, 10% network construction and maintenance and 7% core business synergy.

Cadres of labour unions at all levels, employees' representatives and heads of labour unions insisted on in-depth investigations of frontline employees' conditions. Through attending employees' forum, conducting questionnaire surveys and visits, having face-to-face communication with staff, handling the letters or emails, as well as through the channels of chairman mail box, staff forum, YiChat and WeChat account. We investigated and understood the staff's situation for 54,700 times. We pushed forward handling of requests from employees proactively and resolved 12,500 requests.

### Roles and Duties of Labour Unions

We dedicatedly carry out job innovation activities around stimulation of vitality of employees, enhancement of capabilities and strengthening execution capability to motivate employees to love and respect their jobs and to make contributions. The Company launched activity for nominating innovative and excellent working team and individual. Approximately 4,000 outstanding teams and individuals shared and presented on the "Dual Hundred" platform, among which 99 innovative teams and 99 outstanding individuals were recognised.

Labour unions of the Company organised "May 1st" recognition seminar. The Company received a total of 254 external honours on comprehensive and specific categories at national, provincial and ministerial levels, including 14 national honours, 240 provincial and ministerial honours, 101 group honours and 153 individual honours while the number of honours within each category reaches a historical high. 48 units of pioneer group of China Telecom and 149 outstanding workers were recognised. 1 grassroots unit was awarded the title of pioneer group of china national defense posts and telecommunications industry, 1 junior staff was awarded the title of outstanding workshop manager, 1 vice chairman of labour unions at provincial level was awarded the title of the most dependable colleague and 6 employees were awarded the title of craftsman in telecommunications industry.

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### Coordination and Communication between the Company and the Labour Unions

Surrounding the key tasks of business development, the Company's unions and business department organised 6 skills competitions and 6 labour competitions. 18 technical masters of state-owned enterprises (B2 grade), 116 company technical/labour masters (C2 grade) and 847 company technical/labour pacesetters (C3 grade) were selected through the competitions. We organised real-practice competitions and selection contests such as concurrent enhancement on the quality of mobile and fibre networks, IT skills, maintenance skills at company level and cloud base facilities which earned a good reputation among the employees. All levels of enterprises and unions carried out more than 3,700 labour competitions, held "My job, my innovation" series activities, and organised over 2,500 activities such as job innovation contest, case sharing and micro-innovation activities resulting in more than 19,000 job innovation achievements and where they have been imitated by others for more than 5,500 times. The Company established 1,246 innovation workshops named after innovative and outstanding employees.

### Caring for Employees

The Company included the establishment of "Four-Small" into the key work evaluation. The Company's labour unions evaluated the establishment of "Four-Small" on a quarterly basis. Responding to everyday demands of our employees, enterprises at all levels newly built 2,203 "Four-Small" facilities, consolidated and enhanced 7,353 established "Four-Small", and invested over RMB237 million. We selected and set over 1,100 "Four-Small" benchmarks. The "Four-Small" established by northern counties' branches increased to 82% from 31%. Standardised and regulated construction of "Four-Small" was promoted by the Anhui and Tibet branches and the comprehensive improvement on the environment of the counties' branches was promoted by branches in Hunan, Guizhou and Jiangsu which enriched the connotation of "Four-Small" brand.

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Labour unions at all levels actively responded to employee's needs, and helped with over 14,000 tasks for employees cumulatively, and installed more than 1,600 air purifiers in offices and almost 6,000 water purifiers for grassroots. We expanded the channels and contents for employees' services, organised more than 2,700 health seminar and EAP pressure relief activities. The labour unions provided medical services to more than 47,000 individuals and travel convenience for over 60,000 employees. We organised more than 7,000 group buying activities for employees and improved the accommodation conditions for over 9,000 employees. Labour unions at all levels assisted 18,900 employees who were in hardship.

During New Year and Lunar New Year holidays, which were critical periods for operations and production, all levels of management visited frontline employees to show their care for employees. The Company expressed sympathy and care to more than 60,000 frontline employees who insisted on staying on duty during national holidays. We timely visited employees from 12 provinces affected by disasters. Labour unions at all levels congratulated employees who had newborns, whose children were admitted to schools and universities and whose children were enlisted, expressed their sympathy when the employees suffer from sickness and death of their family members. Over 1,500 knowledge exchange activities among outstanding workers were held by all level of labour unions.

The "Scholar Family" reading activities were held by the labour unions for four consecutive years and the selection activities of 100 "Elite Female" store managers and excellent channel managers had been held by the labour unions for five consecutive years. Provincial branches in Anhui and Guangdong arranged 2,221 outstanding female representatives and female workers to subscribe for the HPV vaccine injection project organised by Women Workers' Department of All-China Federation of Trade Union. We built over 1,000 Mommy Cabins, purchased over 3,000 radiation protection suits for female employees during pregnancy, organised over 700 female-worker themed seminars and carried out approximately 3,000 activities for female employees on Women's Day.

The labour unions organised the "e-Surfing Cup" employee table tennis match. We organised participation in various activities which was organised by Communication Sports Association, and got excellent results in matches such as national bridge game tournament, national representative employees table tennis and football matches and table tennis and volleyball matches in telecommunications industry. Employees in China Telecom gave brilliant performances. Labour unions at all levels carried out cumulatively 37,000 various activities with the participation rate of employees reaching 88%. Recreational and sports activities went deep into the frontlines which enriched the cultural life of employees and strengthened their team spirit.



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### Strengthening Human Capital

#### Supporting National Key Training Programme

China Telecom actively undertook and participated in the national professional knowledge update projects for professional and technical personnel. In October 2018, we held the knowledge update project seminar of the Ministry of Human Resources and Social Sciences at China Telecom College — “Advanced Training Class on Key Technology in Supply Chain of Internet of Things”. Professional technicians or managers in advanced professional and technical positions from 72 units, such as Internet of Things, information technology management and intelligent product innovation attended the seminar.

We actively promoted the construction of national-level professional and technical personnel continuing education base. In 2018, the training centre in China Telecom Zhejiang branch was used as a national-level professional and personnel continuing education base. We updated the knowledge for national-level professional and technical personnel, expanded their knowledge structure and improved the comprehensive quality and innovation capabilities of the participants. Focusing on the four areas of “Information, Equipment Manufacturing, Financial Accounting and Social Works”, we implemented training programme for training and cultivation of talents that are in urgent demand and job training programme with trainees almost reaching 10,000 people. We endeavoured to

become the service platform for cultivating high-level, urgently-needed and backbone professional and technical personnel for the nation.

#### Efficient Operations of Online College

In 2018, China Telecom Online College focused on the Company’s annual training key areas. We promoted the open sharing of products, data and capabilities by creating an open platform, continually strengthened the resources building and operation by constructing quality resources and carrying out theme resources marketing activities and effectively enhanced the application level in aspects of centralised management training of the Company, intellectualisation of talent development and intelligentisation of employee learning.

In 2018, China Telecom Online College had cumulatively supported 36,514 face-to-face training classes. With 148,828 people using the Online College to study, we had added 4,705 online learning resources, held 181 skills certification and professional examinations for 32 job units, organised and held 530 online training classes.

Focusing on key business areas, China Telecom Online College organised study activities such as knowledge contest and case collection for positions such as “Unit CEO”. Focusing on the government-enterprise line, the Online College organised the 59th political enterprise business learning courses, further enhancing business development in key areas.



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### Building up the Internal Training Team

In 2018, China Telecom held the score based evaluation and star-grade recognition on the special recruitment, recruitment and trial recruitment of the internal trainers of the Company. Two internal trainer teams at the group-level relating to enterprise information and cloud computing were added. By December 2018, there were a total of 10,799 internal trainers at all levels in China Telecom, of which the company-level internal trainers reached 885 people. Following 5 steps of recruitment, selection, cultivation, utilisation and evaluation, and leveraging the internal trainers management IT system, we built the internal trainers team and implemented the tiered management training mode.

### Cultivating Professional Talents

In 2018, in the aspect of cultivating professional and leading talents in advanced high-level transformation, we commenced “Spark Programme” for the transformation of cultivating professional and high-level talents in three professional fields including Big Data, 5G and cloud computing through cooperating with top research and development institutions, laboratories and enterprises. In the aspect of cultivating high-level professional talents, the Company held 23 professional talents training courses at a corporate level with 630 trainees. In the aspect of capabilities enhancement of professional and technical talents, the Company proactively organised various training courses and talent training camps. Through society recognition, industry recognition, company recognition and various other methods, the perfect and highly skilled talents assessment system which met the requirements of the characteristics of telecommunications industry and enterprise talent current status was established.



The “Five-Phase Training Programme” was commenced for newly recruited young employees in the Government and Enterprise Business Department

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### Building Junior Employees' Capacity

We organised a new session of "Unit CEO" Capacity Improvement and Cultivation for the period of 3 years (2018-2020). The number of "Unit CEO" training courses at the corporate level broke through 100 during this year for the first time with 4,685 participants, which was 43% more than that in 2017. We organised 26 training courses such as courses development, training sessions with top professors and training sessions for core employees, providing courses, teachers, operational standards and case studies in all aspects for provincial and municipal branches. We organised joint training for six major areas nationwide, with total of 74 training courses, which successfully promoted the sharing of training resources and cross-regional experience.

Good news arose from each professional lines, real-life training. The first was the government-enterprise professional line. On 9 May 2018, the "Value-Creation Marketing" of China Telecom's government-enterprise professionals were awarded "2017 ATD excellence in Practice Award". The second was the "store manager training" of the distribution channel line, it was awarded "2018 the Best Practical Award" by the China International Society of Performance Improvement. The third was the "e-Surfing crossing together" activity for

promoting experience of transformation and practical benchmark organised by the marketing department with various departments, which effectively promoted seizing opportunities in different areas, accelerated development and transformation while the way of delivering training to grassroots was widely welcomed. The fourth was the network operation and IT operation focused on the emerging area "Cloud Network Integration" with talent cultivation project and construction of real training base, while the development of cloud business and cloud changing project had made new exploration and breakthrough.

### Inducing and Nurturing Brilliant Young Talents

We continuously promoted regularised operation management of the internship programme. Leveraging our internship platform, we organised spring internship, summer internship, day-to-day internship and other activities to expand the channels to induce brilliant young talents for campus recruitment. We also continued to organise top graduate cultivation programme, while over 1,300 top graduates for this programme were selected by units at all levels. The Company organised 3 sessions of corporate-level outstanding graduate demonstration class, which drove the Company to strengthen the training of outstanding young employees.

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### Recruitment

The Company recruits fresh university graduates and mature talents from the society. The Company organised unified platform, unified advertising and unified key universities promotions and talks to recruit fresh graduates. Throughout the year, the Company recruited more than 7,000 new graduates. The Company promoted the realisation of full coverage of the pilot programme for new employee tutoring projects within the Company, and formulated the *Administrative Measures of China Telecom Pilot Programme for New Employee Tutoring Projects* to guide units at all levels to carry out the work of pilot programme for new employee tutoring projects. For the recruitment of mature talents from the society, the units at all levels orderly organised recruitment in accordance with business development needs.

To provide opportunities for the employees' career development, the Company developed a comprehensive dual promotion channel. Promotion is based on the principles of fairness, justice, openness and transparency. The Company fully respects employees' rights of choice, knowledge and scrutiny.

In the recruitment and promotion processes, the Company treats all candidates and employees equally regardless of gender, age and race.

The Company strictly abides by the national regulations relating to employees' working hours and implemented the *Regulations on Paid Annual Leave for Employees* promulgated by the State Council and formulated the relevant policies in relation to employee vacation.

The Company strictly abides by the laws and regulations such as the *Labour Law of the People's Republic of China* and the *Labour Contract Law of the People's Republic of China* to regulate its employment practices. The Company adheres to offering equality of remuneration and work for male and female employees and implements special regulations to protect female employees' rights and interests. There were no discriminatory policies or regulations, nor had there been any circumstance whereby child labour or forced labour was employed. The Company strictly abides by relevant regulations of the labour contract law and constantly improved the relevant employee management systems. Taking into account the actual circumstances of the Company, we established relevant system and developed detailed provisions for termination of employee labour contracts.

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### Remuneration and Performance Management

#### Remuneration

The Company implemented the differentiated remuneration distribution system under which positions are used as the foundation, a close and direct linkage between performance and contribution is established and which is applicable to characteristics of different positions. The system is mainly comprised of post salary, performance salary, allowance and subsidies, insurance benefits, etc..

Meanwhile, all units are encouraged to actively explore remuneration distribution methods that meet different positions' characteristics according to business development requirements, including annual salary system, commission fee system, project wage system and piece-rate wage system. We adhere to being performance-oriented and fair in internal distribution and tilt towards high-quality professionals and frontline staff so as to encourage more pay for more work.

Persisting in the optimisation and perfection of labour costs resources allocation, as well as the close linkage between corporate development and performance contribution, we implemented different resources allocation model for various units integrating with its own characteristics, and fully mobilised the enthusiasm and initiatives of development of various units, encouraging everyone to adhere to "high contribution, high yield" and "early development, early benefit".

#### Performance management

The Company has established a relatively comprehensive performance evaluation system for all of its employees. Branches at all levels have established employees' performance evaluation teams which are led by the respective general managers of the relevant branches and have formulated evaluation methods for deputies, functional departments, subordinated units and general employees. The Company improves its employee evaluation and incentive mechanism and the related scrutiny and supervision system to ensure fair and reliable performance evaluation results. At the same time, we further optimise and improve the performance evaluation system and implement performance evaluation by categories of business units, deputies, mid-level management and employees of all levels, enhancing the specificity of the performance evaluation.

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## Table of the ESG Indicators

Issues	Name of Indicators	Units	Year 2018	Year 2017
Emissions	Scope 1: Direct greenhouse gas emissions <sup>1</sup>	million tons CO <sub>2</sub> e	0.28	0.29
	Scope 2: Indirect greenhouse gas emissions <sup>1</sup>	million tons CO <sub>2</sub> e	11.75	11.22
	Total greenhouse gas emissions <sup>1</sup>	million tons CO <sub>2</sub> e	12.02	11.51
	Greenhouse gas emissions per unit operating revenue	tCO <sub>2</sub> e/million yuan	31.88	31.42
	Sewage emissions <sup>2</sup>	million tons	36.42	37.55
	SO <sub>2</sub> emissions <sup>3</sup>	tons	65.69	122.11
	Waste disposal amount <sup>4</sup>	tons	101,917.88	121,276.15
	Waste storage batteries disposal amount <sup>4</sup>	tons	11,397.72	11,588.42
	Waste telecommunications equipment disposal amount <sup>4</sup>	tons	10,201.40	14,005.04
	Waste cables disposal amount <sup>4</sup>	tons	67,891.16	85,561.88
	Waste terminals disposal amount <sup>4</sup>	tons	625.63	587.56
	Other waste disposal amount <sup>4</sup>	tons	11,801.97	9,533.23
	Domestic waste emissions <sup>5</sup>	tons	21,711.10	19,134.93
Use of Resources	Electricity consumption	100 million kwh	170.96	162.76
	Natural gas consumption	million m <sup>3</sup>	9.21	8.50
	Coal consumption	10,000 tons	0.49	0.91
	Gasoline consumption	10,000 tons	6.28	6.15
	Diesel consumption	10,000 tons	1.73	2.04
	Purchased heat consumption amount	GJ	1,464,480.69	1,500,277.53
	Overall energy consumption <sup>6</sup>	tce	2,285,326.69	2,191,379.37
	Overall energy consumption per unit of information flow	kgce/TB	5.91	7.10
	Overall energy consumption per operating revenue	kgce/million yuan	6,059.89	5,983.63
	Power consumption per carrier frequency at base stations	kwh/carrier frequency	678.31	721.77
	Water consumption	million tons	42.85	44.18
	Water consumption per unit operating revenue	tons/million yuan	113.61	120.63
	Coverage rate of energy-saving technology at base stations	%	63.03	67.00
	Coverage rate of energy-saving technology at telecommunications equipment room	%	67.85	72.81
	Reclaimed water consumption	tons	44,574.97	36,531.37

# Environmental, Social and Governance Report

## Table of the ESG Indicators

Issues	Name of Indicators	Units	Year 2018	Year 2017
<b>The Environment and Natural Resources</b>	Investment in energy saving and emission reduction	million yuan	<b>674.36</b>	531.94
	Times of video conferencing	–	<b>39,406</b>	36,896
	4G international roaming countries and regions	–	<b>158</b>	137
	Domestic administrative village fibre broadband coverage <sup>7</sup>	%	<b>92</b>	85
	Domestic administrative village 4G network coverage	%	<b>91</b>	88
	Internet backbone interconnection bandwidth	Gbps	<b>5,886.00</b>	4,656.31
	International interconnection bandwidth	Gbps	<b>5,640.64</b>	4,902.15
	Call drop rate of mobile communication	%	<b>0.22</b>	0.24
	Call completing rate of mobile communication network	%	<b>97.81</b>	97.51
	Call completing rate for access line	%	<b>92.35</b>	94.86
	Packet loss rate of broadband Internet ChinaNet backbone network	%	<b>0.06</b>	0.02
<b>Product Responsibility</b>	Degree of satisfaction of mobile Internet users <sup>8</sup>	points <sup>9</sup>	<b>78.92</b>	76.40
	Degree of satisfaction of mobile voice users <sup>8</sup>	points <sup>9</sup>	<b>83.80</b>	80.92
	Degree of satisfaction of fixed Internet users <sup>8</sup>	points <sup>9</sup>	<b>79.86</b>	75.03
	Degree of satisfaction of access line users <sup>8</sup>	points <sup>9</sup>	<b>84.98</b>	79.41
	Percentage of in-time response to customer repair reports	%	<b>98.80</b>	98.30
	Degree of satisfaction of international customers	points <sup>9</sup>	<b>90.40</b>	90.10
	Number of newly acquired patent authorisation	–	<b>520</b>	432
	Number of newly acquired invention patent authorisation	–	<b>490</b>	406
	Number of phishing and fraud websites blocked	–	<b>12,283</b>	3,744
	Anti-corruption education programmes organised	–	<b>20,242</b>	11,478
<b>Anti-corruption</b>	Attendance of anti-corruption education and trainings	person-times	<b>782,658</b>	598,778

# Environmental, Social and Governance Report

## Table of the ESG Indicators

Issues	Name of Indicators	Units	Year 2018	Year 2017
Employment	Percentage of employees participating in labour union	%	100	100
	Percentage of female employees at management level	%	19.63	19.39
	Total number of employees <sup>10</sup>	–	280,747	284,206
	Percentage of employees aged 30 and below	%	13.50	13.89
	Percentage of employees aged 31 to 50	%	71.60	72.37
	Percentage of employees aged 51 and above	%	14.90	13.74
	Percentage of male employees	%	67.83	67.61
	Percentage of female employees	%	32.17	32.39
	Percentage of employees of ethnic minorities	%	6.44	6.39
	Percentage of local employees hired in Hong Kong, Macau, Taiwan and overseas branches	%	43	42
	Total number of newly-hired employees	–	9,641	8,888
	Percentage of newly-hired male employees	%	58.88	58.44
	Percentage of newly-hired female employees	%	41.12	41.56
	Number of resigned employees	–	4,704	4,599
	Percentage of male employees among resigned employees	%	64.90	65.80
	Percentage of female employees among resigned employees	%	35.10	34.20
	Total number of dismissed employees	–	253	337
	Percentage of male employees among dismissed employees	%	66.80	73.29
	Percentage of female employees among dismissed employees	%	33.20	26.71



# Environmental, Social and Governance Report

## Table of the ESG Indicators

Issues	Name of Indicators	Units	Year 2018	Year 2017
Health and Safety	Death rate in accidents per 1,000 employees	%	0	0.0035
	Injury rate in accidents per 1,000 employees	%	0	0
	Loss of working days due to work-related injury	–	0	0
	Number of participants in safety emergency drills	person-times	258,598	192,958
	Number of participants in health and safety trainings	person-times	415,361	263,598
	Participation rate of employee health checkup	%	100	100
	Training expenses per employee	yuan/person	2,630.99	2,584.60
Development and Training	Number of internal trainers	–	10,799	10,151
	Number of training participants	10,000 person-times	51.42	46.62
	Number of senior management trained	person-times	456	360
	Number of middle-level management trained	person-times	73,846	58,884
	Number of general employees trained	person-times	439,853	406,913
	Number of male employees trained	person-times	338,644	309,534
	Number of female employees trained	person-times	175,511	156,666
	Number of employees enrolled in online college	10,000 persons	14.88	27.03
	Average training time per employee <sup>11</sup>	hours/person	25.03	23.52
	Average training time per senior management <sup>11</sup>	hours/person	54.07	56.71
	Average training time per middle-level management <sup>11</sup>	hours/person	35.40	33.01
	Average training time per general employee <sup>11</sup>	hours/person	23.53	21.88
	Average training time per male employee <sup>11</sup>	hours/person	26.16	23.60
	Average training time per female employee <sup>11</sup>	hours/person	22.81	22.33
	Average training time in online college per employee	hours/person	27.95	16.60

# Environmental, Social and Governance Report

## Table of the ESG Indicators

Issues	Name of Indicators	Units	Year 2018	Year 2017
Community Investment	Number of registered employee volunteers	10,000 persons	5.96	4.38
	Total service time of volunteers	10,000 hours	53.11	47.39
	Number of participants in volunteering activities	10,000 person-times	10.45	8.97
	Number of volunteering activities	sessions	8,791	9,867
	Volunteer service activities input amount	million yuan	13.86	10.75
	Total donation	million yuan	20	23
	Number of participated pole line co-construction	kilometres	3,268	5,687
	Number of provided pole line co-sharing	kilometres	20,291	22,198
	Number of participated pipeline co-construction	kilometres	5,207	3,564
	Number of provided pipeline co-sharing	kilometres	1,346	1,533
	Number of participated indoor distribution system co-construction	–	6,094	9,249
	Number of provided indoor distribution system co-sharing	–	927	1,299
	Personnel involved in emergency communication support	person-times	87,046	111,610
	Number of emergency communication equipment dispatched	set-times	17,379	19,494
	Number of emergency communication vehicles dispatched	vehicle-times	22,780	25,990
	Number of emergency public service messages sent	million pieces	37.48	23.01

# Environmental, Social and Governance Report

## Table of the ESG Indicators

### Notes:

1. *The greenhouse gas is measured based on the Greenhouse Gas Protocol — Enterprise Accounting and Reporting Standards of World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD), the 2006 IPCC Guidelines for National Greenhouse Gas Inventories of Intergovernmental Panel on Climate Change (IPCC) and the Fourth Assessment Report 2007 of Intergovernmental Panel on Climate Change (IPCC), etc.*  
*Scope I: direct greenhouse gas emission includes the greenhouse gas emission from use of natural gas, coal, kerosene, gasoline and diesel.*  
*Scope II: indirect greenhouse gas emission includes the greenhouse gas emission from purchased electricity and heating power, where the electricity emission factors shall refer to the base line emission factors of regional power grids in China released by National Development and Reform Commission, Department of Climate Change.*  
*Total greenhouse gas emission shall be the sum of Scope I (direct greenhouse gas emission) and Scope II (indirect greenhouse gas emission).*
2. *The quantity of sewage emission is measured based on water consumption, and the wastewater discharge coefficient shall refer to GB50318-2017 Code of Urban Wastewater Engineering Planning of the National Standards of the PRC and relevant documents of National Bureau of Statistics of the PRC.*
3. *SO<sub>2</sub> emissions is calculated with the method of the State-owned Assets Supervision and Administration Commission of the State Council of the PRC.*
4. *The major types of waste of the Company include worn out facilities, equipment and materials. The Company generally does not disassemble the waste facilities, but hand over to a qualified third party to dispose in accordance with the relevant regulations of the country and the area of operation. Since it is difficult to separate hazardous waste and non-hazardous waste, the major processed waste is disclosed in a detail list in this report.*
5. *The quantity of domestic waste emission in 2017 is measured based on the per capita household waste output coefficient as specified in the guidance released by the State Council of the PRC in 2008. The quantity of domestic waste emission in 2018 is converted based on the current commonly used per capita household waste production coefficient.*
6. *Overall energy consumption is calculated with the energy statistics calculation method applied by National Bureau of Statistics of the PRC.*
7. *Domestic administrative village fibre broadband coverage targets the fixed network service area of China Telecom Corporation Limited.*
8. *The 2018 results of “degree of satisfaction of mobile Internet users”, “degree of satisfaction of mobile voice users”, “degree of satisfaction of fixed Internet users” and “degree of satisfaction of access line users” are quoted from the 2018 national telecom service quality satisfaction evaluation by the Ministry of Industry and Information Technology of the PRC.*
9. *The full mark of user satisfaction measurement is 100.*
10. *The total number of employees includes the number of contract workers and the number of labour dispatch.*
11. *Training time per employee refers to offline training time for employees.*

# Environmental, Social and Governance Report

## Independent Assurance Report

**Deloitte.**

德勤

### Independent Assurance Report

#### To the Board of Directors of China Telecom Corporation Limited (the "Board of Directors"):

We have been engaged by the Board of Directors of China Telecom Corporation Limited ("China Telecom") to perform a limited assurance engagement on its *Environmental, Social and Governance* performance indicators (see "table of the ESG indicators") in the *Corporate Social Responsibility Report and Human Resource Report* ("The Report") in *Environmental, Social and Governance Report* ("ESG report") of 2018 annual report for the period from 1 January 2018 to 31 December 2018.

#### Responsibilities of the Board of Directors

The Board of Directors is responsible for preparing *The Report* in accordance with *Environmental, Social and Governance Reporting Guide* ("ESG Reporting Guide") issued by Hong Kong Stock Exchange, and its presentation (including reporting guidelines, limitations, reporting data and relevant identification procedures).

The Board of Directors is also responsible for determining China Telecom's objectives in respect of **with Environmental, Social and Governance ("ESG") performance and reporting**, including identifying stakeholders and relevant material issues, establishing and maintaining appropriate ESG performance management system and internal control system for obtaining performance information in the report, and maintaining sufficient records.

#### Our Responsibilities

In accordance with the agreed terms with China Telecom, we are responsible for performing a limited level of assurance engagement on the ESG indicators (see "table of the ESG indicators") in the Report, and expressing an opinion on the ESG indicators. Our work is only for the Board of Directors, and for no other purposes. We do not assume responsibility or accept liability to any other person or third parties for our work or the contents in this Report.

#### Our Independence and Quality Control

We conducted our engagement in accordance with the **independence and other ethical requirements** in the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants. We maintains a comprehensive system of quality control applying *International Standard on Quality Control 1*.

#### Basis of Our Work

We conducted our work in accordance with *International Standard on Assurance Engagements 3000: Assurance Engagements Other Than Audits or Reviews of Historical Financial Information* issued by the International Federation of Accountants. We planned and performed our engagement to obtain all the information and evidences which we considered necessary to form conclusions.

#### Procedures, Scopes and Limitations of Our Work

Our work performed includes interviewing personnel responsible for the Report, analysing information, and other steps to collect evidences. Specifically our procedures include:

- Interviewing management and staff responsible for the ESG indicators, to understand the process for determining the applicable controls.
- Establishing acknowledgement of the ESG indicators regarding the Report with China Telecom to perform this limited assurance engagement.
- Analysing sampled data, and performance claims, reviewing its consistency with our work results, and assessing the effectiveness of the control on the report preparation procedure.
- Visiting to the head office and the selected 2 branches in Zhejiang and Jilin based on the results of risk analysis;
- Assessing the consistency of the key financial data in the Report with the data in the audited financial statements.

Limited assurance conducts process to confirm the credibility of information, and its scope is smaller than that of reasonable assurance. Our work performed is not for the purpose of expressing an opinion on the effectiveness of China Telecom's internal control.

We performed our limited assurance engagement at headquarter and 2 branches of China Telecom in Zhejiang and Jilin. We did not carry out such engagement at any other branches and subsidiaries of China Telecom, nor interview with external stakeholders. Moreover, historical data and financial information are not within the scope of our work.

#### Our Conclusions

Based on our work performed, nothing has come to our attention that would lead us to believe that there is any material misstatement related to the ESG indicators in the 2018 Report.

This is translation of the Chinese language version of the Independent Assurance Report. If there is any conflict between the Chinese and English version, the Chinese version will prevail.

Deloitte Touche Tohmatsu Certified Public Accountants LLP  
19 March 2019



# Environmental, Social and Governance Report

## Appendix — ESG Reporting Guide Index

Aspect	Description of Indicators	Page
A1: Emissions	<p>General Disclosure</p> <p>Information on:</p> <p>(a) the policies; and</p> <p>(b) compliance with relevant laws and regulations that have a significant impact on the issuer</p> <p>relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.</p> <p><i>Note: Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.</i></p>	100–102
A1.1	The types of emissions and respective emissions data.	116
A1.2	Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	116
A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	116
A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	116
A1.5	Description of measures to mitigate emissions and results achieved.	100–102
A1.6	Description of how hazardous and non-hazardous wastes are handled, reduction initiatives and results achieved.	101–102

# Environmental, Social and Governance Report

## Appendix — ESG Reporting Guide Index

Aspect	Description of Indicators	Page
A2: Use of Resources	General Disclosure	100–102
	Policies on the efficient use of resources, including energy, water and other raw materials.	
	<i>Note: Resources may be used in production, in storage, transportation, in buildings, electronic equipment, etc.</i>	
	A2.1 Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	116
	A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facility).	116
	A2.3 Description of energy use efficiency initiatives and results achieved.	100–102
	A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	101–102
A3: The Environment and Natural Resources	A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not Applicable <sup>1</sup>
	General Disclosure	101–103
	Policies on minimising the issuer's significant impact on the environment and natural resources.	
B1: Employment	A3.1 Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	101–103
	General Disclosure	96–100,
B1: Employment	Information on:	114–115
	(a) the policies; and	
	(b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	
	B1.1 Total workforce by gender, employment type, age group and geographical region.	107, 118
	B1.2 Employee turnover rate by gender, age group and geographical region.	118



# Environmental, Social and Governance Report

## Appendix — ESG Reporting Guide Index

Aspect	Description of Indicators	Page
B2: Health and Safety	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	99
	B2.1 Number and rate of work-related fatalities.	119
	B2.2 Lost days due to work injury.	119
	B2.3 Description of occupational health and safety measures adopted, how they are implemented and monitored.	99
B3: Development and Training	General Disclosure Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. <i>Note: Training refers to vocational training. It may include internal and external courses paid by the employer.</i>	98–99, 111–113
	B3.1 The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	119
	B3.2 The average training hours completed per employee by gender and employee category.	119
B4: Labour Standards	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	97–98, 114
	B4.1 Description of measures to review employment practices to avoid child and forced labour.	97–98, 114
	B4.2 Description of steps taken to eliminate such practices when discovered.	97–98, 114
B5: Supply Chain Management	General Disclosure Policies on managing environmental and social risks of the supply chain.	103–104
	B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	103–104

# Environmental, Social and Governance Report

## Appendix — ESG Reporting Guide Index

Aspect	Description of Indicators	Page
B6: Product Responsibility	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	91–96
	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not Applicable <sup>2</sup>
	B6.2 Number of products and service related complaints received and how they are dealt with.	95
	B6.3 Description of practices relating to observing and protecting intellectual property rights.	91–92
	B6.4 Description of quality assurance process and recall procedures.	Not Applicable <sup>2</sup>
	B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	95
B7: Anti-corruption	General Disclosure Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	91–92
	B7.2 Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	91–92
B8: Community Investment	General Disclosure Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	104
	B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	104
	B8.2 Resources contributed (e.g. money or time) to the focus area.	120

### Notes:

1. Packaging materials used for the finished products do not apply to the practice of the Company. Through the identification of substantive issues, we mainly reported the recycling and reusing of the resources such as storage batteries, cables, terminals that the Company mainly use, in the process of operations and services. For more details, please refer to "VI. Practicing green development" of Corporate Social Responsibility Report.
2. Recalling products shall not apply to the practice of the Company. Through the identification of substantive issues, we mainly reported on maintaining network information security, assuring emergency communications and protecting the rights of customers. For more details, please refer to "III. Providing high quality network assurance" and "IV. Providing heartfelt services to customers" of Corporate Social Responsibility Report.