

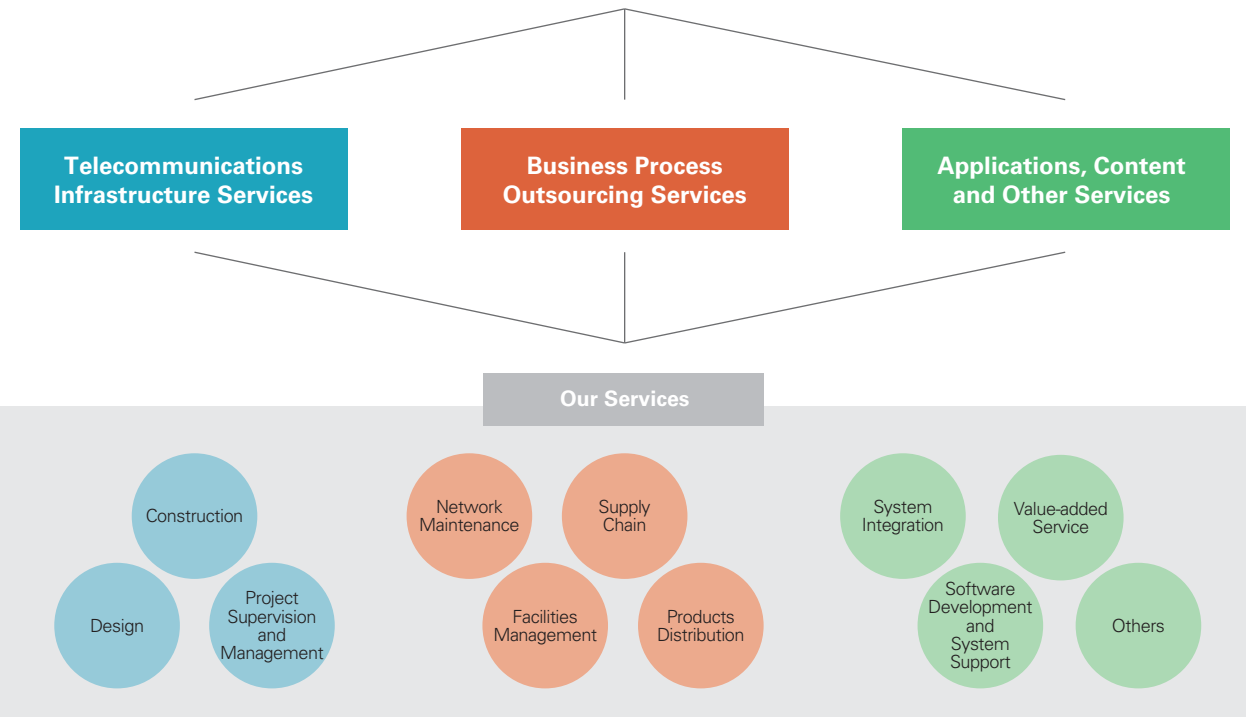


BUSINESS OVERVIEW

The Group is a leading service provider in the PRC that provides integrated comprehensive solutions for the informatization and digitalization sector. The Group provides integrated solutions, including telecommunications infrastructure services, business process outsourcing services as well as applications, content and other services to telecommunications operators, government agencies, industrial customers and small-and-medium enterprises (“SMEs”).

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

WE PROVIDE INTEGRATED COMPREHENSIVE SOLUTIONS IN THE INFORMATIZATION AND DIGITALIZATION SECTOR



(In RMB million, except percentages)	Revenue in 2018	Revenue in 2017	Change
Domestic telecommunications operator customers	69,705	65,080	7.1%
Of which: China Telecom	41,279	41,568	-0.7%
China Mobile, China Unicom, China Tower	28,426	23,512	20.9%
Domestic non-telecom operator customers	33,317	26,656	25.0%
Overseas customers	3,155	2,836	11.2%
Total	106,177	94,572	12.3%

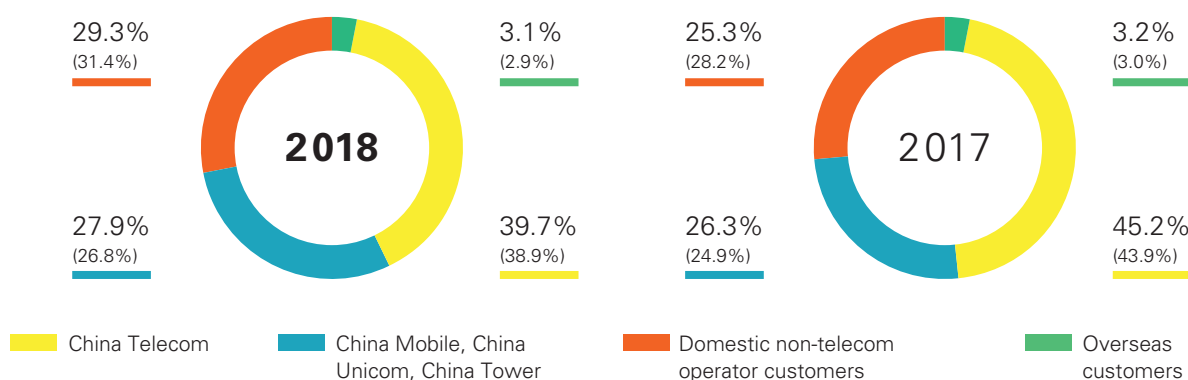


MARKET EXPANSION

In 2018, with the mission of “Bolstering Cyberpower Strategy, Building First-class Enterprise, Serving a Good Life”, the Group adhered to the overall roadmap of “value-driven, seeking steady yet progressive growth and high-quality development” and continued to focus on “optimizing structure, sustaining growth, strengthening capabilities and enhancing efficiency”. While seeking further development of the CAPEX¹-driven business of the domestic telecommunications operator market, the Group continued to transform its growth momentum and increased its efforts in exploiting the OPEX¹-driven business of the domestic telecommunications operator market, thereby maintaining the stable fundamentals of its businesses. Meanwhile, centering on building an ecological platform, the Group strengthened the internal and external collaboration and cooperation to make dedicated development in key industries and enhance the brand image of “Smart Comservice”, thus continuously expanding the scale of domestic non-telecom operator market. In addition, the Group focused on the development of overseas sizable turnkey projects, and the overseas business stabilized and recovered. In 2018, the Group further optimized the business structure by continuing to proactively control products distribution business with low efficiency. Total revenues of the Group for the year amounted to RMB106,177 million, representing a year-on-year growth of 12.3%, in which, revenue from the Core Businesses² excluding the products distribution business achieved rapid growth and reached RMB101,294 million, representing a year-on-year growth of 15.6%. The Group’s overall scale of revenue and revenue from Core Businesses both have achieved the leap from ten-billion level to hundred-billion level, embarking on a new journey of high-quality development.

In 2018, the Group continued to reinforce its market expansion and transform the growth drivers. Revenue from the Core Businesses achieved double-digit growth and its contribution to the total revenues recorded a year-on-year increase of 2.7 percentage points to 95.4%, demonstrating a stride towards high-quality development. During the year, revenue from domestic telecommunications operator customers (including China Tower) amounted to RMB69,705 million, representing a year-on-year increase of 7.1%. Revenue from domestic non-telecom operator customers amounted to RMB33,317 million, representing a year-on-year increase of 25.0%, in which the Core Businesses revenue increased by 33.9%. Revenue from overseas customers amounted to RMB3,155 million, representing a year-on-year increase of 11.2%.

The following charts show the revenue contribution of each customer group in terms of Core Businesses:



Note: The figures in bracket are the revenue contribution to the total revenues (including revenue from products distribution business).

¹ CAPEX and OPEX refer to the capital expenditure and operating expenditure of domestic telecommunications operators, respectively.

² Core Businesses include telecommunications infrastructure services, business process outsourcing services (excluding products distribution), and applications, content and other services.

Domestic Telecommunications Operator Market

In 2018, the Group continued to enhance project management and service quality in the domestic telecommunications operator market. The Group commenced research on key 5G technologies, as well as 5G network planning and testing. The Group captured the opportunities of upgrade of fiber optic broadband networks, optimization and upgrade of networks of domestic telecommunications operators and centralized procurement, with our market share showing a stable-to-rising trend. Meanwhile, we exploited the OPEX-driven business, overcame the unfavourable effect from the decrease of CAPEX and unit price of domestic telecommunications operators and realized a steady growth in the revenue from domestic telecommunications operator market. Of such revenue, revenue from China Telecom amounted to RMB41,279 million, representing a year-on-year decrease of 0.7%, and aggregate revenues from domestic telecommunications operator customers other than China Telecom amounted to RMB28,426 million, representing a year-on-year rapid growth of 20.9%. During the year, business from domestic telecommunications operators other than China Telecom recorded a substantial increase and was the largest contributor to the Group's incremental revenue from domestic telecommunications operators.

1 & 2. The Group undertook construction of telecommunications network and 5G project



3. The Group undertook Hunan Highway Informatization Project

4 & 5. The Group undertook the Smart Photovoltaic Project

Domestic Non-Telecom Operator Market

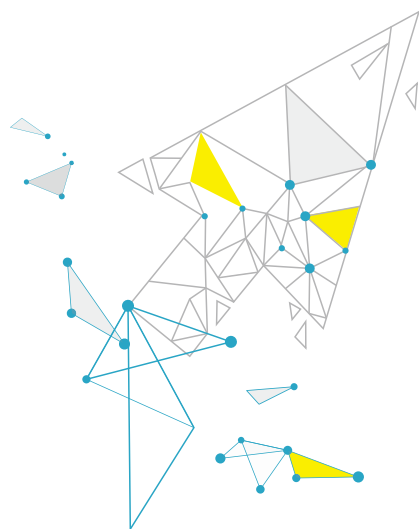
In recent years, the Group has been paying close attention to the development trend of digitalization of industries. Through innovation and transformation, the Company achieved rapid growth of its business from domestic non-telecom operator market and sustained optimization of its revenue structure. In 2018, the Group accelerated the transformation towards the direction of digital services by focusing on the development opportunities arising from Smart City, Internet of Things ("IoT"), Big Data and Cloud Computing and continuously improved service level to promote constructive and interactive development between its emerging and traditional businesses. The Group ranked 6th in "China's Top 100 Software Enterprises 2018" and the top ten "Leading Enterprises" for Information Technology Industry in 2019, demonstrating its industry position. Revenue from domestic non-telecom operator market amounted to RMB33,317 million, representing a year-on-year growth of 25.0%. Among that, the revenue from Core Businesses of domestic non-telecom operator market recorded a year-on-year growth of 33.9%, which became the largest contributor to the incremental revenue of the Group during the period. In 2018, the Group has already developed the group-level products³ including more than 20 types of smart product solutions, such as Smart City, Smart Park, Smart Highway, Smart Safety, PaaS Cloud Platform, IoT Platform, Cloud Computing Engineering Services, and Electronic Certification. And the Smart Society Product Portfolio could be disassembled and combined according to customer needs, which also provides customers with full-process service from top-level design to product R&D and operation.

³ The contents of certain group-level products are set out on the last page of "Business Overview".



The Group has established 227 independent business development units across the nation and allocated more than 9,000 staff for key industries. During the year, the Group signed approximately 500 projects with contract amount at RMB ten-million level. Large-scale projects of RMB hundred-million level included Intelligentization Project of Shenzhen World Exhibition and Convention Center, Intelligentization Project of Suzhou Smart Industrial Park, Non-stop Electronic Toll Collection of Hunan Highway, and Smart Park of Beijing International Horticultural Exhibition. Meanwhile, the Group expedited the cultivation of the team of technical experts for core products and currently has an expert team consisting of approximately 10,000 planning and consultation experts and 10,000 software engineers. In the next stage, the Group intends to continuously increase its training efforts, strengthen capabilities accumulation and capabilities enabling through informatization means including the Smart Comservice APP, continuously enrich core teams of professionals. In addition, the Group has devoted more efforts in the supply-side reform and actively adopted the “Consultant + Staff” model⁴ to penetrate into and integrate with customers, for which the service not only satisfied, but also led customers’ demand; and provided integrated high-quality services that will create value for customers and will realize the Group’s own value. Currently, annual contracted revenue of the Group generated from customers in sectors of government, transportation, electricity, internet and IT, construction exceeded RMB1 billion each.

1. The Group undertook the Intelligentization Project of Shenzhen World Exhibition & Convention Center
2. The Group undertook the Smart Park Project of Beijing International Horticultural Exhibition
- 3 & 4. The Group undertook the telecommunications network construction of Hong Kong-Zhuhai-Macao Bridge



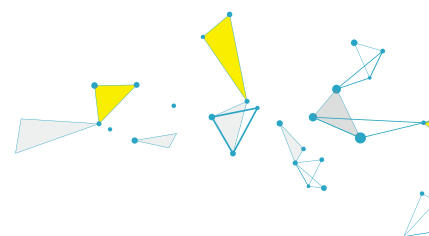
⁴ “Consultant + Staff” model is an innovative service model adopted by the Group in recent years. “Consultant” means that the Group acts as the “Consultant” of its customers through leveraging on its talents and products advantages, so as to turn customers’ needs into feasible solutions or projects, whereas “Staff” means that the Group, as appointed by customers, assists its customers in the capacity of a “Staff” in coordinating other stakeholders of the project, so as to promote the smooth implementation of the project and ensure its customers’ expectation could be achieved.

Overseas Market

In 2018, the Group continued to promote deepened reform, the overall overseas market stabilized and recovered and achieved stable growth in scale. Revenue from overseas market of the Group amounted to RMB3,155 million, representing a year-on-year increase of 11.2%.



1. Chen Zhaoxiong, Vice Minister of the Ministry of Industry and Information Technology, visited the Group's booth at the ITU Telecom World
2. The Group participated in the 21st Africa Com



In 2018, the Group further optimized its four supporting systems, i.e. technology, commerce, financing and risk, persisted in market expansion and business transformation and upgrade, and continued to increase market development efforts and focused on the markets of Southeast Asia, the Middle East and Africa. The Group was awarded a number of large-scale projects, including: 4G Network Project in Nepal, Tiger Tower Turnkey Project in Myanmar, ITC National Broadband Network Project in Saudi Arabia, DU Network Installation in UAE, National ICT Backbone Network Phase III Project in Tanzania and Digital Mali Project in the Republic of Mali. In 2018, while vigorously penetrating into traditional telecommunications infrastructure services, the Group focused on the development of key products including Smart City, Smart Education and Smart Building and key industries including government, transportation, electricity and information security. The overseas business structure and customer structure become more diversified.



3. The Group entered into a service agreement regarding Network Installation with DU in UAE
4. The Group procured the launching of Nepal 4G Network Project through high-level marketing



BUSINESS EXPANSION

The Group is a leading service provider in the PRC that provides integrated comprehensive solutions in the informatization and digitalization sector. We offer telecommunications infrastructure services, including design, construction and supervision; business process outsourcing services, including management of infrastructure for information technology (Network Maintenance), general facilities management, supply chain and products distribution; and applications, content and other services, including system integration, software development and system support, and value-added services.

Telecommunications Infrastructure Services

As the largest telecommunications infrastructure service provider in China, the Group possesses all the highest grade qualifications in the communications construction industry in China. In 2018, revenue from telecommunications infrastructure services amounted to RMB57,359 million, representing a year-on-year growth of 13.6%.

The Group has the capabilities to provide worldwide telecommunications operators with comprehensive telecommunications infrastructure services including planning, design, construction and project supervision for fixed-line, mobile, broadband networks and supporting systems. In 2018, the Group fully addressed the needs of customers including the three domestic telecommunications operators and China Tower, and maintained its solid market leading position. The Group's revenue of telecommunications infrastructure services from domestic telecommunications operator customers amounted to RMB40,325 million, representing a year-on-year growth of 4.3%.

The Group also provides construction services of ancillary communications networks, and integrated solutions for informatization and smart solution for intelligentization of industries to domestic non-telecom operator customers, such as government agencies, financial institutions, broadcasting and television enterprises, construction enterprises, transportation and power sectors as well as overseas customers. The Group continuously achieves breakthroughs in the construction projects for Smart City, Smart Park, data centre and power projects. In 2018, revenue of telecommunications infrastructure services from domestic non-telecom operator customers amounted to RMB14,646 million, representing a year-on-year growth of 50.8%, maintaining a strong growth momentum.

Through tapping market potentials and capturing the demand on integrated construction, maintenance and network optimization services from domestic telecommunications operators, the Group expects to develop its traditional infrastructure business of domestic telecommunications operators steadily. With the further implementation of national strategies of "Digital China", "Cyberpower" and "Smart Society", Smart City and other application scenarios will be sustainably enriched, domestic telecommunications operators will promote 5G, Smart Family, construction of IoT, etc., and demand on infrastructure construction and industry informatization such as Smart City will also continuously increase. In addition, the national "Belt and Road" Initiative will lead to higher overseas market potential, which will create new opportunities for the growth of the Group.

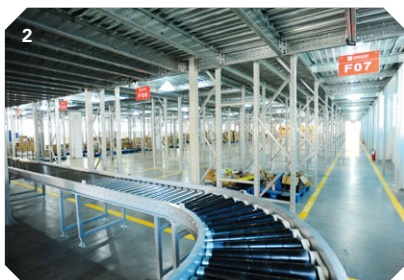


1. The Group undertook IDC Data Center Projects

1



2



3



4



1. A subsidiary of the Group was awarded "National Excellent Logistic Enterprise 2018"
- 2 & 3. The Group provided storage and logistic services for customers
4. The Group's employees were providing facilities management services to the customers by applying unified IT platform

Business Process Outsourcing Service

The Group is the largest integrated provider of business process outsourcing services in the communications industry in China. We keep extending our business scope from core networks to access networks along the communications business value chain, and provide services including management of infrastructure for information technology (Network Maintenance), general facilities management, supply chain and products distribution. The targets of our services include domestic and overseas telecommunications operator customers, government agencies and enterprises customers. In 2018, the Group continued to exploit the OPEX-driven business of domestic telecommunications operators and the revenue from the Core BPO services⁵ amounted to RMB30,220 million, representing a year-on-year growth of 17.1% while the overall revenue from the business process outsourcing services amounted to RMB35,103 million, representing a year-on-year increase of 7.1%.

The Group provides Network Maintenance services for telecommunications operators covering fiber optic cables, electric cables, mobile base stations, network equipment and terminals. In 2018, the Group proactively undertook on-site integrated maintenance services from the three domestic telecommunications operators and China Tower, and facilitated a relatively fast development in maintenance services with a revenue of RMB14,793 million, representing a year-on-year growth of 15.3%.

The Group provides general facilities management services to domestic telecommunications operators and domestic non-telecom operator customers for their data centres, cloud computing bases, commercial buildings, high-end residential buildings, high-speed railway stations and airports, etc. During the year, the Group continued to develop brand-building of intelligent building, and proactively promoted the construction of IT platform of intelligent building to enhance the synergistic operational capabilities of general facilities management service. In 2018, revenue from the general facilities management business of the Group was RMB5,278 million, representing a year-on-year growth of 15.9%.

The Group provides logistics and transportation, logistics, warehousing and auxiliary services, procurement agent, inspection and value-added services of supply chain to domestic telecommunications operators and domestic non-telecom operator customers. In 2018, with the industry-recognized AAAAAA logistics qualification, the Group further consolidated the supply chain business. After consolidation, the registered capital of China Comservice Supply Chain Management Company Ltd., the Group's directly owned subsidiary engaging in supply chain business, reached RMB929 million. An all-process and network-wide integrated operation system has been preliminarily established, the economies of scale has started to emerge, and the service capability has been improved through enhanced synergistic operation. The Group intensified development effort on upstream and downstream customers in the information industry, and won the bid for nation-wide logistics businesses of Yangtze Optical Fibre and Cable, FiberHome Telecommunication Technologies, etc. and made breakthroughs in overseas logistics business and other domestic trunk transportation business. In 2018, the Group's revenue in supply chain service was RMB10,149 million, representing a year-on-year increase of 20.5%. In the future, the Group will take full play of the synergetic operation effect of China Comservice Supply Chain Management Company Ltd. in driving the expansion of supply chain business.

⁵ Core BPO services include management of infrastructure for information technology (Network Maintenance), general facilities management and supply chain services.



In 2018, the Group's distribution sales and service capabilities were further enhanced. The Group strives to develop “中通福” (ZhongTongFu) as the core distributor recognized by operators and large nationwide chain store recognized by consumers. During the year, the Group undertook the business of China Telecom's “Yitianxia Tianyi Telecom Tmall Flagship Store”, which ranked 7th in respect of online sales volume of mobile phone in China.

The Group provides terminals distribution and device distribution services to domestic telecommunications operator customers and provides distribution and procurement services of IT devices, auxiliary machinery and equipment to domestic non-telecom operator customers. In 2018, the Group proactively controlled the development of products distribution business with low efficiency and realized revenue of RMB4,883 million, representing a year-on-year decrease of 29.8%.

The Group believes that the OPEX business of domestic telecommunications operators have enormous room and potential to grow, and the domestic non-telecom operator customers also have strong demands for business process outsourcing services. The business process outsourcing business is characterized by high customer loyalty, low accounts receivable turnover days and good cash flow. The Group will further allocate its advantageous resources to carry out professional operation in certain business sectors with high value to realize a more efficient and larger scale development.



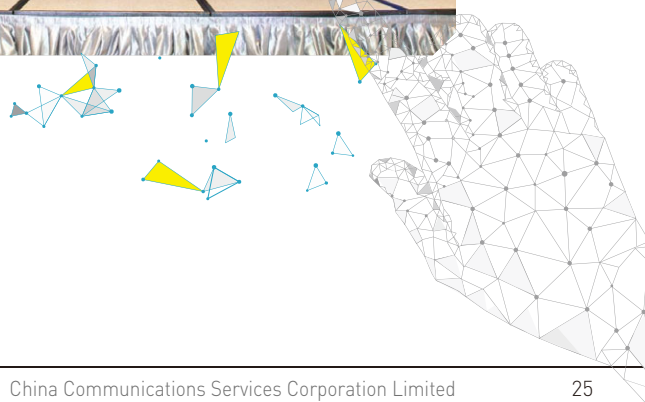
1 & 2. The Group provided Data Center Solutions to customers

Applications, Content And Other Services

The Group provides system integration, software development and system support as well as value-added services to customers including domestic telecommunications operators, government agencies and enterprises customers. In 2018, the Group accelerated the ecological deployment of smart industry, established the “Smart Service Industrial Ecosystem Alliance” with business partners, released the Smart Society Products Portfolio, and invested in the construction of foundation platforms such as Open IoT Platform, CCSYUN (our Cloud service) Platform to promote the convergence of products and services to the foundation platforms, which bolstered the cultivation of leading enterprises and professional capabilities. The Group's capabilities in software development and system integration have been widely recognized by the society. Revenue from applications, content and other services amounted to RMB13,715 million, representing a year-on-year increase of 21.4%.



3. The Group established Smart City Industrial Alliance with industrial partners





1. The Group participated in the 1st Smart China Expo in Chongqing
2. The Group participated in the 7th Big Data Expo in Guizhou
3. The Group participated in the 14th China (Nanjing) Soft Expo

In 2018, the Group leveraged on its strength on integrated service, software development and system integration capabilities to expand its industrial ecosystem through external collaboration. During the year, the Group set up internal Ecosystem Alliances for Cloud Computing, IoT, Smart City and Network Security, etc. and continued to increase its investment in research and development of key products, in which the Group completed a comprehensive upgrade of the smart-series products including Smart City, Smart Park and Smart Transportation with certain of them achieving industry-leading level with the needs of government and enterprise customers effectively addressed. At the same time, the Group participated in the Big Data Expo in Guizhou, Smart China Expo in Chongqing, Cybersecurity Week in Chengdu, China (Nanjing) Soft Expo, etc., which further increased the Group's influence in the industry. The domestic non-telecom operator customers were the major customer base of our applications, content and other services, which contributed to more than 50% of the overall revenue from such services. In 2018, the revenue from domestic non-telecom operator customers for applications, content and other services recorded a year-on-year increase of 23.4%, representing a major driver for the growth of this segment.

The Group will proactively grasp the opportunities arising from "Digital China" construction, make sustained upgrades of its key products and strengthen its research and development and platform construction in key areas such as Cloud Computing, IoT, Smart City and Big Data. With further enhancement and upgrade of the core competitiveness of products, the Group will accelerate the capabilities building of top-level planning and comprehensive solutions for Smart City. To continuously cultivate various smart products, the Group will navigate the integration and development of smart products on CCSYUN platform and Open IoT Platform. In an effort to expedite the deployment of relevant industries, the Group will converge and integrate internal and external resources to continuously cater for the needs of customers for digitalization construction and form new engines for capabilities.



CONTENTS OF CERTAIN GROUP-LEVEL PRODUCTS OF THE GROUP

- 1

Smart City

Based on its showcase-typed Smart City (Mini Smart City 1.0) and solution-typed Smart City products set (Mini Smart City 2.0), the Group developed the new generation of Smart City product (Mini Smart City 3.0) which represents the first product and service set for new Smart City solutions based on SDC (software defined city) structure. The product aims at building a user-friendly, service-oriented Smart City that takes CCSYUN Platform as the infrastructure, supported by the Open IoT Platform and leveraged on Smart Government Services.
- 2

Smart Park

The Group developed the cross-platform multi-business integrated service platform by applying the cutting-edge technologies such as Cloud Computing, Big Data, IoT, Artificial Intelligence and Virtual Reality to perceive, monitor, analyze, control and integrate resources of each aspect of the parks.
- 3

Smart Highway

Upholding the principles of environmental friendly, efficient and safe, while integrated with advanced information processing technologies such as sensing, transmission and control, the highway informatization system could provide emergency command, smart toll collection and smart operation and maintenance that covers the operation and monitor of highway network.
- 4

Smart Safety

The Group provides eight types of information security services (including information security consultation, assessment, design, construction, training, emergency solution, daily operation and maintenance and monitor) and three types of information security products (including physical security, data security and security operation, maintenance and management), covering the full life cycle of information security and delivering integrated solutions.
- 5

PaaS Cloud Platform

The Group developed the PaaS Cloud Platform by utilizing cloud native technologies with an aim to solve problems in the era of Mobile Internet including high concurrency, massive data, sudden peaks, microservices and DevOps development. The product provides customers from governments, operators, financial industry, chemical industry, manufacturing industry and energy industry etc. with the new generation of "Internet+" Cloud Computing solutions to help enterprises accelerate innovation and transformation.
- 6

IoT Platform

An open IoT Platform launched by the Group for extensive industries that provides universal IoT infrastructure capabilities and vertical industry application services. It also integrates with the rich products and applications in the ecosystem to meet the differentiated needs of customers in the industry.
- 7

Cloud Computing Engineering Services

Based on energy efficiency management and BIM capabilities, the Group provides integrated solutions for parks, buildings and communication that cover the entire cloud infrastructure construction process to Internet enterprises, financial industry, government agencies and parks with cloud infrastructure needs. At the same time, riding on the experience in consultation and design services gained in long-term thorough development of industrial informatization construction and the CCSYUN Platform, supplemented by advanced technologies including Big Data, IoT and artificial intelligence, the Group provides an industry-oriented integrated cloud solutions consisting of cloud construction, migration and management.
- 8

Electronic Certification

As a response to the national information security strategy, the Group provides cryptography-based security solutions integrating identification and electronic certification for applications such as Internet, Cloud Computing, IoT, etc.

