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# **Chairman's Statement**

# Embrace the 5G Era and Create a Future of Intelligent Connectivity Together

The year 2018 marks the 40th anniversary of China's reform and opening up. Over the years, China's information and communications technology (ICT) sector has made massive strides to establish itself as one of the industrial leaders worldwide. China Mobile continues to enhance economic and social well-being through ICT and acts as a key driver in the historic transformation of China's ICT sector that has undergone different phases: blankness in 1G, falling behind in 2G, making breakthroughs in 3G, keeping pace in 4G, and leading in 5G. To capture the opportunities associated with 5G, in 2018, China Mobile strove constantly to build stronger connectivity capabilities, joined hands with other industry players to accelerate digital innovation, and actively fulfilled its social responsibilities, thereby playing an active role in building China's strengths in cyberspace and digital technology.

# Yang Jie

Chairman China Mobile Limited



Provide high-quality connections and consolidate digital infrastructure. We continued to expand the depth and width of our network coverage to deliver unimpeded, high-quality and high-speed connectivity capabilities. As of the end of 2018, we had 2.41 million 4G base stations and had served 713 million 4G customers and 157 million wireline broadband customers and launched our international data roaming services in 239 countries/regions. We had rolled out NB-IoT in 346 cities, and achieved continuous coverage at township level and above. The number of our IoT smart connections grew by 322 million to 551 million. At the same time, we actively harnessed new technologies such as artificial intelligence to boost cloud computing and data center infrastructure upgrades with a view to building new world-class information infrastructure.

Pioneer technological innovations and create an intelligent, beautiful life. We continued to promote research on key technologies and applications, taking the lead in developing international standards for 5G infrastructure and actively engaging in 5G network scale experimentation and business use case demonstration. We launched the "5G Device Forerunner Initiative" and built global open laboratories and 5G industry alliances based on our 5G Joint Innovation Center to promote the maturity of the end-to-end industry chain. As part of our R&D deployment expansion efforts, we established three new industry research institutes in Xiong'an New Area, Chengdu and Shanghai in 2018. We incubated 5G demonstrative applications across key verticals of the economy including industry, agriculture, healthcare, education, transportation, finance and smart cities to drive the in-depth integration between digital economy and real economy and the construction of an intelligent society.

Deepen industry cooperation and create a prosperous digital ecosystem. We continued to implement the 139 Cooperation Plan with three major specific measures, namely upscaling digital industry cooperation, strengthening digital home cooperation, and deepening pan-intelligent terminal cooperation, to provide industry partners with an open platform for achieving win-win cooperation. In 2018, our communications capability sharing platform was selected as a Sharing Economy Demonstration Platform by the National Development and Reform Commission of China, serving more than 305,000 enterprises; our mobile authentication platform processed an average of 670 million accreditations per day; and our OneNET IoT platform brought together 9,396 enterprises and empowered nearly 100,000 developers. We were actively engaged in building a national-level mass entrepreneurship and innovation demonstration base and made an all-out effort to inspire entrepreneurship and innovation, both internal and

external, through a series of initiatives, including the And-Creation Space, independent development competitions as well as employee entrepreneurship and innovation activities, and to support and empower SMEs and individual entrepreneurs. We stepped up strategic cooperation with our industry peers on all fronts in emerging technology areas such as 5G, Internet of Vehicles and artificial intelligence to jointly explore new opportunities in digital services.

Fulfill responsibilities in all respects and share sustainable value. We further implemented measures of speed upgrade and tariff reduction to bring affordable information access to our customers. We continued putting in more efforts to combat telecommunications frauds and regulate harmful information and devising new methods to safeguard information security for our customers. We actively implemented special initiatives including the Telecommunications Universal Service Project, cumulatively delivering broadband access to 417,000 administrative villages and bringing 4G coverage to 97.8% of all administrative villages, thereby further narrowing the urban-rural digital divide. We deepened our partner assistance and targeted poverty alleviation efforts in eight counties of five provinces, expanded the scope of our Targeted Poverty Alleviation System and poverty-alleviation preferential tariffs, and launched projects in livelihood enhancement, industry support, education improvement, healthcare and many other aspects to do our part in supporting rural revitalization and fighting poverty. Our Blue Dream Educational Aid Plan and Heart Caring Campaign continued in 2018, through which we cumulatively trained 115,782 rural primary and secondary school principals in central and western China and sponsored the surgeries of 5,358 impoverished children with congenital heart disease. We carried out the "Green Action Plan" for the 12th consecutive year and contributed to the realization of UN Sustainable Development Goals through measures such as continuously improving energy conservation and emission reduction management and developing low-carbon environmentally friendly applications.

At the dawn of the 5G era, China Mobile is intent on continuing to pioneer technological innovations powered by 5G, big data and artificial intelligence and uniting with other industry players, in order to drive the digital and intelligent transformation of our economic and social life and jointly shape a new future of intelligent connectivity that is to the benefit of everyone.



March 2019

# **About China Mobile**

# **Company Profile**

As the largest telecommunications service provider in Mainland China, China Mobile Limited ("China Mobile", "the Company" or "we") serves the world's largest number of mobile customers and operates the world's largest mobile network, maintaining a leading position in the telecommunications market in Mainland China.

#### Incorporation

3 September 1997 in Hong Kong, China.

#### **Operation Regions**

All 31 provinces, autonomous regions and directly administrated municipalities in Mainland China, and the Hong Kong Special Administrative Region.

#### **Credit Rating**

Currently, the Company's corporate credit ratings continue to be equivalent to China's sovereign credit ratings from Standard & Poor's and Moody's.

#### Shareholding Structure

The Company's ultimate controlling shareholder is China Mobile Communications Group Co., Ltd. ("the parent company"), which indirectly held approximately 72.72% of the total number of issued shares of the Company as of 31 December 2018. The remaining approximately 27.28% was held by public investors.

# Honors and Recognitions

- Ranked the 25th in the "2018 Forbes Global 2000 List";
- Listed in the "BrandZ<sup>™</sup> Top 100 Most Valuable Global Brands 2018" published by Kantar Millward Brown and Financial Times for the 13th consecutive year, ranking 21st globally;
- Continued to be the first and only company from Mainland China listed in CDP's Climate A List for the third consecutive year, and was acclaimed as a Sustainability Leadership Enterprise Model by CDP China for our work to tackle climate change for the fifth consecutive year;
- Received "The Asset Platinum Award" from The Asset;
- Ranked 1st in the "Social Responsibility Development Index of Chinese Enterprises Top 300 2009-2018", and won the "10 Years of Responsibility; Top 10 State-owned Enterprises" award;
- Won the "Exemplary Enterprise Award for Sustainable Competitiveness" presented by Outstanding Chinese Enterprises with Sustainable Competitiveness 2018.

# **Organizational Structure**

The Company owns 100% interest in the following major subsidiaries:

China Mobile Communication Company Limited, China Mobile Guangdong Company Limited, China Mobile Group Zhejiang Company Limited, China Mobile Group Jiangsu Company Limited, China Mobile Group Fujian Company Limited, China Mobile Group Henan Company Limited, China Mobile Group Hainan Company Limited, China Mobile Group Beijing Company Limited, China Mobile Group Shanghai Company Limited, China Mobile Group Tianjin Company Limited, China Mobile Group Hebei Company Limited, China Mobile Group Liaoning Company Limited, China Mobile Group Shandong Company Limited, China Mobile Group Guangxi Company Limited, China Mobile Group Anhui Company Limited, China Mobile Group Jiangxi Company Limited, China Mobile Group Chongqing Company Limited, China Mobile Group Sichuan Company Limited, China Mobile Group Hubei Company Limited, China Mobile Group Hunan Company Limited, China Mobile Group Shaanxi Company Limited, China Mobile Group Shanxi Company Limited, China Mobile Group Neimenggu Company Limited, China Mobile Group Jilin Company Limited, China Mobile Group Heilongjiang Company Limited, China Mobile Group Guizhou Company Limited, China Mobile Group Yunnan Company Limited, China Mobile Group Xizang Company Limited, China Mobile Group Gansu Company Limited, China Mobile Group Qinghai Company Limited, China Mobile Group Ningxia Company Limited, China Mobile Group Xinjiang Company Limited, China Mobile Group Design Institute Company Limited, China Mobile Hong Kong Company Limited, China Mobile International Limited, China Mobile IoT Company Limited, China Mobile Information Technology Limited, China Mobile Online Services Company Limited, China Mobile (Suzhou) Software Technology Company Limited, China Mobile (Hangzhou) Information Technology Company Limited, MIGU Company Limited, China Mobile Internet Company Limited, China Mobile Tietong Company Limited, China Mobile Investment Holdings Company Limited, China Mobile Quantong System Integration Co., Ltd., China Mobile Financial Technology Co., Ltd., China Mobile (Chengdu) ICT Co., Ltd., and China Mobile (Shanghai) ICT Co., Ltd..

In addition, the Company owns a 99.97% equity interest in China Mobile Group Device Company Limited, a 92% equity interest in China Mobile Group Finance Company, and a 66.41% equity interest in Aspire Holdings Limited.

# Sustainability Strategy and Manageme

# **Sustainability Strategy and Management**

Following the corporate core value of "Responsibility Makes Perfection", China Mobile strives to bring out the best in people and things, and make a continued effort to pursue coordinated development in the economy, society, and the environment. We adhere to the new development concept of "innovation, harmony, green, open and sharing" and incorporate the UN Sustainable Development Goals (SDGs) into our sustainability strategy, thereby responding to stakeholder expectations through responsible operations, and co-creating and sharing the value of sustainable development.

# The ICT Model for China Mobile Sustainability

#### Building Quality Networks and Sharing Digital Benefits

Continuously expanding the scope of connections, implementing speed upgrade and tariff reduction measures, enhancing network quality and emergency response capabilities, and striving to build ubiquitous, high-speed and intelligent first-class infrastructure.

#### Providing Satisfactory Services and Seeking Trusted Communication

Adopting a customer-centric approach to comprehensively optimizing customer services, reinforcing network and user information security protection, responding promptly to customer concerns, and ensuring delivery of more convenient, intelligent and considerate customer services.

#### Facilitating Employee Growth and Fostering Innovative Talents

Boosting employees' innovativeness through continuous improvements to our innovation incentive mechanism, respecting and protecting employees' legitimate rights, and implementing more comprehensive healthcare and safety measures to help our employees achieve work-life balance.

# Committing to Green Development and Environmental Protection

Continuing to implement the Green Action Plan and improve our environmental management system, rallying all employees, industry chain partners and the general public around energy reservation and emission reduction efforts, and contributing to the development of ecological civilization.



#### Cementing Leadership in Innovation and Accelerating Transformation and Development

Improving R&D deployment, comprehensively enhancing independent innovation capabilities, joining hands with industry peers to drive 5G technological and application innovations, accelerating digital transformation, and strengthening sustainable development capabilities.

# Supporting Public Welfare and Helping Community Thrive

Continuing to develop branded public welfare programs consistent with our business expertise and society's needs, enhancing the scope and effectiveness of these programs, and striving to offer genuine assistance to underprivileged groups through more professional volunteer service philosophy and capabilities and including them in community development.

#### Enabling a Digital Society and Unlocking Innovative Possibilities

Accelerating capability opening-up and cooperative innovations, leading the construction of a new digital service industry ecosystem, innovating individual and industry intelligent applications, facilitating supply-side reform and digital transformation and upgrading of the industry, and building a digital society together with stakeholders.

# Promoting Poverty Alleviation and Boosting Rural Revitalization

Fully deepening poverty alleviation efforts, utilizing technological and platform advantages to encourage and empower people to lift themselves out of poverty, contributing to targeted poverty elimination, and providing information-based and intelligent solutions for rural revitalization. The strategic corporate social responsibility (CSR) management at China Mobile began in 2006 and is closely related to our corporate strategies and operations. Building on this, we have constructed a strategic CSR management system over the years comprising four modules, namely strategy, implementation, performance and communication.



# Best CSR Practices Selection

We received 72 applications from 41 units at the 11th Best CSR Practices Selection in 2018. Through case collection, qualification examination, preliminary assessment, online voting and expert review, we presented 14 outstanding CSR practices with the following awards: Top 10 CSR Practices of the Year, CSR Originality Award, Outstanding Employee Engagement Award, Best Public Welfare Organization Award, and Netizens' Choice Award, and recognized three employees as the "Philanthropy Stars of China Mobile". In 2018, we launched an online voting in the CSR section of our website, while also enabling voting via WeChat and Weibo. The online voting lasted for two weeks with over 640,000 valid votes cast, receiving considerable public attention.



# A Beautiful Life Created Together

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# Strengthening Foundation for Connectivity

Aligning its efforts with the development requirements of the new era, China Mobile further implements the "Big Connectivity" strategy and commits itself to building quality networks and bridging the digital divide. In doing so, we strive to meet the public's ever-growing demand for digital consumption and lay the "connectivity" foundation for economic and social transformation and development.



# Narrowing Digital Divide

We try constantly to extend broadband coverage in remote villages and islands to further narrow the digital divide. By the end of 2018, through the Telecommunication Universal Service Project, we had cumulatively delivered broadband services to 38,352 administrative villages and our wireline broadband services covered 417,000 administrative villages.

# L Fujian: Tackling Challenges in Building Island Broadband

Fujian Province is surrounded by mountains on three sides and by the sea on one side. This caused difficulties in broadband construction in remote areas, in particular on coastal islands, such as significant signal loss and proneness to interference. China Mobile introduced a domestic cross-sea communications expert team and state-of-the-art big-broadband telecommunications equipments and formed 20 technical teams. They worked around the clock conducting investigations and developing construction plans and effectively overcame the obstacles of building cross-sea networks. On May 12, 2018, the Company took the initiative to launch 100Mbps fiber-optic broadband on 23 coastal islands, not only providing the citizens on islands with access to high-speed broadband services but also greatly enhancing the development of local tourism and fishery sectors.

# uilding Quality Networks and Sharing igital Benefits

# Jiangsu: Collaboration in Developing Offshore Base Stations

Nantong city of the Jiangsu Province has a coastline of 206 kilometers. To effectively resolving the issue of delivering offshore mobile signal coverage to meet the communication needs of maritime workers such as fishermen, harbor workers and wind turbine operators, China Mobile collaborated with coastal wind power companies in building high-power base stations utilizing offshore boosting stations and offshore wind turbines. At present, the Company has started four offshore base stations on Nantong and Yancheng waters in Jiangsu, providing seamless mobile network coverage within 70 kilometers of the coastline in the respective areas.

# **Broadening International Connections**

China Mobile continues to grow its capacity for international connections through strategic measures such as optimizing roaming services, developing overseas service channels and strengthening mutually beneficial cooperation with its global telecommunications counterparts. As at the end of 2018, China Mobile continued to lead the world with its 4G international roaming services extending to 181 countries/regions around the globe, achieving a 61.2% year-on-year growth in its international data roaming users.

To persist in complying with the principle of achieving shared growth through discussions and collaboration, China Mobile continued to optimize the multi-dimensional high-speed information channels encompassing Information Highway (transmission resources), the Information Station (POPs), and the Information Island (data centers) to expand its capabilities for overseas communications infrastructure construction and deployment. In 2018, we achieved positive development in serving the needs of Chinese enterprises for "going out" and the needs of transnational companies for pursuing information-based development through the provision of reliable dedicated cross-border communications connections, international data center services, and holistic ICT solutions.

# Speed Upgrade and Tariff Reduction

China Mobile earnestly implements network speed upgrades and tariff reductions, laying the requisite foundation for a thriving digital economy. Our speed upgrade and tariff reduction measures cumulatively benefited 4.7 billion person-times as at the end of 2018.

At present, high-speed Internet experience has become the new norm of the day, where people have ubiquitous access to HD movies, intriguing videos and live broadcasts, can enjoy installation-free online gaming experience with no lag, and can instantly transmit huge files. The list goes on. While continuing to improve our 4G network speed, we placed a dedicated focus on comprehensive speed upgrades for our home broadband services in 2018 to fully accommodate people's demand for high-speed Internet.

- Average 4G network downloading rate on urban roads reached 42.6Mbps
- Achieved comprehensive home broadband speed upgrades, with the broadband connection speed of the whole network exceeding 100Mbps; rolled out 1000Mbps demonstration communities in every city across the country, taking a lead in the provision of 1000Mb networks





In an effort to ensure both quality and affordability, we made our services more accessible to consumers in 2018 through a range of measures to reduce tariffs for our voice, data and other services. By doing so, we managed to stimulate customers' consumption demands and nurture their habits of digital living, while fueling the digital transformation of SMEs.

- Completely eliminated charges for long-distance calls, roaming calls, and data roaming
- Introduced measures such as big-volume data plan, sponsored data tariff, and data assurance services
- Lowered charges for home broadband, business broadband, and dedicated Internet access

# Improving Network Quality

In light of the growth of the scale of connections, the complexity and difficulty in maintaining the networks has continued to grow. It thus becomes the Company's top priority to maintain robust network quality and user experience. In 2018, China Mobile continued to improve its network quality management system, robustly upgrade network maintenance and emergency communication support, so as to ensure a smooth and premium network experience in all kinds of scenarios.

# Reinforcing Network Quality Management

In 2018, we created the innovative Network Experience Index (NEI) to further refine our network quality evaluation management. Based on accurate user experience analysis and timely response, we strive to overcome the difficulties in network maintenance to provide better connections. In the meantime, big-volume data services have created new requirements and challenges for developing the necessary network capabilities. We proactively adapted ourselves by introducing new technologies and building new platforms dedicated to addressing issues such as high-load communities and network interferences, thus improving our network operations capabilities.

# 🚺 Network Experience Index

In 2018, China Mobile launched the Network Experience Index (NEI) in collaboration with our partners. For the first time, the index theory and genetic engineering models were introduced into the mobile communication network, which, together with four innovation technologies including artificial intelligence algorithm and big data, served as the pillars of the experience-based digital evaluation system of the telecommunications industry. The system enables digital representation of network experience, quantitative correlation of customer perception, and rapid quality benchmarking against international operators, thereby more accurately pinpointing key contributing factors to network capabilities and providing direction for network quality improvement.

# New Capacity Smart Operations System

Major scenic spots across the country witness a sharp rise in the number of tourists during public holidays. People use their mobile phones to search for food to enjoy and beautiful places to visit, upload photos and videos, interact real-time with their friends and relatives, etc. Such exploding demands for mobile data often lead to short-term, regional ultra-high network load, which significantly undermines network quality or even leads to network jams. To satisfy the high network traffic demand in these situations, China Mobile Zhejiang Company established the new Capacity Smart Operations System in 2018, with "resources operations", "capability operations" and "efficiency operations" as its guarantee guidelines. With intelligent analysis and judgment, automatic evaluation, and automatic execution enabled by its network maintenance support platform, the system provides solid support for meeting customers' data demands in a timely and effective manner.

# Ten-dimension" Quality Evaluation System

With the "Four-aspect & Ten-dimension" quality evaluation system, China Mobile defines perception indicators across 10 vertically refined dimensions under the four aspects of macroscopic scale, microscopic scale, network foundation, and major events and measures the daily network experience of its individual, household, government and enterprise customers, and new business users in a comprehensive and multi-dimensional manner.

# Improving Emergency Response Capability

We continued to improve our critical event network supporting system characterized by 4 "Rs", namely "clear Responsibility, readily available Resources, manageable Risk, and timely Response". Meanwhile, we further strengthened our long-standing critical event supporting mechanism, which involved unified efforts between the Group and provincial subsidiaries as well as cross-departmental and interdisciplinary collaboration, to improve our overall capability in providing emergency support.

In 2018, we successfully provided communications and network security support for major events including Boao Forum for Asia, Shanghai Cooperation Organization (SCO) Qingdao Summit, Forum on China-Africa Cooperation (FOCAC) and China International Import Expo (CIIE) as well as providing communications quality and network security support for natural disaster relief, and achieved our service goals of "zero major network failures, zero major network security incidents, and zero complaints from key customers".



# Combating Typhoon "Wambia"

From the afternoon of August 18th to the early morning of August 20th, the No.18 Typhoon "Wambia" brought widespread torrential rain to Shandong Province, leaving Weifang severely ravaged by the biggest flood in decades. On the eve of the disaster, China Mobile launched the emergency communications response plan and prepared support resources in advance. In the aftermath of the disaster, we rapidly deployed and set up the centralized command and control center for flood control and disaster relief. Using the "Zhiduoxing" command and control system and a range of new emergency response devices such as drones, satellite communications vehicles, satellite phones, and Gigabit microwave, we effectively addressed issues of dangerous scenarios and serious network damages and rapidly restored Internet access in disaster-stricken areas. Moreover, we sent out 900,000 charitable text 🔺 Post-disaster communication equipment repair messages in support of disaster relief and provided affected people with free access to phones, as well as phone charging, consultation, and other services.



# Communications Support for SCO Qingdao Summit

From June 9th to 10th, 2018, the 18th Meeting of the Council of Heads of Member States of The Shanghai Cooperation Organization was held in Qingdao, Shandong Province. Bringing together its group of experts, China Mobile undertook comprehensive safety tests and loophole rectification for 687 systems/mobile apps and developed the innovative "Haina" multilayer network emergency communications vehicles. Together with the newly developed one-button disaster recovery system that realized safety protection at important sites at the press of one button, all these efforts helped ensure secure and smooth Internet access during the summit.

#### Communications Support for CIIE

From November 5th to 10th, 2018, the first China International Import Expo (CIIE) was held in Shanghai. To ensure a sound communication service experience for guests from all over the world, China Mobile had initiated a "carpet-style international business test" for global network operators in advance. The Company actively engaged over 300 operators from 165 countries in tests on the interconnectivity between international roaming cards and international Internet. During the Expo, the "breathing network" was adopted for the first time to ensure on-site communication, whereby intelligent adjustments were made consistent with the real-time people flow and network use inside the exhibition hall to cater to the communication needs when there was heavy passenger flow. Meanwhile, we managed to solve the problem of communication interference caused by densely located base stations using innovative technologies, increasing the wireless communication capability inside the hall by around 6.5 times to accommodate the communication needs of up to 500,000 people simultaneously.



▲ Service team at the SCO Qingdao Summit



Emergency communication drill at the CIIE

# Communications Support for Boao Forum for Asia

On April 8th, 2018, the 17th Boao Forum for Asia Annual Conference was held in Hainan Province. Using its independently developed technological applications such as the "And Cloud Speed" device and "AR Network Map" mobile app, China Mobile conducted Internet speed test at important sites and surrounding roads as well as base station monitoring, providing successful communications support for the Forum.



# **Key Performance Indicators**

Indicators	2016	2017	2018
Connection scale			
Number of mobile customers (million)	849	887	925
Number of 4G customers (million)	535	650	713
Number of wireline broadband customers (million)	78	113	157
Number of IoT smart connections (million)	103	229	551
Roaming services			
Number of countries and regions with 4G international roaming service	143	172	181
Number of countries and regions covered by our data roaming services	218	229	239
Network capability			
Number of 4G base stations (10,000)	151	187	241
Average 4G network downloading rate on urban roads (Mbps)	40	42	42.6
International transmission bandwidth (G)	12,942	23,750	39,000
Network quality guarantee			
Number of emergency communication support tasks	4,128	4,476	4,899
Significant political/ economic event support	3,748	4,253	4,597
Significant natural disaster support	347	190	266
Significant accident or catastrophic event support	25	23	16
Public health incident support	2	0	1
Social safety incident support	6	10	19
Number of emergency support vehicles deployed	15,425	7,362	8,986
Number of emergency support equipment deployed (set-times)	56,625	30,642	36,596
Number of emergency communication support personnel activated (person- times)	386,214	201,250	314,427

# China Mobile and SDGs

#### **Our Sustainable Development Rationale**

Like roads, water supply, power supply, and other types of infrastructure, information and communication networks and services have become an integral part of economic development and our social and personal lives. The size and quality of information infrastructure will impact our quality of life and social productivity in profound ways. As a provider of connection services, China Mobile recognizes providing extensive, quality, and reliable connections as its top priority for contributing to the SDGs. To this end, we commit ourselves to expanding 4G and broadband network coverage, accelerating the development of IoT, offering premium networks, and delivering continuous improvements in our universal services and emergency communications support capabilities. Through the provision of quality information and communication services, China Mobile is on track to contribute to an inclusive digital economy and information society that is to the benefit of everyone.

# **Our Achievements in 2018**

- Cumulatively set up 2.41 million 4G base stations, and served 925 million mobile customers and 157 million wireline broadband customers
- Improved broadband network coverage in remote rural areas and island regions, and cumulatively delivered broadband services to 38,352 administrative villages through the Telecommunications Universal Service Project
- Comprehensively improved emergency response capabilities, performing 4,899 emergency support tasks and realized the service goals of "zero major network failures, zero major network security incidents, and zero complaints from key customers"

# Our Goals for 2019

- Achieve a net increase of 45 million 4G customers, 25 million household broadband customers, and 300 million IoT smart connections.
- Build a network quality assessment system that covers all networks, systems, platforms, and applications, and extend the scope of assessment from 31 provincial subsidiaries to also include all specialized organizations





# Optimizing Customer Experience

As our business evolves along with the technological advancements, the scope and boundary of telecommunications services have been significantly expanded. The increasingly complex service portfolio presents an ever-greater challenge for ensuring premium customer experience. China Mobile firmly adopts the Customer-centric and Service-oriented approach and strives for an all-round service management system that leads to services satisfactory to customers, whose personalized service demands are responded to and met in a timely and effective fashion.

# Improving Service Management System

We set up the Customer Service Department in 2018 to further reinforce the management responsibilities and implemented a series of measures to improve our service management system and customer service work mechanism.



# Enhancing management responsibilities

- Set up the Customer Service Department to assume overall customer satisfaction management responsibilities, strengthened service quality regulation, and accelerated implementation of the customer service responsibility system.
- Strengthened cross-departmental collaboration and established the cross-departmental joint work mechanism to enable timely communication and handling of customer service issues.
- Improved the customer service personnel arrangement and service quality supervision, and strengthened customer service responsibility and service awareness to improve capability to provide professional services on all fronts.



### Optimizing complaint management measures

- Revised the China Mobile Management Measures on Customer Complaints to raise time-limit standards for tiered and classified complaint handling and clarify requirements for each stage of the complaint handling process.
- Set up the National Upgraded Complaint Center to handle all sorts of upgraded complaints in an omnichannel, all-round manner, thus enabling more efficient complaint handling.
- Set up the Voice of Customers platform, and established company-wide mechanisms to collect customers' true thoughts.
- Intensified communication with governmental departments and organizations like the Consumers' Association, paid close attention to customer demands, and actively resolved service-related disputes.



#### Improving customer satisfaction surveys

- Conducted customer satisfaction and Net Promoter Score (NPS) surveys targeting key business areas including 4G, household broadband, and international roaming services to deliver 360-degree monitoring of the key elements of customer perception.
- Planned to construct a centralized overall customer satisfaction evaluation system to further improve the efficiency and accuracy of the surveys and inform improvements in customer service capabilities.
- Our 4G customer satisfaction rate reached 78.5% in 2018, maintaining a leading position.

		2	5
Risk identification	Timely response	Problem analysis and resolution	Service supervision and follow-up
Determine key risk control points at each stage of customer service from the three dimensions of mon- itoring, intervention and remediation before, during and after an event respec- tively; create a closed- loop complaint handling mechanism that involves unified efforts between the headquarters and provincial subsidiaries.	Establish a dedicated re- minder line to set up a green channel between the communication and resolu- tion of complaints; create a proactive care mechanism dedicated to frequent com- plainants, set up an alert platform, and respond to customer demands in a timely manner through the provision of proactive ser- vices.	Conduct in-depth analysis regarding issues that lead to customer complaints, and urge concerned de- partments to resolve such issues through effective measures.	Ensure that upgraded customer complaints are properly received, resolved and followed up by setting up the service supervision hotline 4001110086.

# Responding to and Resolving Key Issues

In 2018, we conducted joint analysis among the various departments, implemented powerful measures, and ensured timely response and resolution to issues about which our customers have complained intensively according to their feedback, thereby trying our best to improve customer experience.

# Top customer concerns & China Mobile solutions

#### Unauthorized service orders and data tariffs

Regulatory guarantee: We formulated a number of policies including the China Mobile Management Measures on Unauthorized Service Orders (Trial), Notice on Further Regulating "Unlimited Data" Plan Offering, and Notice on Further Standardizing Customer Agreement Orders to further regulate our related management practices.

#### Specific measures

- Making our service tariffs public at all contact points such as China Mobile sales channels, website and mobile apps, and moving the tariff section on the Company website to the featured section on the front page to give users easier access.
- Regulating outbound marketing and improving transparent consumption practices such as "0000 unified inquiry and unsubscription", "double check", and "payment notifications" to ensure correct billing.
- Improving the "daily report, weekly analysis, monthly review" customer complaint collection and reporting
  mechanism and incorporating unauthorized service order complaints into the KPI appraisal of relevant subsidiaries to strengthen management accountability.
- Improving data reminder service to help avoid high data costs and recommending targeted data plans based on user behavior to protect customer interests.

#### Customers' rights of choice

Regulatory guarantee: We published the Notice on Further Guaranteeing Customers' Right of Choice to fully guarantee customers' proper rights when choosing services to subscribe or accept.

### Specific measures:

- Explicitly forbidding such non-conforming behaviors as limiting customers' rights to subscribe to or change services and forcing bundle sales; adjusting unreasonable restrictions on subscription conditions; removing unreasonable requirements regarding scope of services for subscription; resolving the issue of differential treatment for old and new customers.
- Introducing the DIY plan priced between RMB8 and RMB38, which allows customers to freely pick and combine data and voice services as they need, satisfying customers' demands for lower range offers.

# oviding Satisfactory Services and Seeking usted Communication

# **Creating New Service Platforms**

We fully embrace the transformation towards providing "integrated services, Internet-based services, big data-driven services, and intelligent services" to deliver a brand-new customer experience that is efficient, convenient, intelligent and interactive.

In 2018, we continued to improve our 10086 Internet service system to establish a full-service, all-contact-point service platform. Meanwhile, 24/7 access to 10086 hotline was guaranteed to improve the efficiency and quality of our online services. We delivered continuous innovations in our service contents and improvements in our service offerings and functions based on the new mobile Internet platform. Using more everyday language, we strengthened interactions with our customers and created communication channels that were more flexible, direct, and effective. At the Chinese Enterprises New Media Annual Meeting 2018, China Mobile 10086 Weibo account and China Mobile 10086 WeChat account were awarded the "Most Impactful Central Enterprise New Media Second-tier Account of 2018".

Moreover, we improved our intelligent customer service system by introducing new technologies such as AI and big data, and strove to build our integrated online-to-offline intelligent customer service capabilities by introducing fully self-service machines.

# Intelligent All-In-Ones

In 2018, China Mobile launched unguarded self-service intelligent AIOs to facilitate the construction of intelligent sales channels. At present, we had deployed over 70,000 intelligent AIOs in 30 provinces, offering our users convenient access to real-name authentication, account opening, card reissue, broadband, business inquiry and processing, and a range of other services.

# Ensuring Worry-free Consumption

A prosperous digital economy is dependent on a secure and reliable information consumption environment. China Mobile embraces customer-centricity and makes an all-out effort to reinforce the protection of customer privacy and information security and prevent customer rights violations resulting from telecommunications frauds and harmful information, thereby ensuring worry-free consumption by customers.

# Intensifying Customer Privacy Protection

In 2018, we continued to intensify customer information security protection, with zero major customer information leakage event recorded during the year.

### Regulation formulation

We formulated 14 regulations including the China Mobile Regulations on Customer Information Protection according to numerous relevant laws and regulations including the Cybersecurity Law, the Law on the Protection of Consumer Rights and Interests, and the Provisions on Protecting the Personal Information of Telecommunications and Internet Users, establishing a long-standing customer information protection system and incorporating customer information protection in employees' performance appraisal.

#### Implementation Methods

We implemented the customer information protection Vault Mode, where all high-risk operations involving sensitive customer information on key system platforms were placed under vault management, and sensitive customer information was obscured to prevent leakage.

### Monitoring and inspection

We intensified customer information security checks and actively undertook third-party monitoring to reinforce supervision both during and after the occurrence of customer information security incidents.

# Privacy Protection Solutions: And Multiple Numbers and Intermediate Numbers

While making people's lives a lot more convenient, the popularity of the Internet and smartphones has also increased the risk of personal information leakage. In response, China Mobile launched the And Multiple Numbers and Intermediate Numbers, with a view to providing privacy protection for individual and corporate numbers. The And Multiple Numbers are for individual use and enable the addition of 1-3 secondary numbers without having to insert another SIM card. Those secondary numbers can be used for registration or contact purposes. Corporate users are provided with "Intermediate Numbers", which are ad hoc virtual numbers assigned to transacting parties, thereby "double-encrypting" the numbers of both the vendor and the customer. The total number of our Intermediate Number services exceeded 1.1 billion in 2018, providing over 2.2 billion person-times with temporary transaction communication safety guarantee services.

# Preventing Telecommunication Frauds

With a close eye on the new forms of telecommunication frauds, China Mobile continues to improve its overall capabilities in telecommunication fraud prevention and crackdown to provide maximum protection of customer interests.



# [ Big Data-Based Telecommunication Fraud Prevention and Crackdown Technology

The "Big Data-based, Scenario-oriented Communications Information Fraud Prevention and Crackdown Technology" of China Mobile is based on its massive user database. The Company has set up high-risk number identification models and fraud incident analysis models based on the various fraud scenarios and established a telecommunications fraud prevention platform that enables accurate and effective discovery and timely interference and prevention. In 2018, the Company identified 11.896 million fraud incidents, sent out alerts against 435,000 high-risk fraud numbers, and dissuaded 1.23 million person-times of potential deceived users. The technology was presented with the Black Technology Award and New Technology Award by China International Big Data Industry Expo.

# Intensifying Harmful Information Management

We make a continuous effort to intensify harmful information management with the aim of creating a secure and clear consumption environment and cyberspace for our users. In 2018, we formulated the China Mobile Work Plan for "Campaign on Comprehensive Regulation of telephone harassment" to enforce targeted management measures against telephone harassment for commercial marketing, malicious and criminal purposes. We provided our customers with a range of relevant services including emergency protection against "SMS bombs", high-frequency harassment phone numbers interception, and mobile phone safety protection. We strictly followed regulatory requirements to adopt a "zero tolerance" attitude towards information with pornographic content, implementing "network-wide one-click blocking" of noncompliant websites.



# U Building Sunshine Internet Screen to Safeguard Healthy Childhoods

As more and more parents equip their children with a smartphone, issues such as malicious online information and phone addiction have seriously affected the physical and mental health of minors, giving rise to an urgent need for parents to effectively manage and properly supervise their children's use of smartphones. The Sunshine Protection platform is an integrated solution developed by China Mobile Beijing Company to ensure the healthy use of Internet by minors. The platform allows parents to activate safety protection features to block pornographic, violent and virus-infected websites, thereby creating a green and safe online environment for their children. Functions like screen time limit can be set up to encourage children to develop good habits for using the Internet.

Providing Satisfactory Services and Seeking Trusted Communication

# China Mobile and SDGs



#### **Our Sustainable Development Rationale**

As information consumption finds its way into every corner of our social and personal lives, people are exposed to an increasing number of negative events such as telecommunications frauds and information leakages, which has become a major risk to be guarded against for building a digital society. It is China Mobile's top priority to deliver quality products and reliable services and ensure solid protection on top of greater convenience for information consumption. We actively practice sustainable operations and responsible production strategies by improving our customer service management system, optimizing customer experience and intensifying crackdown measures on illegal actions such as telecommunications frauds, continuously championing and contributing to a sustainable information consumption environment.

# **Key Performance Indicators**

Indicators	2016	2017	2018
Customer rights protection			
Number of complaints per million customers (person-times)	46.2	35.4	32.1
Number of reported spam messages handled (10,000)	149	128	133
Number of fraud numbers dealt with	136,000	50,700	19,600

### **Our Achievements in 2018**

- Set up the Department of Customer Services, further improved customer service management procedures, responded to and addressed key issues, and drove improvements in customer service quality
- Enhanced capacity for customer information security protection on all fronts by means of institutional improvements, technologies, supervision and control, and identified 11.896 million fraud incidents and dissuaded 1.23 million person-times of potential deceived users through the telecommunications fraud prevention platform based on big data

# Our Goals for 2019

- Fully strive for high-quality development, construct a customer-oriented service management system, and improve closed-loop service management which covers the whole process of formulation and implementation of service standards, service quality assessment and customer complaint management to improve customer satisfaction
- Focus on where we fall short in customer perception and improve the quality of our networks, products, business, support, and service on all fronts by intelligent means
- Fully utilize new technologies such as big data and artificial intelligence to further strengthen the protection of customers' privacy and enhance network safety standards



# Building Industry Ecosystem

In the era of intelligent connectivity, cross-industrial collaboration and win-win development have become the inevitable choice for realizing integrated industrial innovation. China Mobile strives to make good use of its connectivity expertise and role as an industry leader to actively contribute to building a new digital service ecosystem. The Company makes a concerted effort with its partners to deliver innovations in frontier fields such as 5G, AI, and IoT, providing new possibilities to satisfy people's growing need for a better life.

# Embracing Openness and Cooperation

Consistent with the "Value co-creation, mutual benefit, and win-win" cooperation philosophy, in 2018, China Mobile entered into strategic cooperation agreement with 15 partners including large Internet companies, leaders of vertical industries, and important organizations to explore cooperation in new infrastructure areas such as cloud computing, big data, AI, IoT, and key vertical industries.

In terms of international communication and cooperation, in 2018, we took an active part in major events hosted by industrial organizations such as the GTI (Global TD-LTE Initiative) and ITU (International Telecommunication Union), and continued to scale up our Hand-in-Hand Program. We actively boosted business cooperation in voice and data services as well as the "going out" of self-owned brands, technologies and services to enhance the platform's capabilities in providing services worldwide.

As a Gold Member of OPENSTACK and Priemer Member of the CEPH open source community, we are actively involved in directing the development of international cloud computing and cloud storage technologies. We seek to engage in deeper communication and cooperation with industry leaders via the open source community to foster the healthy development of the industry ecosystem.



# Upgrading "139" Cooperation Plan

With capability openness and win-win development at its core, we upgraded our "139" Cooperation Plan on all fronts in 2018 so as to seize the broad range of opportunities associated with 5G development. By doing so, we further improved the capability sharing system of China Mobile and enabled closer connections, interactions and cooperation among enterprises in the upper and lower end of the industry chain to jointly create a bright digital future.

# The Achievements of "139" Cooperation Plan in 2018

#### \_\_\_\_\_

- The China Mobile Digital Home Alliance has 165 official members encompassing a wide range of industry sectors including chips, modules, and smart hardware, etc..
- The China Mobile IoT Alliance has 675 official members and it gives them a variety of rights including standard setting and mobile empowerment; the OneNET platform brings together nearly 100,000 developers.
- The China Mobile 5G Innovation Center initiated five major industry alliances in multimedia, autopilot, smart cities, Internet of Flying Things and Internet of Energy, with 260 cooperation partners.



### Launching the Upgraded Version of "139" Cooperation Plan



# Supporting SME Development

Small- and medium-sized enterprises (SMEs) are important driving force behind China's economic and social development. Through its communications capability open platform, China Mobile enables the information-oriented transformation of SMEs and inspires innovation and entrepreneurship. We have established the "1 (business broadband) + 1 (converged business gate-way) + N (value-added services)" service system to provide SMEs with customized broadband, standardized products and industry solutions that are stable and cost-effective. By including partners from a wide spectrum of backgrounds such as software, hardware and services, in jointly building the service alliance, we provide a full-service platform dedicated to SMEs where all their needs for information-based services can be satisfied.

# Building Entrepreneurship and Innovation Demonstration Base

We have continuously fostered the organizational, all-member, and open innovations. Leveraging our capacity openness platform online and the series activities offline, we built a cross-industrial and multi-dimensional capability sharing system to promote the aggregation, openness, and sharing of premium resources along the industry chain. We thus sought to enhance the dynamics of internal and external entrepreneurship and innovation and actively explore the mass entrepreneurship and innovation model where large enterprises can engage SMEs in integrated development.

In 2018, we actively explored the innovative path of "unified production and research" and fostered the construction of the Entrepreneurship and Innovation Demonstration Base. The Base has been listed by Ministry of Industry and Information Technology of China in the entrepreneurship and innovation platform pilot and demonstration projects for the manufacturing sector and by the National Development and Reform Commission of China in the sharing economy demonstration platforms and included in the China Sharing Economy Development Report.

- Established united laboratories with university demonstration bases including Tsinghua University and key enterprises along the industry chain to pursue collaborative breakthroughs in core areas such as Internet of Vehicles and Internet of Things
- Set up innovation incubation bases with local governments and universities in line with regional features to promote local economic transformation and development
- Founded the AND-HOME Innovation and Entrepreneurship Incubation Base with business partners focused on hi-tech areas such as smart hardware and artificial intelligence to jointly innovate and incubate relevant products and capabilities

We established three And-Creation Spaces in 2018, namely "intelligent hardware", "cloud computing and big data", and "artificial intelligence and smart cities", and signed And-Creation Spaces incubation agreements with ten external mass entrepreneurship and innovation teams. Meanwhile, we have expanded the scope of our Makers' Marathon series competitions to cover the six major areas of the Internet, 5G innovative applications, digital home, MIGU culture, Internet of Things and digital industry to further stimulate the creativity of the wider society.

# The aring Impaired for the Calls Possible for the Hearing Impaired

"Longyu", an intelligent device designed by Nuobaiai specifically to allow people with hearing impairment to make phone calls, won the first prize at the 2018 China Mobile Digital Home Makers' Marathon Contest.

"Longyu" features the Bluetooth peripheral box + app solution. When people with hearing impairment get phone calls, the voice messages are translated into texts and displayed on the app. They can reply the messages by typing texts, which are then processed by a speech synthesis system before being clearly played out as voice messages. The device thus enables hearing-impaired people to easily engage in barrier-free communication in situations where phone calls are required such as food delivery ordering, parcel collection, and job interview. During the contest, China Mobile provided the team with funding and an interview opportunity for being prioritized for entering China Mobile Digital Home product portfolio and securing marketing channel and strategic investment.

### 2018

Entrepreneurship and Innovation platform hosted users

156,000

The number of teams engaged in innovation and entrepreneurship projects



The number of projects created through Entrepreneurship and Innovation activities

2,918

The number of teams worked at the And-Creation Space

109

"The contest provides a platform for us to showcase our company and our products. From the experience, I felt the enthusiasm of China Mobile and its dedication to helping special groups and engaging in social causes. This also allows the makers to quickly and freely fit in as part of the big family and has enormously benefited startups like us."

> —Du Bowei, Team Member Nuobaiai (Hangzhou) Technology Co., Ltd.

Enabling a Digital Society and Unlocking Innovative Possibilities

# Enjoying a Digital Life

Leveraging its strengths in business offerings, technologies, networks, and economies of scale, China Mobile constantly fosters the integration between technological applications and industry scenarios through the provision of customized solutions across various verticals of the economy, thereby accelerating the digital transformation and upgrading of industries and providing people with a rich spectrum of opportunities for enjoying a more intelligent digital life.



# L And Education: Supporting Information-based Education

China Mobile developed the And Education cloud platform to provide an integrated solution combining "teaching, learning, and education" to drive the information-based development of pre-school education, K12 primary and secondary school education and vocational education.



# U "Shared Parking Spaces" Solving Parking Problems in an Innovative Way

As the standard of living is getting higher, there is an increasing mismatch between the growing number of private vehicles and limited public parking spaces. Given that Lanzhou city featured a compatible mixture of commercial and residential areas, China Mobile developed China's first private parking space sharing solution here based on the concept of sharing economy. The solution utilizes the intelligent linkage between the parking lot entry/exit management system and parking space locks and realizes time-based space rental using IoT technology.

Parking space owners can publish real-time space sharing information by themselves via the mobile App or WeChat official account. Car owners in need of a parking space can select and pay for an idle space online to make a reservation. The relevant parking lot entry/exit management system would automatically recognize those cars and let them through. Not only does the service bring profits to space owners but it has also put idle parking spaces to efficient use. As at the end of 2018, the number of monthly parking space sharing reached 586 and the parking spaces enjoyed an average daily use rate of 89% through sharing, effectively relieving people's "anxiety" for parking.

# Mobile Community Healthcare Platform: Facilitating the Life of In-home Elderly

To solve the problems with health management at community hospitals in Beijing, China Mobile proactively seeks to build the Mobile Community Healthcare Platform, to help create a hierarchical diagnosis and treatment system that is institutionalized, personalized, and archived. Currently, the Mobile Community Healthcare Platform has signed on over 50,000 family doctors, benefiting more than 70,000 residents at the initial stage.



"Aged people living in Dongcheng District are fortunate. Doctors can bring a Portable Medical Box to my home and my daughter can view the results on her phone. I can also get prescriptions from experts in 3A hospitals. I am feeling better now."

— A senior patient in Dongcheng District, Beijing

# (Internet of Teas" Making Teas Reliably Traceable

Due to the lack of effective tracing system and technologies, the West Lake Longjing Tea is plagued by a large volume of counterfeit products in the market. China Mobile worked with a number of partners and developed the first NB-IoT + Blockchain Tracing System in China. This system enables information collection and transmission in rural areas based on intelligent IoT sensors and networks and utilizes blockchain for data storage and management, producing traceable data that are safe from manual manipulation. The data is more accurate and credible thanks to real-time monitoring and direct uploading.

In 2018, China Mobile launched the platform with the Tianzhu Tea Garden in West Lake Longjing Tea Grade 1 Production Area of Zhejiang as the demonstration base, reducing the tracing time for tea's vital information from several days to merely 2.2 seconds and increasing the sales volume by 50%. Thanks to the promotion by

# Leisurely Tourism Big Data Platform Enabling Intelligent Tourism

We independently developed the Leisurely Tourism Big Data Platform for tourism management agencies, scenic spots, tourism companies and tourists. With customer privacy protection and data masking as prerequisites, the platform supports a range of functions including accurate and real-time monitoring of tourist flow, tourist attributes and transportation analysis, and travel itinerary analysis by various means such as cloud service, API, and WeChat Official Account. At present, the Platform has been put to commercial use at the tourism departments and scenic spots in Jiangsu, Henan, Yunnan, Shanxi and other provinces, effectively fostering the development of intelligent tourism. In 2018, the Leisurely Tourism Big Data Platform was elected as an outstanding case of big data product and solution by the Ministry of Industry and Information Technology of China. China (Shanghai) International Tea Expo, the Company has signed a letter of intent for cooperation with 52 companies across the country.



 Intelligent sensors at the tea garden conducting real-time monitoring of tea data



# Enabling a Digital Society and Unlocking Innovative Possibilities

# Serving for the Regional Development

Actively aligning with the guidance and opportunities of the national regional development strategies, China Mobile takes Xiong'an New Area, Guangdong-Hong Kong-Macau Greater Bay Area and the Hainan Pilot Free-trade Zone as the demonstration areas for pioneering digital innovations. China Mobile plans and builds the next generation of telecommunications infrastructure in accordance with the highest international standards. It also provides innovative digital solutions in association with the respective regional characteristics and development needs, establishing itself as a benchmark in supporting innovation-driven development while serving and implementing national strategies.

# Actively Participating in Developing Xiong'an New Area

In 2018, China Mobile entered into a strategic cooperation agreement with the government of Xiong'an New Area, established the "Xiong'an New Area Office" and implemented a series of measures to support the intelligent city development of the area.

# Difference in the second secon

- Achieved full coverage of NB-IoT and regional coverage of 5G demonstration networks in key areas.
- Initially established access capability of "Gigabit in households and 10 Gigabit in businesses" for key areas.

# Innovation capability development

- Established the China Mobile (Xiong'an) Industry Research Institute, and announced the Urban Superbrain Action Plan.
- Trial deployed and successfully demonstrated the super intelligent system providing feasible intelligent city solutions for Xiong'an in areas such as city governance and environment monitoring.
- Organized a series of 5G intelligent city forums, engaged in intelligent city general working group in standard setting, and participated in partnerships with industry peers on Xiong'an intelligent town planning.

# To Become the Best Digital Life Partner of Customers in Guangdong-Hong Kong-Macau Greater Bay Area

In 2018, with the vision of "becoming the best digital life partner of customers in Guangdong-Hong Kong-Macau Greater Bay Area", China Mobile worked to promote the construction and integrated development of the Area through the provision of improved telecommunications infrastructure and integrated digitalized solutions.

Constructing high-speed information channels connecting the Greater Bay Area

- Actively involved in network coverage construction for key connectivity projects in the Greater Bay Area such as the Hong Kong-Zhuhai-Macau Bridge and Guangzhou-Shenzhen-Hong Kong Express Rail Link to provide high-quality network services.
- Expanded the local network capacity in Hong Kong, accelerated 5G and NB-IoT technological evolution, and completed end-to-end 5G laboratory testing, laying the foundation for providing users with high-quality and fast network services.

Creating an interconnected net of information

- Launched Greater Bay Area service plans, providing visitors to the Greater Bay Area with quality communications services.
- Provided Hong Kong enterprises with high-quality ICT solutions including fixed-line voice service, dedicated line service and mobile office service, fulfilling their needs for digital development.
- Launched the IoT-based "Guangdong and Hong Kong Card" and focused on exploring cross-border operations such as connected vehicles, shipping and personal consumption intelligent hardware.

digital solutions

Providing cutting-edge

Deployed a local IoT platform
of OneNET in Hong Kong, and launched NB-IoT-based intelligent parking solutions which have been put to commercial use as a pilot project.

# Supporting Construction of Hainan Pilot Free-trade Zone

In 2018, China Mobile signed a strategic cooperation agreement with Hainan Province government to improve its information infrastructure and support the construction of the pilot free-trade zone and free-trade port with Chinese characteristics in the Hainan Special Economic Zone. With an aim of being first class of its kind in the world, we formulated the Hainan International Undersea Cable Hub Construction Framework and Planning to support the digital development in Hainan.



# China Mobile and SDGs

# **Our Achievements in 2018**

- Advanced the construction of Mass Entrepreneurship and Innovation Demonstration Base to further inspire innovative initiative and invested RMB83.59 million in support of mass entrepreneurship and innovation
- Our communications capability open platform served over 150,000 enterprises and our OneNET platform attracted 9,396 enterprises
- Actively delivered innovative applications based on our own platform strengths and industry scenarios to pioneer a richer selection of intelligent digital life applications
- Made forward-looking deployment in key development areas such as Xiong'an New Area, Guangdong-Hong Kong-Macau Greater Bay Area and the Hainan Pilot Free-trade Zone with high standards, building first-class information infrastructure and laying an important foundation for demonstration areas of the next generation digital services.

### Our Goals for 2019

- Further advance the "139 Cooperation Plan"; work with stakeholders to build a digitalized industry ecosystem that is more integrated and dynamic to capture the new opportunities associated with 5G
- Explore the various industry verticals in collaboration with partners to continuously innovate digital platforms and products and boost the digital transformation of industry verticals
- Accelerate new explorations into intelligent cities to provide relevant regions with all-round, high-quality platform and application services and foster the integration between information technology and city governance and industry development

### **Our Sustainable Development Rationale**

The digital economy is becoming a new driver of economic growth in China and enables new possibilities for the sustainable development of cities and communities. The technological and application innovation in the digital area requires a concerted effort by multiple parties and the formation of a new industry ecosystem that features shared resources, complementary capabilities, co-created value, openness and inclusion. To this end, China Mobile leverages its strengths and its role as a platform and incubator of digital innovations and implemented the following measures: further cooperating with industry chain players by pushing forward the 139 Cooperation Plan and establishing a multi-dimensional online/offline capability sharing platform; providing all-round support for mass entrepreneurship and innovation to empower SMEs and individual entrepreneurs; developing and delivering innovative solutions tailored to the basic needs and key issues relating to the sustainable development of cities and communities to facilitate the realization of relevant SDGs.

# **Key Performance Indicators**

Indicators	2016	2017	2018
R&D and Innovation			
Investment in entrepreneur- ship and innovation support (RMB10,000)	400	7,955	8,359
Number of developers on OneNET	over 30,000	56,728	99,963
Number of connected de- vices on OneNET (10,000)	over 700	3,154.31	7,987.85
Number of applications on OneNET	12,000	27,897	57,667





# Committed to Targeted Poverty Alleviation

To help realize the goal of eliminating poverty for rural residents living below the current poverty line in China by 2020, in 2018, China Mobile aligned efforts with the parent company and undertook partner assistance and targeted poverty alleviation in eight counties of five provinces, namely Xizang, Qinghai, Heilongjiang, Xinjiang and Hainan. The Company endeavored to help realize empowerment-based poverty alleviation and steady poverty eradication through measures such as optimizing the poverty alleviation management mechanism, prioritizing key projects, conducting education and training as well as providing information networks, platforms and technologies.



- Formed the poverty alleviation leading group led by the Chairman of the Board, with a subordinate task force that coordinates work of relevant units as well as dedicated departments and personnel at the headquarters and all 31 provincial subsidiaries.
- Reinforced selection and management of poverty alleviation cadres and assigned temporary poverty alleviation cadres and village-stationed first secretaries to counties chosen for partner assistance and targeted poverty alleviation.
- Improved the three-tiered management mechanism whereby the Group made overall plans, provincial subsidiaries played a management role, and city-level companies and temporary poverty alleviation cadres were in charge of implementation.
- By the end of 2018, the Company had cumulatively invested RMB530 million into partner assistance and targeted poverty alleviation in the eight counties of five provinces, and implemented 30 poverty alleviation programs concerning livelihood improvement, industry development, education support, healthcare, etc.
- Launched programs in Maqin County of Qinghai such as information training as well as college employment and entrepreneurship training, and helped introduce remote medical programs such as "4G Village Doctors" and "4G Cloud Medical Care" to local hospitals.
- Rolled out Mandarin popularization and poverty alleviation initiatives nationwide together with the Ministry of Education of China to help impoverished people in remote areas overcome language barriers to poverty alleviation.

- Built 768 4G base stations in counties chosen for partner assistance and targeted poverty alleviation with additional 66,500 households covered by household wireline broadband, and realized a broadband network coverage of 98% among registered and archived impoverished villages in counties chosen for targeted poverty alleviation.
- Developed smartphones customized for poverty alleviation and provided purchase subsidies for impoverished households in the eight counties of five provinces to allow more impoverished people to benefit from information technology.
- Provided poverty alleviation preferential tariff plans for registered and archived impoverished people nationwide, with extra data and voice volume offered.

# Promoting Targeted Poverty Alleviation System

As at the end of 2018, the Targeted Poverty Alleviation System independently developed by China Mobile had been implemented in 71 cities/counties of 14 provinces across the country, covering 8.11 million impoverished people and 740,000 frontline poverty alleviation cadres.

Qian Yajun is the First Secretary stationed in the Yanglou Village, Fan County, Henan Province. Before the application of our Targeted Poverty Alleviation System, work on dozens of indicators related with targeted poverty alleviation of all the impoverished households in the village, including field investigation, record keeping and written summaries, had to be done manually by Qian Yajun. It was cumbersome, prone to inaccuracies and quite inefficient. Now, with the help of the Targeted Poverty Alleviation System, all Qian Yajun has to do is input the latest figures and poverty alleviation process records into the mobile app wherever he goes, and a work report is smartly and conveniently generated for him.

The Targeted Poverty Alleviation System has even greater significance for Li Daokai, an impoverished farmer from the Libaiqiu Village, Puyang County, Henan Province. In April 2017, Li Daokai had a sudden heart attack that had to be treated as soon as possible, but the high surgery fee was unaffordable for his family. After learning about his situation, the staff from the Targeted Poverty Alleviation System managed to raise over RMB90,000 in donations on the platform in just a week, enough for him to receive the treatment. After the surgery, Li Daokai's family started to engage in rex rabbit ranching under the online guidance of experts on the platform, thus alleviating his plight of poverty. In addition, China Mobile live-streaming team visited the lotus root farming and production base in Yanglou Village and utilized the e-commerce platform on the system to live-broadcast the sales of lotus root and Fan County rice, helping the villagers to make an income of more than RMB1,500 that day while making Fan County organic food known to more consumers.



 Rallying donations of study supplies through the Targeted Poverty Alleviation System

"All our poverty alleviation work used to be done manually. Now with the help of the China Mobile Targeted Poverty Alleviation System, a mobile phone is all we need to conduct surveys and investigations at impoverished households."

-Qian Yajun, First Secretary of Yanglou Village, Fan County, Puyang City, Henan Province

### Five-legged Pig Ranching Helping Lingwei Out of Poverty

The five-legged pig was originated in Wuzhishan, Hainan Province. It wanders in the wild, using its nose to dig for food in the ground. It walks with its mouth on the ground, which looks like a fifth foot from behind. That is how it gets the nickname of "five-legged pig". Today the pig has been given a new nickname by villagers in Baisha Li Autonomous County, Hainan – the "poverty alleviation pig".

China Mobile launched the "cooperative societies – impoverished people – poverty alleviation industry program" model in the local region, uniting with local government and impoverished households in developing the five-legged pig ranching industry. We have also made project-specific poverty alleviation investments in building pig ranching infrastructure in strict compliance with relevant standards, including sow pens, nursery pens, pork pig pens, and porkers' pens to fodder fermentation rooms, sick pig isolation rooms, national-standard biogas digesters and offices.

Every day at noon, the Athletes' March begins to play at the Baisha Heyou Planting and Raising Specialized Cooperative Society that has been jointly funded by China Mobile and the Rongbang Township Government of Baisha County. For the five-legged pigs in the Cooperative Society, the song is the call for lunch, at the sound of which they all rush out of the yard to the pen to enjoy the meal. The villagers have been gradually lifted out of poverty since they began to work at the pig farm.

So far, an agriculture-based circular income growth model has been established in the five-legged pig ranching demonstration base in Lingwei Village, where government and companies work together to provide funding and self-regulation and operations are implemented by the villagers. The base has pulled in over RMB170,000 of income since its pig ranching industry developed in 2017, with a total of RMB94,900 dividend distributed in November 2017, February 2018 and January 2019 to 33 impoverished households, on average RMB2,876 to each household. Thanks to the base, a total of 154 people from 38 households have been steadily lifted out of poverty. Those five-legged pigs are really "poverty alleviation pigs" to the villagers.



Villagers receiving dividends for five-legged pig ranching

Promoting Poverty Alleviation and Boosting Rural Revitalization

# Enrooted in Xizang to Help Pastoral Regions Out of Poverty

Located in the northwestern region of Xizang, Gaize County is one of the largest purely animal husbandry-based counties in Ali. Duan Yuping, a Xizang-aiding cadre of China Mobile, came here in 2016 and has committed himself to boosting local livelihoods and economic development by introducing an array of resources.

#### Growing Leafy Vegetables on the Snowy Plateau

With an average altitude of over 4,700 meters, Gaize County experiences eight-month long winter every year. The harsh natural environment makes it almost a luxury to get leafy vegetables in winter. Seizing the opportunity, China Mobile invested RMB13.85 million of Xizang-aiding fund in building eight vegetable greenhouses. Thanks to the active efforts led by Duan Yuping, a variety of greenhouse-grown vegetables, such as pakchoi, coriander, spinach and garland chrysanthemum gradually appeared on the dinner tables of villagers in Gaize County in the winter of 2018, addressing their difficulty in getting vegetables in winter.

#### Supporting Tourism in Line with Local Conditions

As Temporary Deputy Head of Gaize County, Duan Yuping proposed the idea of boosting local economic development through tourism based on an in-depth research and investigation. With support from local government, Duan Yuping helped to set up the Gaize County Tourism Company. The Company undertook market-oriented development of local tourism resources, launching scenic spots and cultural tourism routes such as the Xianqian County Tourism Base and country tours in Dongcuo County and Quedeng County. Featured products stores have also been set up to showcase and sell featured local products such as locally-manufactured woolen sweaters, scarves and Xizang incense, yielding a monthly turnover up to over RMB300,000. The tourism industry in Gaize County has been on fast track since then.

#### Actively supporting Poverty Alleviation through Education

It is important to help people increase ability and confidence in their own ability to help themselves out of poverty. Poverty has been a cause of school dropouts in Gaize County. To address the issue, Duan Yuping mobilized people around him to engage in paired assistance for students from impoverished families in Gaize County. A dozen units including China Mobile Jiangsu Company rallied behind efforts to call on more people to donate goods and materials for the students including clothes, dictionaries, sports equipment, stationery, and more. Donations from companies were used to set up scholarships in local secondary schools, alleviating the difficulty in getting education and the shortage of education resources.

For the archived poor in Gaize County, we provide them with skills training in catering, loader and excavator operations, etc.. The trainings are systematically designed according to relevant national occupational standards and training syllabus and combine teaching with practice. Apprentices who pass the exams are presented with a certification of compliance or profession qualification certificate. So far, 30 apprentices have received the profession qualification certificates, with 20 of them already earning a steady income. Some apprentices started their own businesses after graduation and now make an income of up to RMB10,000 a month.



Xizang farmer working in a vegetable greenhouse

# Constructing Digital Countryside

China Mobile accelerates the comprehensive and thorough integration of modern information technologies such as IoT, big data and cloud computing with rural production and life. The Company contributes to the development of modern agriculture and diversified industries to transform villages with more robust agriculture, a more beautiful countryside, and better-off farmers by providing digitalized products and innovative solutions and advancing the application of information technology in rural areas.

# The secoming Farmers' "New Farm Tools"

The Saihu Farm in Ruichang, Jiangxi Province is a state-level modern agricultural park featuring comprehensive agricultural development, with 98% of its farmers owning a mobile phone. Closely in line with the requirement of delivering "intelligent agricultural production, e-commerce-based agricultural operations, efficient agricultural management, and convenient agricultural services" at Saihu Farm, China Mobile developed the smartphone-oriented "four farm tools on smartphones" based on agricultural IoT technologies to provide all-round services for agricultural development. By providing backbone farmers and technical personnel at the Farm with training on IT applications, the farmers become good at utilizing the smartphone. Since the inception of the project, grain yields have increased by 1.05 million kg and the farmers have made a total net income of RMB5 million, while the fine breed coverage rate has reached 98% and the rate of soil test and fertilizer recommendation reached 100%.

#### Pest Prevention and Control

Set up the Intelligent Pest Risk Monitoring Station that allows farmers to keep an eye on insect pest on their phones in real time and eliminate it using drones or other tools enabled by cloud computing analysis and remote control technologies.

The four farm tools on smartphones

#### Agricultural Material Quality Tracing

Set up the Agricultural Material Quality Tracing Platform which allows farmers to look up the quality of production materials on their phones, thus enabling "safety alerts, traceable sources and trackable information".

In 2018, China Mobile actively helped the farmers adopt new sales channels based on featured e-commerce services such as Caiyun Youpin and Sales Manager so as to help enhance their sales and popularity. In Yunnan, the number of sales of Suijiang Banbianhong plums exceeded 1,000 cases in just 5 days; in Anhui, the timely release of the picking and sales information of Dangshan nectarines brought hope and happiness to the local farmers.

#### Soil Testing and Fertilizer Recommendation

Set up the Intelligent Soil Testing and Fertilizer Recommendation System to intelligently collect soil data; based on shared locations, a Soil Testing and Fertilizer Recommendation card is generated, which truly delivers "approaches tailored to specific pieces of land".

#### **E-commerce Platform**

Worked with the biggest agricultural product e-commerce platform "Jiangxi Selected (Gan Po Youpin)" in Jiangxi province to explore the new "cooperative societies + farmers + industries + e-commerce + training" integrated model of agricultural e-commerce.



Anhui Company employees teaching farmers how to publish information for picking and sales

# [ \_\_\_\_\_ "Internet+" Program Launched in Maqin County, Qinghai

The Maqin County of Golog Zang Autonomous Prefecture is located in southeastern Qinghai Province with harsh natural conditions and a relatively underdeveloped economy. In 2018, China Mobile Qinghai Company initiated a pilot "Internet+" program in Maqin County. The program provides information-based system upgrades for Maqin County Hospital and deploys systems such as 4G Cloud Medical Care and Cloud Doctors' Alliance and relevant equipments, realizing intra- and inter-hospital information exchange and driving improvement in local medical conditions.

To facilitate environmental protection and sustainable local economic development, China Mobile helped Maqin County Government develop the Maqin County Tourist Attraction Signs Information System with a series of core functions such as Travel Guide, electronic maps and accommodation and transportation guidance, giving a significant boost to local traditional cultural heritage preservation, county-wide tourism economy development, and delivery of self-reliant, sustainable economic development.

Promoting Poverty Alleviation and Boosting Rural Revitalization

# China Mobile and SDGs



# **Our Sustainable Development Rationale**

Against the backdrop of global attention to poverty eradication and efforts to help everyone secure equal opportunities for development, China Mobile actively plays to its business strengths to contribute to the realization of China's 2020 poverty alleviation goal. Overcoming numerous challenges along the way, we have built 4G networks in remote, impoverished areas comparable to those in developed regions and made an all-out effort to implement the Telecommunication Universal Service Project, thereby providing broadband access to impoverished families and serving as the lifeline for local economic development and community growth. On this basis, we invested funds and manpower and conducted programs in livelihood improvement, industry development, education support, healthcare, etc. in partner assistance and targeted poverty alleviation areas to realize empowerment-based poverty alleviation, thereby helping impoverished people increase production and income and lead a better life. We also integrated new technologies and applications such as 4G, IoT and cloud computing closely with the practical needs of rural development, harnessed local characteristics to help realize new types of rural economy such as intelligent agriculture, intelligent animal husbandry and intelligent tourism, and built modernized "new villages".

#### **Key Performance Indicators**

Indicators	2016	2017	2018
Narrowing digital divide			
Number of sales channels in township-level areas <sup>1</sup> (10,000)	55.0	46.2	41.0
Number of Rural Information Service users (10,000)	6,487	7,480	8,924

Note:

 With the development of the Internet, the number of customers, volume of business and market share have all increased rapidly in our online store, mobile store and other electronic channels. This has been accompanied by a corresponding decline in the scale of offline channels including village channels. In the future, we will further enhance the business capacity of our electronic channels to provide rural customers with convenient services that can be enjoyed at home.

# **Our Achievements in 2018**

- Cumulatively launched the self-developed Targeted Poverty Alleviation System in 71 cities/counties in 14 provinces across the country, covering 8.11 million impoverished people and 740,000 frontline poverty alleviation cadres
- Undertook partner assistance and targeted poverty alleviation in eight counties of five provinces together with the parent company, investing over RMB100 million in assist fund, implemented 30 focused poverty alleviation projects, and improved infrastructure conditions and economic development levels in impoverished areas
- Further enhanced information technology application in rural areas and formed a number of unique rural information-based application demonstration projects, thereby providing new ideas and new means for rural development

# Our Goals for 2019

- Strengthen the organization of and resource assurance for poverty alleviation, enhance the effectiveness of poverty alleviation projects, and help impoverished regions establish normalized mechanism for poverty eradication and help impoverished people develop capacity for sustainable development
- Continue to amplify efforts in network-based poverty alleviation and serve as a more effective platform to drive effective integration between social forces for poverty alleviation and the needs of impoverished regions, and provide technological and platform support for realizing poverty alleviation targets
- Further combine the resource endowments and development needs of villages in different regions, provide tailor-made village information applications, promote demonstration programs, and help villages enjoy information benefits and realize leapfrog development



# Promoting Social Welfare

China Mobile fulfills its part as a corporate citizen by being actively involved in supporting social welfare. Since founding the China Mobile Charity Foundation in 2009, we have constantly improved the construction and management of our public welfare platforms. We have continually launched a range of brand programs such as the Blue Dream program and the Heart Caring program, utilizing information technology to improve children's education and medical aid conditions in remote rural areas, resolving the "last kilometer" problem of public welfare.



In 2018, we thoroughly implemented the MIGU Running initiative. We continued to optimize the user experience of our online platform and expand the scope of our offline activities. Combining the Blue Dream and Heart Caring programs, we matched user running mileages with company donations to further increase social participation and gather the power of public welfare. At present, 4.5 million people have cumulatively participated in our MIGU Running public welfare activities.

# Heart Caring Program Passing on Love

In November, 2018, the program was brought to the She County of Hebei Province. A 12-year-old boy named Zhao Zhiwei was the oldest of all the children screened for the disease and also had the latest diagnosis, rendering the disease life-threatening. When learning that Zhiwei was qualified for assistance from the Heart Caring program, his grandma cried with joy. Our staff learned that Zhiwei's grandma had adopted him in 2008 and since been raising him with her every effort. Through the kind gesture of adoption, she had saved Zhiwei's life years ago, and now China Mobile is passing on that love with its Heart Caring program.

China Mobile started the Heart Caring program in 2011 to provide free screening and treatment for children diagnosed with congenital heart disease. By the end of 2018, the program had covered nine provinces including Neimenggu, Liaoning, Henan, Shanxi, Qinghai, Guangxi, Ningxia, Hebei and Guizhou, cumulatively donating RMB160.8 million and providing free screening for 45,648 impoverished children, with 5,358 diagnosed children receiving free surgery.

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Since 2006, the China Mobile Blue Dream Education Aid Plan has been dedicated to improving the balanced development of school education and teaching facilities in central and western China for 13 years. In 2018, based on the continual and integrated adoption of shadow training and long-distance training, the China Mobile Principal Training program newly launched the Diagnostic training model, where programs such as principal visits to the Mobile Information-based Exhibition Hall are included in the training to expand the training model and content, improving the effectiveness of training. In the meantime, we visited Sichuan, the Three Regions Three Cities at the Shanxi Provinces as well as areas of extreme poverty where we donated 272 multimedia classrooms equipped with multimedia long-distance teaching facilities and our And Education products to the local secondary and primary schools. By the end of 2018, the Company has invested over RMB156.8 million in the Blue Dream program, training 115,782 rural school principals and donating 2,310 China Mobile libraries and 2,302 China Mobile multimedia classrooms.

# Music Classrooms Filled with Love

"These kids deserve better music education," said volunteer teacher Sha Nanjie. As a Yi ethnic singer from Daliang Mountains, Sha Nanjie still clearly recalls the first time he visited the school in impoverished areas of his hometown, when he was truly amazed by the children's passion for music there. "Every classroom was packed with 50-60 children. The music lessons were part-time covered by other subject teachers. Due to the lack of hardware facilities, music classes were taught by the following to sing with the teachers repeatedly. However, I was surprised to find that the children could choreograph by themselves and would give performances in class now and then, clearly very eager for opportunities to perform."

In June 2018, Sha Nanjie arrived at Sanchahe Township Primary School and Jiefang Township Primary School in Zhaojue County with our MIGU Music Classroom program. Drawing on his own specialties, he gave a singing and vocal class to the children. Through easily understandable beats combined with improvisational composition rooted in everyday life, he brought a brand new music experience to the children and inspired their imagination about musical forms.

Since its launch in November 2017, the MIGU Music Classroom program has joined forces with music experts, professional singers, employee volunteers, and other parties to bring music lessons to six schools in Zhaojue County of Liangshan Yi Autonomous Prefecture and Kaili County of Qiandongnan Miao and Dong Autonomous Prefecture. Over 3,000 children have been benefited from our music lessons on basic musical knowledge, musical instruments and singing, as well as mate"The training allowed me to learn firsthand better ways of school management. When I return to school, I will engage teachers from different schools in Simao District in sharing and research sessions to deliver higher-quality and more specialized school education."

- Xiao Weishu, Principal of Simao No.7 Primary School, Pu'er City



Children having class in the China Mobile multimedia room



Yi ethnic singer Sha Nanjie and primary school students from Daliang Mountains

rials including stationery, musical instruments and books, etc., which have satisfied the student's needs for learning music and improved local learning conditions.

Asemalimu, a 14-year-old girl of the Yi ethnicity from Bi'er County Central Primary School, Zhaojue County, Liangshan Prefecture, contributed a pristinely-rendered song to the public welfare album Ceiba ("Mumian") under the professional guidance of MIGU volunteer music teachers. The album has been released on MIGU Music and is intended to use music to bring more people's attention to remote and mountainous areas and ethnic minorities, delivering positive message through music.





Scan the QR code to listen to Ceiba, the public welfare album

# [ Sunshine Children Safety Monitoring Poverty Alleviation Program

Bijie City is a remotely located city in Guizhou Province, and nearly 180,000 residents work outside the city as migrant workers, leading to a huge number of left-behind children. The life and education of those children have become an issue of wide public concern.

Child safety accidents frequently occur in Bijie City. In response, China Mobile launched the Sunshine Children Safety Monitoring Program in cooperation with local government and social security departments, sending out 65,088 safety intelligent phone watches to left-behind children in 7 counties/districts of Bijie. Equipped with features such as family calls, emergency calls, location tracking, trail playback, etc., those watches build a bridge of safety between those children and their guardians.

All the left-behind children wearing the intelligent watches are included in the And Campus platform, where, utilizing the "Internet + Education" approach, targeted quality educational resources designed by renowned schools/teachers are provided based on the students' records of academic scores and evaluations to help improve their academic performance.



The watch enables the left-behind children to talk with their parents, thus ensuring better care and guardianship, helping them to develop more intimate communications and relationship with their parents, getting rid of the "shadow" of loneliness.

We developed the left-behind children safety supervision platform, which has been incorporated into the public security system to show the children's real-time location and historical movement and send timely notifications when they are near dangerous spots; in case of emergency, nearby equipment can be maneuvered for quick response to reduce the time for resolutions.

# Championing Volunteer Services

We encourage employee volunteerism and continue to improve the volunteer service implementation and guarantee mechanisms to make our volunteer work more effectively delivered and richer in content. We are concerned about the needs of under-privileged groups and actively implement a rich variety of employee volunteer service programs for impoverished households, left-behind children, outdoor workers, the elderly, the disabled, and other groups, providing them with comfort and assistance.

In 2018, we formulated the Guideline on Further Promoting China Mobile Volunteer Work to make our employee volunteer management more standardized, program-oriented, systemized and normalized, thereby improving the management effectiveness and impact of voluntary management programs. 135,900 employees had registered as volunteers, collectively contributing 567,600 hours of volunteer work.

# 🔃 With You – With Seedlings Campaign

With You is a China Mobile volunteer brand dedicated to implementing "one-on-one" donation and assistance initiatives aimed at poverty alleviation and education improvement in the Company's targeted poverty alleviation regions. With Seedlings is a With You sub-brand designed to provide volunteer teaching in impoverished areas to drive education-based poverty alleviation and broaden students' horizons and knowledge base. We also recruited the children of our employees to be "little volunteers". They have participated in gatherings with donations (like stationery) for left-behind children, passing on the kindness of heart.

In 2018, our With You volunteer activities inspired active employee participation and donations. Through 6,301 activities, we raised a total of RMB9.1816 million in donations. Meanwhile, our With Seedlings platform sent 10 volunteer teachers to Ningxia Province and donated 105 sets of new desks and chairs and RMB25,000 worth of books to Xingjing County

Hui People No.1 Elementary School in Yinchuan City to provide better learning conditions for the children.



Shaanxi Company employees celebrating birthday for left-behind children

# L Having You Under Our Roof – The Outdoor Workers' Care Station

Outdoor workers are "guardians of the city". Regardless of the weather conditions, they always spare no efforts in contributing to the betterment of the city and the citizens' lives. However, they are always in lack of a roof to protect them from the rainstorms and harsh weather conditions. In 2018, China Mobile Shanghai Company set aside a special section and established the Outdoor Workers' Care Stations in the numerous China Mobile stores throughout the city. Over time, a service model that incorporates "space, sign, personnel, services, facilities and guarantee" has been established, with a focus on addressing the workers' practical needs for drinking water, shade from the sun and shelter from the cold, food warming, phone charging, bathroom breaks, etc. Drawing on our own business features, we also provide them with free 300Mb or 500Mb domestic data and free tryout of our mobile information services.

At present, the Company solidifies construction of the care stations by setting up a dedicated workgroup tasked with formulating Outdoor Workers' Care Station operations and management regulations and conducting regular on-site inspections on the supplies and service quality. By the end of 2018, the Outdoor Workers' Care Station had been set up in 119 China Mobile outlets throughout Shanghai, collectively serving over 3,500 outdoor workers in all kinds of professions such as sanitation workers, assistant traffic police, messengers and deliverymen.



 Staff from our business store in Shanghai offering hot water to outdoor workers

"I am so happy about these Care Stations. In the past, when I needed to use the bathroom, I would feel too awkward to ask the shoppers in case it would cause them any inconvenience. There was no proper place for lunch or taking a rest, so I would just sit under the shade of a tree. Now these Care Stations have made my job much more enjoyable. It is a wonderful service, and we all love it."

-Aunt Zhang, Cleaner

# Philanthropy Stars of the Year



#### Zeng Huiling: Participator in charitable causes and spreader of love

Zeng Huiling is an account manager at the Tengzhou Branch of China Mobile Shandong Company. While taking good care of her own child, she has also long been dedicating her time and energy to caring for elderly empty nesters, left-behind children and special children in the community as a volunteer. To spend time with deaf-mute children, she has even mastered the sign language. For over ten years, she has influenced people around her with concrete actions and inspired more people to participate in social welfare through her unwavering commitment to charitable work.



#### Zheng Yaru: Rose-giving hand has a lingering fragrance

Zheng Yaru is an employee of the Zhongshan Branch of China Mobile Guangdong Company. Her responsibility is to oversee work implementation of the Company's chief youth volunteer squad. She believes that outstanding and refined charitable work lies in a continuous effort to innovate and give character to past experience. With a focus on caring for migrant workers and providing premium service, Zheng Yaru has actively explored the way and managed to deliver a perfect blend of commercial activities and social good as well as diversified forms of charitable events and services.



#### Lin Wanlv: Applying knowledge to practice to innovate poverty alleviation

Lin Wanlv is the Chief Operator of the Network Management Center Monitoring Room of China Mobile Yunnan Company. Since May 2018, he has volunteered to participate in poverty alleviation in Huangping Village, Suijiang County, Zhaotong City. Drawing on his technological expertise to overcome numerous difficulties, Lin Wanlv set up an innovative impoverished household information display platform and FTP information storage platform. The platform helped the work team solve chronic problems such as difficulty in locating specific people, information asymmetry, and difficulty of finding required resources, enhancing the efficiency of poverty alleviation work. **G** 

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# China Mobile and SDGs

# **Our Sustainable Development Rationale**

Information and communications technologies have unique advantages in helping to narrow down development divide, alleviate and eradicate poverty, balance educational and medical resources, unite forces for public welfare and other aspects. China Mobile leverages its business strengths and Internet thinking and strives to deliver "last kilometer" solutions for providing public welfare assistance. From Blue Dream and Heart Caring to the platform dedicated to caring for left-behind children, and from the music classroom to MIGU Running Initiative, the Company gives play to its public welfare resources and featured platforms to connect groups in need with public welfare endeavors, enhancing the effectiveness of public welfare assistance and building and sharing prosperous communities with relevant stakeholders.

#### **Our Achievements in 2018**

- Improved the construction and regulatory management of our public welfare platforms and promoted China Mobile Charity Foundation as a Class 4A foundation
- 115,782 principals from rural primary and secondary schools in central and western China trained through our Blue Dream Educational Aid Plan and 5,358 impoverished children diagnosed with congenital heart disease treated through our Heart Caring Campaign
- Continued to improve our volunteer service management and guarantee mechanism to enhance the volunteer service abilities of our employees and extend the coverage of our volunteer services, providing 567,600 hours of voluntary service this year

# Our Goals for 2019

- Train 11,120 principals from rural primary and secondary schools in central and western China and build 538 multimedia classrooms through the Blue Dream plan
- Provide treatment for around 600 impoverished children diagnosed with congenital heart disease through the Heart Caring Campaign
- Fully implement and improve the effectiveness of poverty alleviation volunteer work

# **Key Performance Indicators**

Indicators	2016	2017	2018
Public Welfare			
Total number of regis- tered employee volun- teers (10,000 persons)	13.10	11.10	13.59
Total amount of employ- ee volunteer service time (10,000 hours)	50.20	56.80	56.76
Cumulative number of impoverished children to receive free congenital heart disease screenings	33,417	39,488	45,648
Cumulative number of impoverished children di- agnosed with congenital heart disease assisted and treated	3,633	4,498	5,358
Cumulative number of China Mobile Libraries built	2,310	2,310	2,310
Cumulative number of multimedia classrooms built	1,760	2,030	2,302
Cumulative number of ru- ral primary and secondary school principals trained	92,532	103,828	115,782
Cumulative donation made by China Mobile Charity Foundation (RMB10,000)	23,395	27,225	31,055

# A Digital Future Achieved Together

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# Leading 5G Innovations

As 5G technologies continue to mature, the 5G era, an era of intelligent Internet of Everything, is just around the corner. China Mobile continues to drive up 5G technology R&D, explore the forms of 5G products, and extend 5G application scenarios to areas such as smart factory, new media and smart transportation. The Company joins forces with business partners to boost the Internet-based, digital and intelligent development of all sectors and jointly deliver a beautiful 5G lifestyle.

## U Successfully Building the First 5G Smart Power Plant

In January 2019, China Mobile completed the first 5G-based multi-scenario smart power plant end-to-end business verification exercise in China at Jiangxi Photovoltaic Power Plant in collaboration with industry partners. Based on China Mobile's 5G networks, the power plant successfully materialized a number of smart energy application scenarios, delivering significant breakthroughs in the application of 5G technologies in the smart energy sector.

- Drone patrol inspection and robot patrol inspection scenario: Based on the platform, the Centralized Control Center in Nanchang remotely controls drones and robots at the Gongqing Photovoltaic Power Plant to perform patrol inspections. The HD inspection footages are then transmitted back to the control center in Nanchang in real time, realizing the transition of the mode of equipment control from local to remote.
- Intelligent security protection scenario: Realizing real-time monitoring and integrated environmental surveillance at the power plant through panoramic HD cameras.
- Personnel operations scenario: Audio & video and location functions enabled by intelligent wearables allow experts in Nanchang to provide remote guidance for on-site maintenance and repair personnel at the power plant.

## I Helping China Media Group Deliver Its First "5G+4K" Spring Festival Gala Live Broadcast

In 2019, the Spring Festival Gala was successfully live-streamed over 5G networks in 4K ultra high-definition through a concerted effort among China Mobile, China Media Group and relevant partners, the first time since the program debuted. The broadcast is not only a 5G application demonstration that has received the largest viewership in history but also an integration between the traditional Chinese New Year and state-of-the-art 5G technologies.

With the support of China Mobile's 5G networks, 4K ultra high-definition footages of the Spring Festival Gala Shenzhen parallel session were transmitted to the China Media Group Studio in Beijing in real time without lag and presented to the audience. This is a perfect demonstration of the characteristics of 5G such as high speed and low latency and lays the foundation for the large-scale application of ultra-high-definition video technologies in the era of 5G.

Cementing Leadership in Innovation and Accelerating Transformation and Development

# Building the Wuxi Internet of Vehicles City-level Demonstration Application Project

The Wuxi Internet of Vehicles City-level Demonstration Application Project led by China Mobile is a joint effort between China Mobile and nearly 30 partners and currently the world's largest city-level Internet of Vehicles. The project opens up over 40 traffic control data items, materializing more than 30 application scenarios including push notifications for traffic light information as well as warnings for vehicle front collisions and pedestrians crossing the street. The project has played an effective role in improving the public's mobility experience and enhanced the smart traffic management of cities.

In 2018, we comprehensively advanced the maturity of 5G technologies with a view to realizing 5G pre-commercial use in 2019 and large-scale 5G commercial use in 2020.

#### Actively applying new technologies

- Led the setting of 5G network framework international standards and played a primary role in advancing 5G terminal testing and certification standards at the 3GPP (3rd Generation Partnership Project) and GCF (Global Certification Forum).
- Launched the 5G Terminal Pioneers Plan and rolled out large-scale 5G pilot network construction in full.
- Core thesis on large-scale 5G antenna won the Fred W. Ellersick Prize 2018 Best Paper Award presented by IEEE (Institute of Electrical and Electronics Engineers), the first time the prize has been independently received by a Chinese industry sector/R&D organization.

#### Striking out in new directions

- Announced plans for the first batch of 5G terminal products in collaboration with industry players, introduced China Mobile's first selfowned brand 5G terminal, and published the White Book on 5G Universal Modules showcasing its achievements.
- Set up industry research institutes in Xiong'an New Area, Chengdu and Shanghai, and incubated realizable and scalable 5G demonstration applications with a focus on industry, agriculture, healthcare, education, transportation, finance, smart cities and other verticals to promote the integration between digital economy and real economy.

# Building a new ecosystem in concerted efforts

- Initiated the O-RAN Alliance for wireless network architecture geared to building "open", "opensource" and "intelligent" wireless networks with high flexibility and low cost.
- Reinforced communication and cooperation with international telecommunications enterprises in new technology R&D, new application expansion, new model exploration and other areas to push towards coordinated innovation and shared growth in the 5G era.
- Upgraded the China Mobile 5G Innovation Center to an innovation incubator with 260 partners and 20 open laboratories set up worldwide, representing a concerted effort to accelerate the innovative application of 5G.

# Deepening Industry Transformation

Drawing on its continuously improving independent R&D capabilities, China Mobile actively explores the new "Internet + digital content" operating model and delivers new experiences and new scenarios made possible by technological innovations, thereby actively preparing itself for the new competitive landscape.

# Enhancing Independent Innovation Capabilities

The Company continues to strengthen its R&D organizational system to improve its R&D capabilities in frontier technologies. In 2018, we set up second-tier R&D institutes in 10 specialized services companies and directly affiliated units. We also established an intelligent hardware innovation center to undertake all work related to the Company's proprietary branded intelligent hardware such as frontier technology research, product design and R&D as well as manufacturing and supply chain management. The center equips us with the core capability to independently develop full-lifecycle intelligent hardware and develop an intelligent hardware ecosystem, thus propelling the large-scale and innovative development of intelligent hardware in China.

The Company works to improve its core capabilities for R&D on proprietary branded products on all fronts by comprehensively sorting out its technological capabilities, constructing its R&D capability map and deepening its R&D mechanism reform. In 2018, we completed the first phase of the construction of scientific and technological achievements sharing platform and hosted nine "Scientific and Technological Achievements Day" events, facilitating the promotion of scientific and technological achievements that takes various forms, spans different points in time, and covers multiple fields.

In terms of proprietary intellectual property rights, the Company actively fosters a culture where independent innovations are valued and protected. In 2018, we filed 2,222 patent applications and 1,040 patents were newly granted. We also held week-long proprietary property awareness activities, improved our mass entrepreneurship and innovation IP management, and continued to explore IP operations.



#### Innovative applications

- Our customer service intelligent answering system "Yiwa" is currently the world's biggest intelligent customer service system.
- Our products, including Business Converged Gateway, With Seedlings children's watch, and Find Him/Her Locator, won a number of awards such as Red Dot, METIS, and IDEA.
- We launched a range of new AI products such as Witness Comparison All-In-One, intelligent loudspeaker, And-MU camera, and Penetrating Eyes, based on the application of new AI technologies such as intelligent voice and machine vision.

# Operating Digital Content Ecosystem

#### **Proprietary brands**

- Introduced proprietary branded intelligent hardware products across the four major areas of households, individuals, industries and chip modules.
- Accelerated deployment in the area of new retail and launched a new independent terminal pilot, effectively enhancing the efficiency of existing channels.
- Completed the preliminary development of image recognition, voice recognition, user portrait, big data analysis and other functions, with services like face recognition and intelligent app recommendation already applied in the end products N5 and N5 pro, our selfowned brand cell phones.

The increasingly enriched technological means have provided people with a brand-new content consumption experience. With a focus on digital content upgrading, and taking the live broadcast of the 2018 FIFA World Cup as an opportunity, China Mobile thoroughly implements our "Internet + digital content" operations model, providing users with a full-scale immersive experience.

#### Management innovations

- The triangle management model has enabled digital content-focused collaboration among our headquarters, specialized services companies and provincial subsidiaries, building the coordination matrix encompassing marketing, contact points and content.
- Became the first telecom operator to deliver networks that spanned broadcasting and TV companies, Internet companies and telecom operators, and obtained the IPTV transmission license plate, starting a new era of China Mobile IPTV.

## Operating Big Sports IP – World Cup

#### Business innovations

- Created content IP and originally developed diversified content formats.
- Developed big data-based targeted marketing.

#### Service innovations

- Enhanced product experience based on a number of innovative technologies such as cloud editing, split screen and multiple angles.
- Created a full-scale immersive experience.

In 2018, Our MIGU brand was selected to be the official partner for CCTV live stream new media and telecommunications transmission of the FIFA World Cup held in Russia. This is the first time that a Chinese telecommunications operator has been given the live streaming rights for a major international competition. We delivered the live broadcast of all 64 matches to 4.3 billion viewers (person-times), utilizing new services and functions to enable a brand-new, high-definition and smooth viewing experience.

#### "Three-dimensional" presentation of the World Cup in true colors

We achieved live broadcast of original images at 50 frames per second on small screens (handsets); as for big screens (TV), the real 4K image quality boasted a resolution four times higher than 1080P; the application of HDR technologies allowed viewers to capture the smallest detail on the field.

#### "Interactive" experience for a fun World Cup

Features such as split screen and multiple angles fully satisfied viewers' personalized needs for watching the World Cup; content and activities such as World Cup theme music, audio live streaming and virtual run-to-Russia initiatives offered users the opportunity to be fully "engaged" in the matches.

#### AI Live Stream Editor

The Editor tools can accurately capture important scenes such as shots, fouls and penalties before editing and slicing the footages in real time using AI technologies to immediately bring the wonderful clips to viewers.

Cementing Leadership in Innovation and Accelerating Transformation and Development

# Reinforcing Compliance Management

Honesty and compliance are the cornerstones of a business and the lifeline of its sustainable development. China Mobile commits firmly to honesty in all its operations, operationalizes a culture of rule of law, and complies with relevant laws and regulations. The Company continuously improves its compliance system as well as its management of risks, anti-corruption compliance and supply chains in all respects and makes an all-out effort to progress its culture of compliance, thereby ensuring healthy development.

# Complying with Laws and Regulations

The Company adheres to the governance value and philosophy of "compliance with laws and respect for rules". Internally, we reinforce all employees' identification with and faith in rule of law, instill the spirit of integrity and commitment in our employees, and guide our employees to strictly comply with rules, thereby providing rule-based safeguards for the Company's healthy development. Externally, the Company fulfills its part as a corporate citizen by running law awareness public welfare campaigns.

We continued to implement our Compliance Escort Plan in 2018, striving for all-round enhancements in our ability to implement the rule of law and compliance management and ensuring lawful operations and proper management.

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Compliance

**Escort Plan** 

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Formulating and optimizing compliance management regulations

Formulated the China Mobile Compliance Management Measures and set up an institutional system centered on compliance management to provide guidance for operations and management. Strengthening compliance management in focal areas

Promoted pilot compliance achievements in focal areas such as bidding and procurement and engineering construction, and created compliance management mechanisms embedded in business to effectively prevent compliance risks; published research reports on export control, market competition, etc., and strengthened anti-monopoly compliance learning.

#### Publicizing a culture of compliance

Organized compliance trainings, set up the Compliance Escort section on our Online University website, and organized the group-wide Compliance Escort Micro-video Contest.

China Mobile issued ten compliance guidelines regarding market competition, anti-bribery in commerce, cooperation with law enforcement, information security, bidding and procurement, project construction, labor and employment, network security, conflict minerals, and export control, further reinforcing close-loop compliance risk management.

With respect to overseas investment, the Company always begins with an in-depth analysis of the macro environment and industry trends of target markets and fully considers the economic, social and environmental impact or value of the projects as a key determinant of investment decisions at all stages such as investment planning, opportunity selection, project implementation and investment decision-making.

We live the core corporate value of "Responsibility Makes Perfection", comply strictly with laws and regulations on human rights protection, and play an active role in protecting the interests of vulnerable groups. Since becoming a member of the UN Global Compact in 2007, we have supported and actively implemented the UNGC Ten Principles, respecting and protecting internationally recognized human rights.

For information on our corporate governance and specific financial performance, please refer to our annual report or website www.chinamobileltd.com.

# **Risk Control**

Our risk evaluation follows a three-tiered management structure comprising the Audit Committee, the departments responsible for functional management, business as well as supervision and evaluation, and the Internal Control and Risk Management Expert Bank at the functional position level, with which we achieve specialized management over planning, decision-making, execution and implementation, thereby ensuring the continuous improvement and effective implementation of our internal control system. Having established regular risk assessment mechanisms and procedures, we conduct major annual risk assessment to evaluate our risk exposures and levels in areas such as strategy, market, finance, operations, legal and compliance as well as information technology, and gradually implement risk control measures and requirements. By further refining our risk prevention and control measures, we continued to strengthen monitoring over all kinds of risks in 2018. For each type of risks, we have developed a task breakdown template setting out specific countermeasures and work plans, embedding requirements for risk management into our daily work. We organized training on internal control and risk management and set up a tiered and categorized training system to enhance the risk management awareness of all employees.

In terms of internal audit, an Internal Audit Department is set up both at the Company's headquarters and its operating subsidiaries. They undertake financial audit, internal control audit, information system audit, risk evaluation and related work to deliver independent internal audit at each affiliated unit and improve the Company's risk prevention and management capabilities. In 2018, we intensified audit supervision over areas such as Internet channels, information security and asset management to improve risk prevention and control, and also pushed forward information-based audit based on an in-depth application of technologies such as big data and cloud computing, remarkably enhancing the efficiency and effectiveness of our audit.

# Anti-corruption

China Mobile's domestic operating units comply strictly with relevant laws and regulations such as the Supervision Law of the People's Republic of China, and our overseas operating units all act in full compliance with local anti-corruption and anti-bribery laws and regulations. We gradually improve our four-in-one anti-corruption work system of "education, prevention and control, punishment, and accountability" to build a corruption free company.

Improving anti-corruption mechanism system	In 2018, China Mobile formulated 15 regulations and regulatory documents including the "Guideline on Continuously Deepening Construction of Embedded Integrity Risk Prevention and Control Mechanism" and the "Provisions on Implementing the Eight-point Regulation of the Centre and Further Deepening Conduct Construction" to further solidify our anti-corruption mechanism system construction.
Strengthening integrity risk prevention and control	We improved integrity risk prevention and control by conducting bottom-up checks and es- tablishing an integrity risk assessment system, exploring a maturity rate evaluation model for embedded prevention and control and compiling an evaluation manual, and setting up an important node normalized reminder and supervision mechanism.
	We listed "micro corruptions" that harm customer and employee interest as one of our prior- ities for internal supervision and inspection. We conducted an investigation at our grassroots units and clarified corrective measures for prominent issues to drive effective rectification.
Improving supervision and	We compiled the "Work Guideline on Patrol Inspections 2018" and the related work manual to specify rules on patrol inspections. We established and deepened the embedded integrity risk prevention and control mechanism for the patrol inspection work stream to further stan- dardize the work of patrol inspection at all levels.
accountability mechanism	We established robust internal and external supervision mechanisms through reporting chan- nels such as email, dedicated phone number, CEO mailbox and on-site reporting during su- pervision and inspection. In 2018, the Company received 1,263 reports in the form of letters/ visits, 85% of which have been handled and concluded.
	We actively organized employee anti-corruption education and training programs and gave equal importance to concentrated education and daily education to develop an all-round, three-dimensional anti-corruption and integrity education structure.
Improving anti-corruption education on all fronts	We held the anti-corruption and integrity awareness month for the eighth consecutive year and provided innovative anti-corruption and integrity trainings complementary to face-to- face lectures with online education platforms such as a dedicated learning area in our Online University, MMS classrooms, video conferences and intranet live broadcasts to drive stronger employee engagement.
	In 2018, the Company held 3,717 anti-corruption and integrity education activities, covering over 90% employees.

# Cementing Leadership in Innovation and Accelerating Transformation and Development

# Reinforcing Product Responsibility

China Mobile pays close attention to end product quality management and ensures product quality through measures such as continuously improving our end product quality evaluation system and standardizing our product labeling and advertising information communication.

For our proprietary branded products, we adopt a comprehensive quality management approach and develop corresponding guidance documents targeting product establishment, R&D, production and sales. We conduct product quality checks in four aspects, namely project quality review, company stock entry quality audit, national or industry test and certification, and post-launching spot checks. Pursuant to the guidance documents, we have measures in place to address products that do not pass quality checks, which include upgrade or repair, recall, rework, and the imposition of fines, depending on the severity of the problems. In 2018, we continued to reinforce special testing and evaluation of our personal, home and IoT end products to detect and resolve various problems in a timely manner and implement stringent quality control.

We act in strict compliance with the Advertising Law of the People's Republic of China and the Trademark Law of the People's Republic of China. We have formulated regulations including the China Mobile Management Measures on Advertising and Publicity, clearly requiring all types of information published for advertising purposes to be true and accurate, forbidding the use of unregulated pictures, terms or texts, and strictly prohibiting the unauthorized use of other people's portraits, registered trademarks, or works, etc., to ensure that our product information and labeling are faithfully communicated and that we engage in transparent and effective communication with our customers. Pursuant to the requirements of the Ministry of Industry and Information Technology of China, we further regulated tariff marketing management to ensure that our tariff plans are simple, clear, explained in standard terminology, and free from ambiguity.

# Supply Chain Management

China Mobile endorses win-win partnerships with suppliers and works actively to create an open, fair, trustworthy and honest value chain. In 2018, we continued to clearly stipulate our supplier cooperation requirements and improve our test and assessment processes, thus gradually enhancing our responsible procurement management capabilities, with 100% of our partnering first-level centralized procurement suppliers having received our assessment.

## Operational guidance to suppliers

- We publicly published the China Mobile Suppliers Cooperation Guidelines, explicitly requiring our suppliers to fulfill their tax obligations, actively pay for social security and obey legal and regulatory rules for legal employment, labor protection, occupational well-being and safety, social responsibility, environmental protection, etc.
- We devised the China Mobile Supply Chain Policy on Conflict Minerals and China Mobile Guidelines on Supply Chain Due Diligence Procedures for Conflict Minerals, demanding suppliers to investigate into and report the use of conflict minerals in the supply chain.
- We formulated the China Mobile Code of Conduct on Professional Integrity for Purchasing Personnel, requiring supplier managers to sign a Business Integrity Pledge, thereby guaranteeing that the procurement activities are standardized and fair.

### Supplier risk management

- We regard supplier risk management as part of the Company's overall risk assessment and perform comprehensive assessments on the economic, environmental and social risks of our suppliers by means of on-site inspections, questionnaires, external sustainability agencies, stakeholder information, external database, public opinion supervision, etc.
- We use certificates for SA 8000 (Social Accountability), OHSAS 18001 (Occupational Health and Safety Assessment Series) and ISO 14000 (environmental management standards) as criteria for assessing suppliers' overall capabilities, and perform on-site inspections; we require suppliers without such certificates to provide supplementary explanation as regards employee safety and well-being, environmental protection, social contributions and other aspects.
- We formulated the China Mobile Management Measures on Negative Acts of Tier-1 Centralized Suppliers, specifying punishment standards and work procedures, and helping suppliers rectify negative actions and enhance their integrity.



#### **Key Performance Indicators**

Indicator	2016	2017	2018
Financial Performance			
Operating revenue <sup>1</sup> (RMB100 million)	7,084	7,405	7,368
Taxation (RMB100 million)	356	337	359
R&D and Innovation			
Number of patent applica- tions (pieces)	1,684	2,006	2,222
Number of newly regis- tered patents (pieces)	684	753	1,040
Compliance and Anti-corrup	tion		
Number of Board Meet- ings in the year	4	4	4
Number of anti-corruption education activities in the year	3,951	3,580	3,717
Participation of anti-cor- ruption education and training (person-times)	696,106	722,720	759,810
Number of corruption cas- es disciplined in the year	232	275	321
Number of employees dismissed and disciplined for corruption in the year	302	414	433
Supply Chain Management			
Number of suppliers	7,243	8,039	7,216
Number of first-level suppliers	553	571	480
Percentage of first-level local suppliers <sup>2</sup> (%)	100	100	100
Number of second-level suppliers	7,148	7,468	6,736
Percentage of second- level local suppliers <sup>3</sup> (%)	44.29	55.69	80.35
Number of assessments on first-level suppliers <sup>4</sup>	2,393	2,417	2,194

#### Note:

1. The Company has applied the new revenue standard (IFRS/HKFRS 15) since January 1st, 2018.

2. Percentage of first-level local suppliers means the proportion of domestic suppliers (registered in Mainland China) in all suppliers for the first-level procurement. We did not conduct any international tendering projects in 2018, thus did not have any international supplier.

3.Percentage of second-level local suppliers means the proportion of suppliers registered in a province for the second-level procurement of that particular China Mobile provincial subsidiary.

 The number of supplier assessments carried out by our Procurement Shared Service Center, covering both winning and non-winning suppliers for the first-level procurement.

# China Mobile and SDGs

#### **Our Sustainable Development Rationale**

The arrival of the 5G era has presented telecommunications operators with new opportunities for developing the next generation of ICT infrastructure and extending their digital service offerings as well as new possibilities for building sustainable cities and communities. In re-sponse, China Mobile actively leads the development of 5G technologies and industries, enhances the construction of innovative systems, and strives to facilitate the realization of the SDGs by comprehensively improving its independent innovation capabilities, building an industry cooperation innovation mechanism, and collaborating with stakeholders in the R&D and promotion of 5G intelligent applications and solutions. At the same time, the Company continuously improves its compliance management and endeavors to establish an all-encompassing integrity risk prevention and control mechanism to continuously reinforce product responsibility and drive stronger sustainability management in the supply chain so as to promote its own healthy development as well as that of the entire industry.

#### **Our Achievements in 2018**

- Extended 5G service applications to various fields such as intelligent life and smart transportation, accelerated the maturity of 5G technologies on all fronts, and contributed to an intelligent, beautiful lifestyle in collaboration with partners
- Established industry research institutes and second-tier R&D research agencies in Xiong'an New Area, Chengdu and Shanghai and set up smart hardware innovation centers, thereby deepening R&D mechanism reform, enhancing comprehensive independent R&D capabilities, and advancing the Company's digital transformation and development
- Enhanced our compliance institutional system, continued to promote the Compliance Escort Plan, and further intensified risk prevention and control as well as anti-corruption education

#### **Our Goals for 2019**

- Accelerate 5G scale experimentation and application innovation with a view to realizing 5G pre-commercial use in 2019 and 5G commercial use in 2020 so as to jointly advance the maturity of the 5G industry
- Work with business partners to develop 5G innovation demonstration projects to provide novel infrastructure and intelligent applications that support the construction of sustainable cities and communities
- Further optimize compliance and anti-corruption management, solidify the construction of a culture of integrity, and leverage our leading position in the industry to realize healthy development with higher standards



# Combating Climate Change

Greenhouse gas emissions are a major contributor to climate change. Pursuing green, low-carbon development and coping with climate change have become the global consensus. China Mobile has developed a climate strategy centered on energy conservation and emission reduction and has made a positive contribution to showing down global warming by continuously promoting the Green Action Plan since 2007 and enhancing its environmental management capabilities.

In 2018, we formulated the "Guideline on China Mobile Green Action Plan 2018", reinforcing management at source, promoting "whole-process, full-stage, all-employee" energy conservation and emission reduction and making sure that our operations complied with the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution, the Law of the People's Republic of China on Conserving Energy, and other relevant laws and regulations.

# Improving Environmental Management System

- Building a comprehensive risk management system whereby the issue of climate change is incorporated into various stages including the identification, screening, integration, ranking and management of risks and opportunities, and formulating and improving the Environmental Management System.
- Identifying the departments responsible for energy conservation and emission reduction management, and including indicators such as total energy consumption per unit of telecom business and power usage effectiveness (PUE) into the employee performance appraisal system of subsidiaries, and forming energy conservation and emission reduction working groups to oversee the management of climate change and energy related issues in business, networks and office activities.
- Improving the Carbon Emissions Management System, demonstrating our climate change strategy, management system, risks and opportunities as well as carbon emissions management performance from the dimensions of disclosure, awareness, management and leadership, and promoting the fulfillment of carbon trading commitments at China Mobile's headquarters, China Mobile Beijing Company, and CM Tietong's headquarters and Beijing branch.
- Creating an energy management system that covers 31 provincial subsidiaries and hiring third-party organizations to perform energy audit and authentication, in order to implement overall monitoring of the Company's daily energy consumption indicators.
- Pushing forward ISO 14001/50001 environmental/energy management system certification efforts, with our provincial subsidiaries in Beijing, Guangdong, Zhejiang, Fujian and Shaanxi (as well as their city-level subsidiaries) certified to have demonstrated compliance with international standards for environmental/energy management.
- Strengthening environmental information disclosure and management and continuously improving environmental management measures through participation in CDP (Carbon Disclosure Project) and other relevant industry evaluation surveys.

# Reducing Resource Consumption

China Mobile attaches great importance to the reasonable utilization of resources and fulfills its commitment to building a sound ecosystem and environment by intensifying technological innovations, promoting green operations and management both within the Company and in the value chain, and enhancing the environmental awareness of employees and the wider public.

# Intensifying Energy Reduction Renovations

Since 2008, China Mobile earmarks a special budget for energy conservation and emission reduction every year to be used for energy-efficient renovations at base stations, data centers, office buildings and stores. In 2018, we further reinforced energy conservation management at our data centers to minimize costs and enhance efficiency. In terms of management approach, we gradually improved the energy efficiency monitoring and management and control system at our data centers, increasing the ambient temperature in machinery rooms and implementing an intelligent air conditioner group control mechanism. On the technology front, we encouraged the use of more energy-efficient integrated rack servers and multi-node servers and recommended putting servers on dynamic energy-efficient operations mode. We also adopted a range of technological renovations in the machinery room facilities, including airflow organization optimization, natural cold source application, air conditioner cold source transformation, waste heat recycling, etc. to continuously improve the energy efficiency at our data centers.

In 2018, China Mobile International Information Port Phase-I Data Center, Southern Base Cloud Data Center, Shanghai Ningqiao Data Center, Guizhou Data Center were included in the first batch of national green data centers. Compared with the previous year, the Company's overall energy consumption per unit of information flow decreased by 57% and the overall energy consumption per unit of telecom business decreased by 53%.

# Innovating Environmental Protection Applications

China Mobile is actively involved in developing and applying energy-efficient technologies such as 4G base station sleep technology and multi-network coordination energy-saving system as well as innovating and exploiting low-carbon information-based applications and products. At the same time, the Company strives to enhance the proportion of renewable energy sources in areas rich in clean sources of energy such as solar, wind, water and hydrogen but lacking traditional electrical power to drive energy conservation and emission reduction in the whole society.

In 2018, we further promoted low-carbon applications such as intelligent charging points and smart meter reading. Income from our low-carbon information-based applications accounted for approximately 7.3% of the Company's annual revenue. Mean-while, we intensified R&D of 5G energy-efficient technologies and launched environmental protection guardian products based on frontier "IoT + AI + big data" technologies, realizing 24/7 real-time monitoring over air quality and facilitating the construction of a complete, regionally integrated air pollution monitoring network boasting enhanced effectiveness in environmental protection.

# Promoting Green Operations

China Mobile actively implements green operations by promoting the use of online office software such as Cloud Video System and Conference Assistant as well as paperless office systems such as OA, mail, supply chain management, and the electronic procurement and bidding system. Meanwhile, the Company cultivates its employees' low-carbon habits by advocating green, healthy and energy-efficient lifestyles. In 2018, 35,774 projects were posted in our electronic procurement and bidding system, and the wholly electronic procurement process resulted in the reduction of about 141,000 paper-based bidding documents.

## Energy Conservation Awareness Week Featuring Green Connectivity

Our Energy Conservation Awareness Week, themed "Green intelligent connectivity; a future created together", continued in 2018. Through offline activities such as "Low-Carbon Life Hacks" and "Count Me in Environmental Protection" and the online annual "Carbon Emissions Test", the Company promoted energy conservation and environmental protection measures among its employees and the wider public based on its own business platform and channels like new media.



# Water Resource Management

In strict compliance with related requirements of the Water Law of the People's Republic of China and the Water Pollution Prevention and Control Law of the People's Republic of China, China Mobile continues to intensify management over daily water use, strictly controls the emission of waste water, advocates water conversation, and encourages the recycling and reuse of rainwater and reclaimed water, thereby reducing the consumption of water resources.

In 2018, we further reinforced the management of water use in our machinery rooms, management rooms and stores, realizing zero growth in the average water use per person in management rooms. A rainwater collection and utilization system was built in China Mobile (Xixian New Area, Shaanxi) mobile data center phase I. The system collected, processed and stored rainwater, which was then used as a supplementary water source for watering greens and washing roads, thus enhancing the efficiency of water resources use.

Committing to Green Development and Environmental Protection

# Waste Management

China Mobile constantly explores and improves the standardized management of waste classification and recycling. Pursuant to the requirements of the Law of The People's Republic of China on Prevention of Environmental Pollution by Solid Wastes, the Catalogue of Waste Electrical and Electronic Products for Disposal (2014) and other relevant laws and regulations, the Company classifies waste into general waste, electronic waste and hazardous waste. Hazardous waste is processed by technological means or handed over to specialized agencies for treatment, while non-hazardous waste is recycled and reused or disposed of according to relevant laws and regulations.

We encourage customers involvement to participate in environmentally friendly recycling initiatives. We organized the Green Box Environmental Protection Campaign in combination with our And Machine Swap service, recycling electronic waste such as scrap mobile phones and mobile phone accessories and offering smart terminal refurbishment services in a number of provinces. In 2018, a total of 39,909 electronic items were recycled via the Company's Green Box volunteer initiative.

## Hazardous Waste Management Platform

In 2018, China Mobile Zhejiang Company set up an information-based hazardous waste management platform in Huzhou. By electronically recording all stages of waste management encompassing collection, storage, utilization and disposal, the platform ensures the standardization and traceability of hazardous waste management, timeliness of its entry and exit, legality of transfer, and compliance with waste disposal agency qualifications. At present, three types of hazardous waste have been included in the platform.

# Green Supply Chain

China Mobile actively propels suppliers' full-lifecycle energy conservation and emission reduction encompassing R&D, manufacturing, transportation and recycling of products. By setting energy conservation standards for the telecommunications industry chain, the Company drives suppliers to adopt green designs. By renewing energy efficiency grading standards and procuring energy-efficient products, we are fueling the green transformation of the industry chain.

## 🕄 Green Packaging

In 2018, we continued to promote the use of green packaging. We replaced the traditional wood packaging with environmentally friendly or recyclable materials such as metal trays, metal circulation racks and environmentally friend cartons. We demanded our suppliers to fulfill their commitment to centralized procurement, ensuring that the green packaging usage ratio of newly added main equipment reached 67%, equivalent to 168,000 m<sup>3</sup> of wood saved. We promoted green packaging recycling among our suppliers, achieving effective material recycling and reuse and energy consumption reduction. We also started adopting customized delivery bags for our SIM cards.

## national Streen Warehousing

With a view to building energy-efficient and environmentally friendly warehouses, we renovated the mode and intensity of lighting in some of our warehouses in 2018. By changing to LED lights, using voice-control switches and enforcing rules on "one-hour lights off during lunchtime", we reduced warehouse electricity use by 50%.

# 😤 Green Transportation

Since June 2017, our pilot zero-emissions "new energy vehicles" have been put into operation in Shanghai, Guangxi and other provinces/regions to carry out green transportation. As of December 2018, 14 such vehicles had been put in use.

# Electromagnetic Radiation Management

We have formulated the China Mobile Electromagnetic Fields Management Methods, combining random inspections by experts with daily monitoring at provincial subsidiaries to safeguard continuous monitoring of our base stations, keeping electromagnetic radiation within regulatory limits and protecting the health and safety of residents. We customized our publicity vans by equipping them with in-vehicle electromagnetic radiation dynamic monitoring systems, professional testing devices and technical personnel and raised the awareness of residents through educational activities such as expert Q&A, educational videos and onsite electromagnetic radiation tests on household appliances, thereby facilitating deep engagement with the community and dispelling public concerns.



# China Mobile and SDGs

## **Our Achievements in 2018**

- Continued to improve our environmental management system and realized the reduction of our overall energy consumption per unit of information flow by 57% compared to last year through measures like energy-saving renovations, environmentally friendly applications and green operations
- 100% of our bidding projects were handled via our electronic procurement and bidding system, realizing fully electronic procurement
- Gradually explored and improved our waste management and promoted the use of lightweight and green packaging materials, achieving a percentage of 67% in the use of green packaging for newly purchased equipment
- Reduced our annual energy consumption by 2,660 GWhs, equivalent to a reduction of GHG emission by 1.706 million tonnes

## Our Goals for 2019

- Reduce our overall energy consumption per unit of information flow by 15% compared with 2018 and our overall energy consumption per unit of telecom business by 10%
- Continue to promote the use of green packaging, urge suppliers to fulfill their centralized procurement commitment, and keep the percentage of newly purchased equipment that uses green packaging at no lower than 60%

#### **Our Sustainable Development Rationale**

"Lucid waters and lush mountains are invaluable assets." Economic development and business activities should not be pursued at the expense of a sustainable ecosystem. China Mobile pays attention to the continued rise in the energy consumption as a result of its extensive network construction and implements energy conservation and emission reduction and cost optimization by improving its environmental management system, promoting energy efficient renovations, innovating energy efficient technologies, introducing renewable energy sources, and optimizing waste management. The Company takes areas such as smart cities, smart delivery and intelligent transportation as key scenarios for 5G application innovation and actively develops energy efficient and environmentally friendly solutions to contribute to the construction of ecological civilization.

#### **Key Performance Indicators**

Indicators	2016	2017	2018
Energy Consumption			
Total electricity consumption (100 GWhs)	197.1	223.3	244.7
Natural gas consumption (mil- lion m <sup>3</sup> )	9.1	7.9	11.2
LPG consumption (100 tonnes)	3.7	3.1	2.7
Coal gas consumption (million m <sup>3</sup> )	0.20	0.10	0.05
Coal consumption (10,000 tonnes)	0.5	0.1	0.2
Total gasoline consumption (million liters)	126.9	121.5	112.4
Total diesel fuel consumption (million liters)	17.6	19.4	14.8
Purchased heating costs (RMB million)	150.4	160.9	123.4

Indicators	2016	2017	2018
Emissions			
CO <sub>2</sub> emissions (million tonnes)	14.38	15.98	16.17
Direct GHG emissions (Scope 1) (million tonnes)	0.35	0.33	0.31
Indirect GHG emissions (Scope 2) (million tonnes)	14.03	15.65	15.86
Carbon emission intensity (tCO <sub>2</sub> e/ RMB10,000)	0.203	0.216	0.219
SO <sub>2</sub> emissions (tonnes)	95.22	23.59	35.93
NO <sub>x</sub> emissions (tonnes)	0	0	0
CH <sub>4</sub> emissions (tonnes)	0	0	0
Carbon emissions from com- mute (10,000 tonnes)	59.87	37.79	39.45
Carbon emissions from business travels (10,000 tonnes)	9.25	29.44	7.10

Indicators	2016	2017	2018
Energy Savings			
Total electricity savings (100 GWhs) in the year	3.8	21.4	26.6
Equivalent cost savings (RMB100 million) in the year	5.2	28.9	37.7
Equivalent GHG emission reduc- tion (10,000 tonnes) in the year	26.4	148.5	170.6

Indicators	2016	2017	2018
Green Operations			
Number of cross-provincial vid- eoconferences at headquarters	800	882	970
Online sales volume (RMB100 million)	3,934	4,648	4,785
Reduction in overall energy con- sumption per unit of informa- tion flow (%)	36	40	57
Investment in Green Action Plan (RMB100 million)	1.9	1.4	1.9
Total amount of resources used for producing terminal devices (tonnes)	3,171	8,847	9,394

Indicators	2016	2017	2018
Water Use			
Total amount of water con- sumption (million tonnes)	41.25	42.24	35.12
Average amount of water con- sumption per employee (tonnes)	90	91	76

Indicators	2016	2017	2018
Waste Management			
Hazardous waste (tonnes)	22,742	35,035	10,165
Non-hazardous waste (tonnes)	-	-	29,594
Hazardous waste emission inten- sity (kg/RMB10,000)	-	-	0.14
Non-hazardous waste emission intensity (kg/RMB10,000)	-	-	0.40
Indicators	2016	2017	2018
Weight of Waste Recycled by Cer	tified Thire	d Parties	
Network waste (tonnes)	21,046	32,531	35,559
Acid batteries (tonnes)	13,997	20,219	19,458
Communication equipment (tonnes)	3,366	6,869	10,743
Cables (tonnes)	1,088	2,136	2,203
Other waste (tonnes)	2,595	3,307	3,155
Office waste (tonnes)	1,512	2,367	4,102
Electronic equipment (tonnes)	1,234	1,895	2,941
Other waste (tonnes)	278	472	1,161
Devices (tonnes)	184	137	98
Total (tonnes)	22,742	35,035	39,759
Indicators	2016	2017	2018
Value of Waste Recycled by Certif	ied Third I	Parties	
Network waste (RMB10,000)	10,574	21,255	22,898
Acid batteries (RMB10,000)	7,942	13,220	13,103
Communication equipment (RMB10,000)	1,513	3,727	6,886
Cables (RMB10,000)	386	3,313	1,684
Other waste (RMB10,000)	733	995	1,225
Office waste (RMB10,000)	712	892	1,717
Electronic equipment (RMB10,000)	612	798	1,336
Other waste (RMB10,000)	100	94	381
Devices (RMB10,000)	140	122	297

Note: In 2018, the Company classified its waste more finely and disclosed weight and intensity of hazardous/non-hazardous waste emission recycled by certified third parties.





# 🔕 Supporting Employee Development

Drawing on continuous improvement to its training system and innovation in its incentive mechanism, China Mobile strives to cultivate the next generation of multi-talented workforce in network, IT system, digital services and other key areas. The Company fosters innovation among all employees, and shares with them the value of sustainable development.

# Improving Effectiveness of Training

China Mobile has formulated and strictly abides by the Training Management Methods and implements the annual training plan in an orderly fashion. The Company develops the caliber of capabilities needed for transformation and development based on its key groups, key capabilities and position characteristics.

In 2018, we strengthened the full-process closed-loop management of our training projects, continued to carry out annual training project evaluation, and constantly enhanced the effectiveness of various lines of professional training work. Meanwhile, we worked to enhance our training and teaching abilities on all fronts by actively improving our integrated Group-wide internal trainer development system, organizing a rich variety of teaching and research activities such as course teaching and development and course delivery to grassroots employees, and engaging in a concerted effort to develop and share excellent internal teaching resources.

We continuously explored and applied a variety of employee training methods, and designed training programs that matched the subject matter of trainings and characteristics of participants. In 2018, we adopted online and offline community-based learning, guided discussion, online learning, experience distillation, outreach training and other learning methods to improve the pertinence and effectiveness of our trainings. In 2018, we provided training for 1.821 million person-times in total, and the average training time per employee reached 100.8 hours.

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#### New employees

Reference Management

#### Business elite

Technological personnel

We held the Mobile Voyage New Employee Growth Camp, where participants received learning resources on a themed basis and had their personalized and varied learning needs met through a number of interactive means of learning. We strengthened leadership training for top management in the transformation phase to improve their team management strategic thinking and ability to discharge work responsibilities, and provided targeted training modules for middle management to improve their strategy execution capabilities.

We reinforced systematic training for our backbone personnel by promoting our network marketing course system, deepening the implementation of group client manager learning roadmap and launching centralized audit capability enhancement programs for audit management personnel. We formulated the New Drivers Capability Enhancement Plan, completed the development of skill maps and learning roadmaps, and conducted intermediate and advanced network training as well as business support expert advanced IT training to further reshape the core competencies of our technical personnel.

## Online Learning Program

Based on our new Online University platform, we provide low-cost, expansive, universal and convenient training programs for employees on a Group-wide basis, featuring an organic combination of online training on PC and mobile phone and offline training. Our online learning program focuses on the 10 major projects under our Big Connectivity strategy. In 2018, the program offered nearly 40 themed learning modules such as intelligent IoT and AI with a viewership of over 1 million person-times, and held 510 job post skills certification exams with a candidature of over 240,000 person-times.

- In 2018, China Mobile was awarded the "Most Socially Responsible Employer Award" under the China Best Employer Awards.
- China Mobile University was awarded the "Outstanding Contribution Award" under China's Best Enterprise University Rankings 2018, the "Excellent Enterprise University Award" and "Enterprise Universities Top 50" under the China Talent Development Elite Awards, as well as the "Advanced Enterprise University Award" and "Advanced Network Academy (Online Platform) Award" by the China Association for Executives Development.
- China Mobile Hong Kong Company was awarded the "Best Employer Award 2018" by Job Market.

# Innovation Incentive Mechanism

In 2018, we made an all-out effort to establish a technological innovation reward system. We reformed our rewards for technological advancements as well as business and service innovations and formulated the China Mobile Technological Innovation Management Measures, further complementing our innovation incentive mechanism. We rewarded major technological innovations, on-the-job technological innovations, and fruition of technological endeavors. We continued to increase our rewards to incubation-oriented innovation and entrepreneurship efforts and make sure that our employees are incentivized.

We provide our employees with an internal mass entrepreneurship and innovation incubation service platform and host the China Mobile Independent Development Competition to unleash our employees' innovative potential. In 2018, ten teams from nine provincial subsidiaries were shortlisted for the finals of our 4th Independent Development Competition.

## Smart "Wukong" and Its Penetrating Eyes

"Wukong", a smart image converter developed by a team from China Mobile Chongqing Company, entered the finals of the China Mobile 2018 Independent Development Competition and won an award. Not only can the product be used by the general public to perform such image processing functions as old photo renovation and shake reduction but it can help image processing professionals improve their user interface (UI) design efficiency as well. During its participation in the competition, the team was provided with resource support by China Mobile such as R&D cloud and AI platform. The process of working hard together to solve one tough problem after another helped the team hone their technological competencies and motivated them to undertake more innovation R&D to help solve real-life problems.



 "Wukong" team road show at the finals of the Independent Development Competition

"The competition has helped us establish a technological basis in a new field. In overcoming difficulties along the way, we have achieved progress and growth. We are greatly thankful to the Company for providing us with a platform for self-realization."

— Cao Xu, Team Leader

"With the help of the Company and my team, I have overcome my fear of public speaking. It took me a lot of courage and also gave me a strong sense of fulfillment. It has made me realize that with passion and dreams, one's possibilities are limitless."

-Wang Feng, Team Member

Since 2013, we have held "The Most Beautiful Mobiler" event every year to recognize the individual value of our employees and develop a role model for growth. In 2018, 21 of our employees (group) were each named "The Most Beautiful Mobiler".

## 🚺 "Gold Digger" in the Big Data Era – Yang Weimin



A veteran in mobile telecommunications operations and R&D, Yang Weimin initiated the establishment of the Fujian Mobile Network Maintenance Innovation Studio. He has led his team to overcome technological barriers in 35 fields and successfully implemented their products in more than ten provinces/cities, generating a comprehensive economic return of over RMB450 million and helping save RMB33 million in annual cost. Moreover, Yang Weimin has spent all his bonuses received over the years, totaling hundreds of thousands of RMB, on talent cultivation in an effort to build a strong caliber of technological talents.

## The "Pathfinder" that Delivers the Mobile Speed – Cen Shuwei



As a technological pioneer, Cen Shuwei has led his team to break innumerous barriers to achieve groundbreaking success in large-scale 4G pilot networks and support Hangzhou City in its launch of China's first 4G-covered bus line. He delivered a multitude of innovations in new technologies, connected cars, Internet of Things and other areas during the G20 Hangzhou Summit, achieving new heights of performance in the network quality and perception of Hangzhou city. Now, Cen Shuwei is leading his team to explore 5G networking models and standards and actively participate in the construction project of the "5G Demonstration Area" thereby making preparations for the imminent arrival of the 5G era.

# Protecting Employee Rights and Interests

China Mobile strictly complies with the laws and regulations on employee rights protection, including the Labor Law and Labor Contract Law of the People's Republic of China, the Special Provisions on Labor Protection of Female Employees, and the Law of the People's Republic of China on the Protection of Rights and Interests of Women, as well as those of overseas jurisdictions where it operates, in order to protect the legitimate rights of its employees by various means.

Recruitment and promotion	• We formulated and strictly abide by the Management Approach on Employee Recruitment and ensure that our hiring process is open, fair and transparent by establishing a scientific, standard and systematic recruitment system. We do not use discriminating recruitment requirements and strictly forbid the use of child labor and forced labor. We optimized our employee career development system and relevant guidance to advance the construction of employee promotion and career development channels.
<u>ه</u>	• We revised and distributed the Labor Management Regulations to further implement standardized labor management as regards job classification, forms of labor, labor contract, work time, rest and vacation, and other aspects. We protect employees' legitimate rights to remuneration, work time, rest and vacation, insurance and benefits, and other aspects. The average salary of our employees is higher than local minimum wage.
Remuneration and benefits	• We formulated the China Mobile Implementation Plan for Incentive Annuities and built a comprehensive employee benefits insurance system. We formulated targeted special incentive and dedicated incentive plans to improve our employees' sense of gain.
	<ul> <li>We prioritized and strengthened "four-period protection" (covering menstrual period, pregnancy period, delivery period and breastfeeding period) to cater to female employees' special needs.</li> </ul>

We respect and protect our employees' rights to information and expression and enable robust employee feedback mechanisms by establishing the CEO mailbox, hotlines, employee forums, employee representative conferences and other channels. Moreover, we collect written feedback, hold employee conversation and conduct field surveys to comprehensively review outstanding practices, typical cases and employee demands as regards employee rights protection. We compile those findings into themed research reports and focal problem summaries, which are important tools for improving our ability to protect employee rights and interests.

# Facilitating Employee Growth and Fostering Innovative Talents

# In Female Employee Rights Protection Training

In 2018, China Mobile invited professional lawyers to offer lectures to our female employees on the Law of the People's Republic of China on the Protection of Rights and Interests of Women, the Special Provisions on Labor Protection of Female Employees, and relevant laws and regulations. We held one-to-one and one-to-many face-to-face communication sessions to collect suggestions and opinions from our female employees, thereby delivering timely solutions to frequently raised issues and improving their ability to safeguard their own legitimate rights and interests.

# Promoting Employee Well-being

China Mobile strictly abides by relevant laws and regulations such as the Labor Law of the People's Republic of China and the Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases in providing a safe work environment and safeguarding employees against occupational hazards.

We continued to provide all of our employees with medical examination and health lectures, with a medical examination rate of 97% in 2018. We provide essential assistance to alleviate the pressing needs of sick and troubled employees by offering poverty aid fund, major illness assist fund, medical insurance, employee mutual help fund, etc..

We promoted the physical and mental well-being of our employees and helped them balance their work and life demands by implementing initiatives such as the Employee Assistance Program (EAP), "Five Smalls" (small canteens, small lounges, small bath-rooms, small activity rooms and small libraries) project, and "Happiness 1+1" (engaging in 1 sports activity and developing 1 hobby) program.

## Employee Assistance Program (EAP)

China Mobile continued to fully implement the Employee Assistance Program (EAP). Through the program, we provide an allyear-round psychological consultation hotline and managers' hotline and work with professional units to offer an array of services that cover all our employees including face-to-face psychological consultations, themed sharing sessions, psychological health tests, high depression tendency screening, psychological crisis identification and prevention, etc. to contribute to our employees' psychological well-being. In 2018, Our EAP activities covered over 320,000 employees from 31 provincial subsidiaries and specialized services companies and directly affiliated units. So far, we have trained 3,093 EAP specialists and set up 120 stress relief rooms and care rooms.

## Tive Smalls" Employee Care Project

In 2018, we continued to promote our "Five Smalls" project (small canteens, small lounges, small bathrooms, small activity rooms and small libraries). We invested RMB557 million and prioritized areas with harsh natural conditions and backward infrastructure, satisfying the basic needs of our grassroots employees for food, water and access to the bathroom and improving their work conditions.

# "Happiness 1+1"

The China Mobile "Happiness 1+1 program started in 2015 and calls on employees to participate in 1 sports activity and develop 1 hobby. The program is designed to improve employees' physical and spiritual well-being by encouraging them to take part in activities such as brisk walking, yoga, basketball, mountain climbing, calligraphy and photography. Our "Happiness 1+1" events in 2018 included China Mobile Employee Ping Pong Competition, Happiness 1+1 Parent-child Talent Show, public welfare tree planting and many more, attracting the participation of 332,000 employees.

**不忘初心 7 休司行 共向未来** 2018年 "幸福1+1" 员工文艺汇演

A Happiness 1+1 Employees' Arts Show

In terms of employee safety, we revised the China Mobile Responsibility System for Safe Production and compiled publicity materials such as the China Mobile Electrical Safety Manual, the Elevator Safety Management, and the Personal Safety Instructions for Women. Additionally, we organized a variety of training and education activities to raise employees' safety awareness, including the Safe Production Month, the Fire Control Awareness Month, as well as safety management personnel capability enhancement training and new employee safety orientation.

As regards emergency preparedness, we formulated the China Mobile Emergency Response Plan and actively organized emergency drills and improved our emergency preparedness procedures, thereby continuously enhancing our ability to handle emergencies and engage in safe production. By doing so, we strove and prevent emergencies and reduce their negative impact on our operations and to ensure employee safety during production.



# China Mobile and SDGs

## **Our Achievements in 2018**

- Improved the incentive mechanism, innovated training methods and strengthened innovative talent cultivation, providing 1.821 million person-times of training to our employees
- Provided a well-run employee complaint mechanism and intensified protection of employee rights and interests, with 100% of our headquarters, provincial subsidiaries, with and specialized services companies signing collective bargaining contract with employees, and 100% of our female employees returning to work after maternity leave at headquarters level
- Implemented activities such as the Employee Assistance Program (EAP), Five Smalls project and Happiness 1+1 to promote the physical and mental well-being, covering over 320,000 employees

## Our Goals for 2019

- Promote implementation of the New Drivers Capacity Enhancement Plan and further reshape the core competencies of the workforce at the stage of transformation to gradually enhance the comprehensive capabilities of technical personnel
- Further innovate incentive mechanism and establish more diversified and categorized employee incentives
- Fully respond to diverse employee demands, continue to improve employee rights protection and strive for harmonious labor relations

### **Our Sustainable Development Rationale**

Against the development backdrop of the imminent arrival of an era of intelligent IoT accelerated by the 5G technology, it is vitally important for telecom operators to attract and retain cornerstone talents and boost the technological transformation of their employees. In light of the critical demand for transformational development in order to achieve sustainable development, China Mobile endeavours to promote the cultivation of innovative talents by further increasing investment in its innovation incentives and training resources. Meanwhile, the Company is intent on sharing the value of sustainable development with the employees by providing more robust career advancement channels, better opportunities for innovation and entrepreneurship, more complete benefits plans, and a more accommodating work environment.

### **Key Performance Indicators**

Indicators	2016	2017	2018
Total number of employees	460,647	464,656	459,152
Human Resource Compositio	'n		
Percentage of technical personnel (%)	-	23.34	25.18
Percentage of marketing personnel (%)	-	56.56	55.17
Percentage of manage- ment personnel (%)	-	7.25	7.29
Percentage of general affairs personnel (%)	-	10.09	10.50
Other personnel (%)	-	2.76	1.86

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Indicators	2016	2017	2018
Diversity			
Percentage of employees under 30 years of age (%)	35.15	29.62	24.35
Percentage of employees between 30 and 50 years of age (%)	61.25	65.95	71.13
Percentage of employees over 50 years of age (%)	3.60	4.43	4.52
Percentage of female em- ployees (%)	55.54	55.11	53.17
Percentage of female em- ployees at senior manage- ment level (%)	18.00	13.18	16.45
Percentage of ethnic mi- nority employees (%)	7.16	6.83	7.03
Percentage of local em- ployees in Hong Kong Company (%)	91.9	89.4	89.5
Percentage of local employ- ees at management level in Hong Kong Company (%)	70.7	75.0	71.2
Employee Turnover			
Total number of employees newly hired in the year	16,842	27,011	20,259
Number of female em- ployees newly hired	9,040	14,194	8,397
Number of male employ- ees newly hired	7,802	12,817	11,862
Total number of employees resigned in the year	10,404	14,831	18,217
Number of resigned female employees	5,950	8,242	9,411
Number of resigned male employees	4,454	6,589	8,806
Total number of employees dismissed in the year	636	925	1,317
Number of female em- ployees dismissed	347	589	888
Number of male employ- ees dismissed	289	336	429
Percentage of employees resigned and dismissed among employees under 30 years of age (%)	1.94	2.24	1.55
Percentage of employees resigned and dismissed among employees between 30 and 50 years of age (%)	0.95	1.59	2.56
Percentage of employees resigned and dismissed among employees over 50 years of age (%)	0.02	0.21	0.15
Female employee turnover (%)	-	-	2.05
Male employee turnover (%)	-	-	1.92

Indicators	2016	2017	2018
Employee Training			
Training expense per em- ployee (RMB)	1,646	1,717	1,892
Total number of employees trained (10,000 per- son-times)	154.9	183.9	182.1
Number of senior man- agement trained (per- son-times)	867	986	1,047
Number of middle-level management trained (person-times)	15,546	28,669	18,744
Number of general em- ployees trained (10,000 person-times)	153.2	181.0	180.1
Average training time per employee (hours)	64.4	88.5	100.8
Average training time per senior management (hours)	99.8	106.9	106
Average training time per middle-level man- agement (hours)	79.8	88.1	109.5
Average training time per general employee (hours)	64.2	88.6	100.7
Number of Online Universi- ty users (10,000 persons)	39.5	40.5	41.6
Average Online University study time per employee (hours)	38.2	50	53.6
Number of Online Univer- sity users via mobile phone (10,000 persons)	27.8	29.1	34.5
Indicators	2016	2017	2018
Respecting and Protecting Hu	ıman Rights		
Number of jobs created (10,000)	268	260	288
Percentage of contracted employees who are labor union members (%)	100	100	100

employees who are labor union members (%)	100	100	100
Percentage of dispatched employees who are labor union members (%)	98	98	98
Indicators	2016	2017	2018
Health and Safety Manageme	ent		
Number of safety emer- gency drills	1,214	1,250	1,225
Participation rate in safety emergency drills (%)	86	86	86
Accident fatality rate per 1,000 employees (%)	0.0065	0.004	0.004
Number of fatalities caused by production safety inci- dents		_	2

Note: The indicators under Diversity and Employee Turnover are based on the number of on-post employees at the end of 2018.



# **Stakeholder Engagement and Materiality Analysis**

China Mobile has various communication channels in place to help us maintain regular and close communication with six stakeholder groups, including customers, employees, shareholders and investors, governments and regulators, value chain partners, and community and environmental representatives. When preparing this report, we used questionnaires to identify sustainability issues that concerned different stakeholder groups and determined areas to be disclosed in the report based on a materiality analysis.

Stakeholders	Key Issues of Concern (Top 5) *	Engagemen	t Approaches
Customers	<ol> <li>Service Quality and Customer Rights Protection</li> <li>Information Security and Privacy Protection</li> <li>Network Quality</li> <li>R&amp;D and Innovation</li> <li>Offshore Compliance of Corporate Social Responsibilities</li> </ol>	<ol> <li>1.Customer Reception Day</li> <li>2.10086 Hotline</li> <li>3.Weibo and WeChat Interactions</li> <li>4.Online and Mobile Customer Service Platforms</li> </ol>	5.Customer Satisfaction Surveys 6.Mobile App 7.CEO Mailbox
Employees	<ol> <li>Service Quality and Customer Rights Protection</li> <li>Information Security and Privacy Protection</li> <li>Network Quality</li> <li>Workplace Health and Safety</li> <li>Human Resources Development</li> </ol>	1.Employee Representative Conferences     2.Regular Trainings     3.Performance Communication Mechanism     4.MMS Magazine Mobile Weekh	5.Employee Recognition Mechanism 6.Employee Complaint Mechanism 7.CEO Mailbox
Shareholders and Investors	<ol> <li>Service Quality and Customer Rights Protection</li> <li>Information Security and Privacy Protection</li> <li>Financial Performance and Tax Payment</li> <li>Corporate Governance and Risk Management</li> <li>Network Quality</li> </ol>	1.Annual Reports, Interim Report 2.General Meetings 3.Investor Briefings and Conferen	
Governments and Regulators	<ol> <li>Information Security and Privacy Protection</li> <li>Network Quality</li> <li>Anti-corruption and Compliance</li> <li>Service Quality and Customer Rights Protection</li> <li>Corporate Governance and Risk Management</li> </ol>	1.Regular Reports and Communi 2.Specific Investigations and Mee 3.Relevant Forums 4.CEO Mailbox	
♥ ■¥¥¥ Value Chain Partners	<ol> <li>Information Security and Privacy Protection</li> <li>Service Quality and Customer Rights Protection</li> <li>Corporate Governance and Risk Management</li> <li>Network Quality</li> <li>Offshore Compliance of Corporate Social Responsibilities</li> </ol>	1.Procurement 2.Supplier Web Portal, Service St 3.Training and Assessment 4.Forums and Meetings 5.CEO Mailbox	ation and Supplier Hotline
Community and Environmental Representatives	<ol> <li>Information Security and Privacy Protection</li> <li>Service Quality and Customer Rights Protection</li> <li>Network Quality</li> <li>Reducing Carbon Emissions</li> <li>Reducing Environmental Resource Use</li> </ol>	1.Community Activities 2.Mass Media 3.New Media (Weibo, WeChat) 4.Charity Platform 5.CEO Mailbox	

\*Note: The top 5 key issues of concern of each stakeholder group come from the results of the stakeholder survey. Please refer to the materiality analysis on P55.

# **CSR** Communication Day

On July 19, 2018, we held the CSR Communication Day event in our sales channels which, together with our General Manager Customer Reception Day, aimed to collect opinions and suggestions from our stakeholders regarding our corporate social responsibility practices. 4,763 self-owned sales channels participated in these events and organized a variety of activities with local characteristics. 1,921 China Mobile representatives, including general managers of branch companies and department directors of provincial subsidiaries, were present to communicate with 78,000 customers (person-times).

Indicators	2016	2017	2018
CSR training participa- tion (person-times)	353,958	471,669	447,006
Number of emails re- ceived in CEO Mailbox	1,033	1,279	1,315
Number of customer visits on Customer Day (person-times)	105,076	102,060	138,301
Number of complaints and inquiries handled on Customer Day	106,020	91,960	118,304

Stakeholder Engagement and Materiality Analysis

In 2018, based on the materiality analysis of the various sustainability issues, we evaluated the degree of impact being brought on stakeholders by economic, environmental and social issues, and China Mobile's impact on these issues, and identified issues of high materiality to be highlighted in this report.

Identification	Evaluation	Report Preparation
International Standard Benchmarking <ul> <li>HKEx ESG Reporting Guide</li> </ul>	Using online questionnaires, we carried out the key stakeholder survey with respect to the degree	A materiality matrix was formed (see the figure below) to highlight issues to be prioritized in the report.
<ul><li>GRI Standards</li><li>UN SDGs</li></ul>	of impact of sustainability issues on stakeholders, collecting 3,302 valid questionnaires in total.	
UNGC Ten Principles	With reference to industry practices,	
Analysis of key sustainability issues and key industry issues	we teamed up internal and external experts to evaluate the impact of Chi- na Mobile's operations on different	
Corporate strategy analysis	sustainability issues.	



- Information security and privacy protection Network quality ment 3 Service quality and customer rights protection sions 4 R&D and innovations
- 5 Corporate governance and risk management
- 6 Human resources development
- 7 Anti-corruption and compliance
- 8 Financial performance and tax payment
- 9 Workplace health and safety
- 10 Fair employment and non-discrimination

- 1 Public welfare 12 Supply chain manage-
- 13 Reducing carbon emis-
- (4) Reducing environmental resource use
- 15 Offshore compliance of corporate social responsibilities
- 16 Stakeholder engagement

17 Waste management

	Issues	Pages	Reporting scope
High Mate	Information security and privacy protection	13-17	Customers, government and regulators, community and environ- mental representatives
ligh ⁄lateriality Issues	Network quality	8-12	Customers, government and regulators, community and environ- mental representatives
sues	Service quality and customer rights protection	13-24	Customers, value chain partners, community and environmental representatives
	R&D and innovation	18-24, 36-42	Customers, government and regu- lators, value chain partners
	Corporate governance and risk management	36-42	Employees, shareholders and inves- tors, government and regulators
Mod	Human resources development	48-53	Employees, shareholders and investors
Moderate Materiality	Anti-corruption and compliance	39-42	Employees, government and regu- lators, shareholders and investors
Aoderate Aateriality Issues	Financial perfor- mance and tax payment	39,42	Shareholders and investors, gov- ernment and regulators
	Workplace health and safety	50-53	Employees, value chain partners
	Fair employment and non-discrimi- nation	50-53	Employees, value chain partners
	Public welfare	25-34	Customers, community and envi- ronmental representatives
	Supply chain management	41-42	Value chain partners, community and environmental representatives
	Reducing carbon emissions	43-47	Customers, employees, govern- ment and regulators, value chain partners
	Reducing environmental resource use	43-47	Customers, employees, govern- ment and regulators, value chain partners
	Offshore compli- ance of corporate social responsibili- ties	9,39	Customers, value chain partners
Low Materiality Issues	Stakeholder engagement	54-55	Customers, employees, sharehold- ers and investors, government and regulators, value chain partners, community and environmental representatives
y Issues:	Waste manage- ment	45-47	Customers, employees, value chain partners

# **Independent Assurance Report**



# To the Board of China Mobile Limited:

## I. Scope of Our Engagement

The 2018 Sustainability Report (the "Sustainability Report") of China Mobile Limited (the "Company") has been prepared by the Company. Management of the Company (the "Management") is responsible for the collection and presentation of information within the GRI Standards issued by the Global Sustainability Standards Board (GSSB), and for maintaining adequate records and internal controls that are designed to support the sustainability reporting process.

Our responsibility is to carry out limited assurance procedures in accordance with International Standard on Assurance Engagements 3000 ("ISAE3000"): "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" issued by the International Federation of Accountants and issue the assurance statement for the year ended 31 December 2018 in accordance with the Management's instructions.

Our work was limited to these stated above and our report is made solely to you, as a body, and for no other purpose. We do not therefore accept or assume any responsibility for any other purpose or to any other person or organization. Any reliance any such third party may place on the Sustainability Report is entirely as its own risk.

## **II. Work Performed**

Our review has been planned and performed in accordance with ISAE3000. In order to form our conclusions, we carried out the following procedures:

According to the Managements instructions, we performed limited assurance procedures in:

- China Mobile Limited Head Office
- China Mobile Liaoning Company Limited
- China Mobile Shaanxi Company Limited
- China Mobile Guangxi Company Limited

We did not perform limited assurance procedures on other sites.

The limited assurance procedures were performed over the following key performance indicators in the Sustainability Report for the year ended 31 December 2018:

#### **Economic indicators**

- Number of first-level suppliers
- Number of second-level suppliers
- Percentage of first-level local suppliers
- Percentage of second-level local suppliers
- Number of assessments on first-level suppliers
- Number of administrative villages with broadband service launched in the "Telecommunications Universal Service Project"
- Number of Rural Information Service customers
- Number of sales channels in township-level areas

#### **Environmental indicators**

- Total electricity consumption
- Natural gas consumption
- LPG consumption
- Coal gas consumption
- Coal consumption
- Gasoline consumption
- Diesel fuel consumption
- CO<sub>2</sub> emissions
- Carbon emission from business travel
- Carbon emission from commute
- Number of video conferences usage at group level

# Independent Assurance Repor

#### Social indicators

- Number of spam messages report handled
- Number of emergency support
- Number of emergency support vehicles deployed
- Number of emergency support equipment installed
- Number of person-times involved in emergency support
- Number of principals of rural primary and secondary schools trained newly added
- Number of assisted children in poverty who suffered from congenital heart disease newly added
- Number of person-times trained
- Percentage of female employees
- Ethnic minorities as a percentage of total employees
- Total number of newly hired employees
- Total number of resigned employees
- Total number of dismissed employees
- Number of Anti-Corruption Education programme organized
- Attendance of anti-corruption education and trainings

The limited assurance procedures we carried out are following:

- Interviewing the Company's management and staffs responsible for the selected key performance information;
- Performing analytical review procedures;
- Performing sample inspection on the selected key performance information;
- Performing recalculation procedures on the selected key performance information;
- Other procedures we considered necessary.

### **III. Limitations of Our Scope**

Our scope of work did not include:

- Assessing the accuracy or fairness of information (including financial information) other than the selected key performance information.
- Reviewing the forward-looking statements made by the Management.
- Reviewing and consequently providing assurance on historical data.

### **IV. Level of Assurance**

Our evidence gathering procedures have been designed to obtain a limited level of assurance (as set out in ISAE 3000) on which to base our conclusion. The procedures conducted do not provide all the evidence that would be required in a reasonable assurance engagement and accordingly, we do not express a reasonable assurance opinion or an audit opinion. While we considered the effectiveness of the Management's internal controls when determining the nature and extent of our procedures, our review was not designed to provide assurance on internal controls.

## **V. Our Conclusions**

Subject to the limitations of scope and based on the procedures specified above for this limited assurance engagement, we provided the following conclusions:

Nothing has come to our attention that causes us to believe that the selected indicators were not presented fairly in all material respects in the 2018 Sustainability Report of China Mobile Limited.

## **VI. Our Independence**

We are in compliance with the Ernst & Young Global Independence Policy which was designed to comply with the requirements of the IFAC Codes of Ethics for Professional Accountants (the IFAC Code). We believe that there were no events or prohibited services provided which could impair our independence.

## VII. Our Assurance Team

Our assurance team has been drawn from our sustainability assurance service network, which undertakes similar engagements to this with a number of domestic or international businesses. Our assurance team has met the requirements of competence and work experience of this engagement.

Emat & Young Here Ming up

Ernst & Young Hua Ming LLP Beijing, PRC 26 March, 2019

# **About this Report**

This report is the 13th Sustainability Report of China Mobile Limited. The report discloses relevant information about our economic, social, and environmental sustainability performance. Unless otherwise stated, the time span of this report is from 1 January 2018 to 31 December 2018.

#### **Reporting Form**

This report is published in both Chinese and English and presented in both printing and online edition. (Read and download the report at www.chinamobileltd.com)

#### **Reporting Standards**

The report has been prepared to comply with globally recognized benchmarks for disclosure of sustainability information while highlighting the industry background and China Mobile's unique characteristics. The standards as key references used for developing this report include:

- Hong Kong Stock Exchange (HKEX) Environmental, Social and Governance Reporting Guide
- GRI Sustainability Reporting Standards by the Global Sustainability Standards Board (GSSB)
- United Nations 2030 Agenda for Sustainable Development
- Ten Principles of the United Nations Global Compact
- ISO Guideline on Social Responsibilities (ISO 26000)
- Chinese CSR Report Preparation Guide (CASS-CSR 4.0) issued by the Chinese Academy of Social Sciences

China Mobile has complied with the "comply or explain" provisions set forth in the HKEx Environmental, Social and Governance Reporting Guide, and this report has been prepared in accordance with the core option of the GRI Standards.

#### Reporting Content and Boundary

In accordance with the principles of "stakeholder engagement, sustainability context, materiality, and completeness", China Mobile determined materiality issues and their boundary through a materiality analysis (See P54-55 in this report for the process and result of materiality analysis.)

#### **Reporting Scope**

Unless otherwise stated, all the cases and data in this report were collected from China Mobile Limited and our subsidiaries (See Page 4 in this report for detailed information about our subsidiaries.)

#### Data and Information Disclosure

The main channels for the collection of data and information in 2018 Report include:

- Relevant data collection systems and statistical statements inside our company;
- Cases about corporate social responsibility practice submitted by provincial subsidiaries every quarter;
- China Mobile 2018 Best CSR Practices Selection;
- Questionnaires developed to collect qualitative and quantitative information based on the reporting framework.

#### Currency

Unless otherwise specified, all monetary figures shown in this report are expressed in RMB (yuan).

#### Report Assurance

In 2018, China Mobile hired Ernst & Young (special general partnership) to provide independent third-party assurance report (see P56-57). The Company's 2018 Annual Report contains details regarding audited financial statements and other financial performance and operating performance for the year ended December 31, 2018 and can be downloaded from the Company's website at www.chinamobileltd.com.



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305-6	ODS is not one of our major emission sub- stances
305-7	Our major emission substances do not in- clude such emissions
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# The UN Global Compact's Ten Principles

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Principle 2	Make sure that they are not complicit in human rights abuses	13-17, 20, 25-34, 39, 41, 50, 53
Labor Standa	ards	
Principle 3	Business should uphold the freedom of association and the effective recognition of the right to collective bargaining	50, 52
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Principle 5	The effective abolition of child labor	50
Principle 6	The elimination of discrimination in respect of employment and occupation	50
Environment		
Principle 7	Business should support a precautionary approach to environmental challenges	43-46
Principle 8	Undertake initiatives to promote greater environmental responsibility	43-46
Principle 9	Encourage the development and diffusion of environmentally friendly technologies	43-44
Anti-Corrupt	tion	
Principle 10	Business should work against corruption in all its forms, including extortion and bribery	39-42

# ISO 26000

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# HKEx ESG Reporting Guide

Subject Areas	Indicators	Pages
A. Environment	al	
	A1.1 The types of emissions and respective emissions data.	
	A1.2 Greenhouse gas emissions in total (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	46-47
1: Emissions	A1.3 Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
T. EMISSIONS	A1.4 Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	
	A1.5 Description of measures to mitigate emissions and results achieved.	43-47
	A1.6 Description of how hazardous and non-hazardous wastes are handled, reduction initia- tives and results achieved.	
A2: Use of Resources	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).	
	A2.2 Water consumption in total and intensity (e.g. per unit of production volume, per facili- ty).	
	A2.3 Description of energy use efficiency initiatives and results achieved.	
esources	A2.4 Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency initiatives and results achieved.	44, 47
	A2.5 Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	45, 47
3: The Envi- onment and atural Re- ources	A3.1 Description of the significant impacts of activities on the environment and natural re- sources and the actions taken to manage them.	43-46
.Social		
1: Employ-	B1.1 Total workforce by gender, employment type, age group and geographical region.	52-53
ment	B1.2 Employee turnover rate by gender, age group and geographical region.	53
	B2.1 Number and rate of work-related fatalities.	53 Data not
2: Health and afety	B2.2 Lost days due to work injury.	collected
ulety	B2.3 Description of occupational health and safety measures adopted, how they are imple- mented and monitored	51-52
3: Devel- pment and	B3.1 The percentage of employees trained by gender and employee category (e.g. senior man- agement, middle management).	
aining	B3.2 The average training hours completed per employee by gender and employee category.	53
4: Labor	B4.1 Description of measures to review employment practices to avoid child and forced labour.	50
andards	B4.2 Description of steps taken to eliminate such practices when discovered.	50
5: Supply	B5.1 Number of suppliers by geographical region.	42
hain Manage- ient	B5.2 Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	41-42
	B6.1 Percentage of total products sold or shipped subject to recalls for safety and health rea- sons.	41
	B6.2 Number of products and service related complaints received and how they are dealt with.	13-14, 17
6: Product	B6.3 Description of practices relating to observing and protecting intellectual property rights.	37, 42
esponsibility	B6.4 Description of quality assurance process and recall procedures.	41, 45
	B6.5 Description of consumer data protection and privacy policies, how they are implemented and monitored.	15-17
7: Anti-cor-	B7.1 Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	40, 42
uption	B7.2 Description of preventive measures and whistle-blowing procedures, how they are imple- mented and monitored.	
8: Community	B8.1 Focus areas of contribution (e.g. education, environmental concerns, labour needs,	25-34

# Report Disclosure Indexe

# UN Sustainable Development Goals

SDGs	Our Practices	Pages
Goal 1: No poverty	Promoting work in partner assistance and targeted poverty alleviation, introducing pover- ty-alleviation preferential tariff policies, undertaking poverty alleviation programs in indus- try support, education improvement, healthcare, and other areas, and rallying all possible social forces to participate in poverty alleviation donations to help impoverished house- holds gradually get out of poverty and lead a decent life.	25-27, 30-32
Goal 2: Zero hunger	Providing information products and innovative solutions based on new technologies such as IoT, big data, and cloud computing to facilitate agricultural development, thereby help- ing farmers increase their production and income and boosting local economic develop- ment.	25-29
Goal 3: Good health and well-being	Providing free screening and treatment for impoverished children diagnosed with congen- ital heart disease, accelerating the deployment and upgrading of hospital information sys- tem in impoverished regions to realize the interconnection of medical resources; offering medical check-ups to all employees and promoting their physical and mental well-being by organizing activities such as the Employee Assistance Program (EAP) and Happiness 1+1.	30, 50-52
Goal 4: Quality educa- tion	Conducting the Blue Dream Educational Aid Plan to provide training for rural primary and secondary school principals in central and western China, donating teaching facilities to primary and secondary schools in impoverished regions; encouraging employee volunteers to participate in poverty alleviation education assistance activities, and improving school education in impoverished regions by offering access to a richer selection of education and teaching resources.	30-32, 48-49
Goal 5: Gender equal- ity	Providing employees with equal employment and training opportunities and a fair work environment; strengthening "four-period" rights protection for female employees and of- fering them educational lectures on legal rights protection.	48-51
Goal 6: Clean water and sanitation	Advocating water conservation and the recycling and reuse of rainwater and reclaimed water to reduce water use; all wastewater produced from company operations over the year was discharged into the sewage network, and there was no incident of significant impact due to water withdrawal within the Company.	
Goal 7: Affordable and clean energy	Continuously increasing the proportion of new energy use, piloting the zero-emissions "renewable energy vehicles", advocating whole-lifecycle energy conservation and emission reduction in supply chain, and contributing to enhancing industry-wide green operations.	44-46
Goal 8: Decent work and economic growth	and innovation activities, and fostering innovative talents; creating an openness and co-	
Goal 9: Industry, inno- vation and infrastruc- ture	Implementing the Telecommunication Universal Service Project to advance network infra- structure construction and information-driven development in rural areas; intensifying 5G technology R&D and comprehensively enhancing the construction of new types of infra- structure to boost the digital transformation and upgrading of industries.	
Goal 10: Reduced in- equalities	Continuously expanding 4G coverage in administrative villages and minimizing urban-rural digital divide; pushing society forward with the Company's own development and sharing the development achievements with all stakeholders.	25-29, 48-52
Goal 11: Sustainable cities and communi- ties	Developing and promoting information applications to contribute to an intelligent urban life, and serving national strategies for regional development; continuously expanding the application scenarios for 5G technologies to facilitate intelligent city management and de- liver a more intelligent user experience.	8-11, 21-23, 30-33, 36-38
Goal 12: Responsible consumption and pro- duction	Strengthening customer privacy protection and preventing telecommunications frauds to ensure secure consumption; continuing to optimize the product and service quality evalu- ation system to improve customer satisfaction; carrying out the Green Box Environmental Protection Campaign to recycle electronic waste such as scrap mobile phones and mobile phone accessories so as to reduce environmental footprint.	
Goal 13: Climate ac- tion	Conducting the Green Action Plan, and gradually improving the Environmental Manage- ment System to oversee all the environmental impacts of the Company; reinforcing R&D of energy conservation technologies and low-carbon applications, and hosting environmental protection awareness campaigns to drive energy conservation and emission reduction in the wider society.	43-47
Goal 14: Life below water	No relevant practice.	
Goal 15: Life on land	Assessing local biodiversity before building a base station and taking measures to protect the local natural environment; no species was found significantly impacted by the Company's operations.	39, 44-45
	Promoting the Compliance Escort Plan, solidifying compliance management on all fronts, and gradually improving the four-in-one anti-corruption work system of "education, pre- vention and control, punishment, and accountability".	39-40
	Actively participating in international initiatives and actions for sustainable development and propelling the sound and sustainable development of industry ecosystem in collabora- tion with international telecom operators and relevant industry players.	18-19, 30-32, 37

# Feedback

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China Mobile Report Team

March, 2019

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