## BUSINESS OVERVIEW

The Group is a leading service provider in the PRC that provides integrated comprehensive solutions for the informatization 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 SECTOR

Telecommunications Infrastructure Services	Business Process Outsourcing Services	Applications, Content and Other Services

Our Services
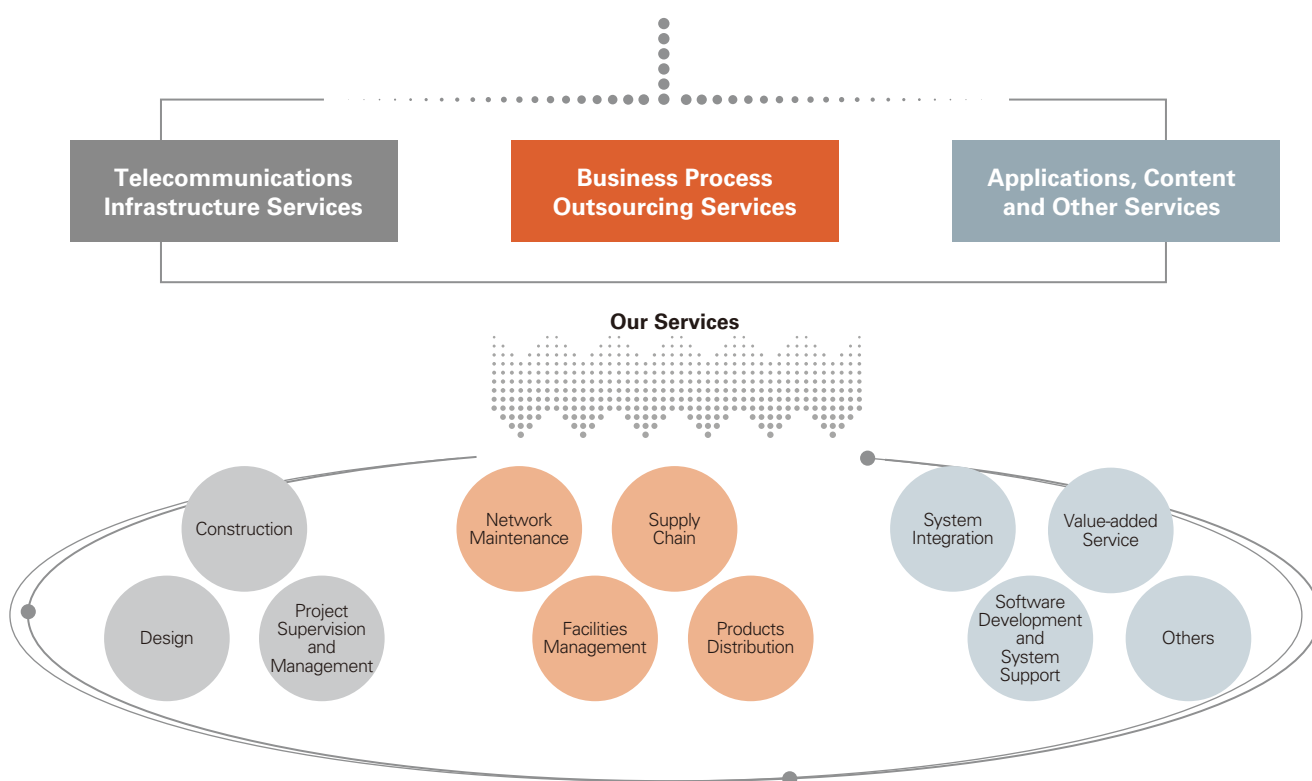
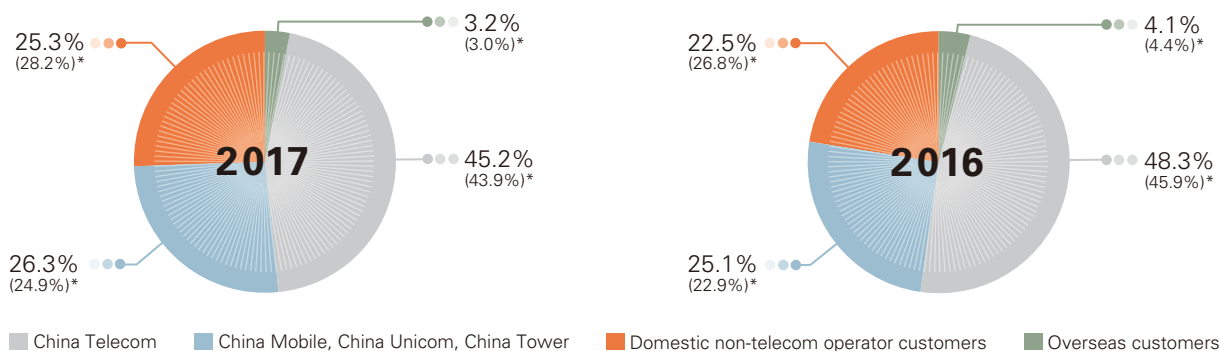| (In RMB million, except percentages)	Revenue in 2017	Revenue in 2016	Change
Domestic telecommunications operator customers	65,080	60,889	6.9%
Of which: China Telecom	41,568	40,597	2.4%
China Mobile, China Unicom, China Tower	23,512	20,292	15.9%
Domestic non-telecom operator customers	26,656	23,714	12.4%
Overseas customers	2,836	3,846	−26.2%
Total	94,572	88,449	6.9%

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MARKET EXPANSION

In 2017, the Group upheld the principal philosophy of "value-driven, seeking steady yet progressive growth and efficient development". While seeking further development of the CAPEX[1]-driven business of the domestic telecommunications operator market, the Group transformed its growth momentum and increased its efforts in exploiting the OPEX[1]-driven businesses of the domestic telecommunications operator market, thereby maintaining the stable fundamentals of its businesses. Meanwhile, the Group also endeavored to expand the domestic non-telecom operator market scale in the key industries and focused on development of overseas turnkey projects, and as a result, achieved efficient and sustained development of the Company. In 2017, the Group focused on "optimizing structure, sustaining growth, strengthening capabilities and enhancing efficiency" and 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 RMB94,572 million, representing a year-on-year growth of 6.9%, in which, revenue from the Core Businesses[2] excluding the products distribution business achieved rapid growth and reached RMB87,617 million, representing a year-on-year growth of 12.4%.

In 2017, the Group continued to reinforce its market expansion and shifted the growth drivers. Revenue from the Core Businesses of the Company achieved double-digit growth and its contribution to the total revenues recorded a year-on-year increase of 4.5 percentage points to 92.7%, demonstrating a high-quality development. During the year, revenue from domestic telecommunications operator customers (including China Tower) amounted to RMB65,080 million, representing a year-on-year increase of 6.9%. Revenue from domestic non-telecom operator customers amounted to RMB26,656 million, representing a year-on-year increase of 12.4%, in which the Core Businesses revenue increased by 26.5%. Revenue from overseas customers amounted to RMB2,836 million, representing a decrease of 26.2%.

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

2017:
- 3.2% (3.0%)*
- 45.2% (43.9%)*
- 26.3% (24.9%)*
- 25.3% (28.2%)*

2016:
- 4.1% (4.4%)*
- 48.3% (45.9%)*
- 25.1% (22.9%)*
- 22.5% (26.8%)*

■ China Telecom   ■ China Mobile, China Unicom, China Tower   ■ Domestic non-telecom operator customers   ■ Overseas customers

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

In 2017, the Group continued to enhance service quality and project management in the domestic telecommunications operator market. The Group captured the opportunities of upgrade of fiber optic broadband networks, optimisation and upgrade of networks of domestic telecommunications operators and scale development of tower construction and maintenance business in China. Our market share showed a stable-to-rising trend. Meanwhile, we exploited the incremental market of OPEX-driven business, overcame the unfavourable factors from the CAPEX decrease of domestic telecommunications operators and realized a steady growth in the revenue from domestic telecommunications operator customers. Of such revenue, revenue from China Telecom amounted to RMB41,568 million, representing a year-on-year growth of 2.4%, and aggregate revenues from domestic telecommunications operator customers other than China Telecom amounted to RMB23,512 million, representing a year-on-year rapid growth of 15.9%.

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[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.

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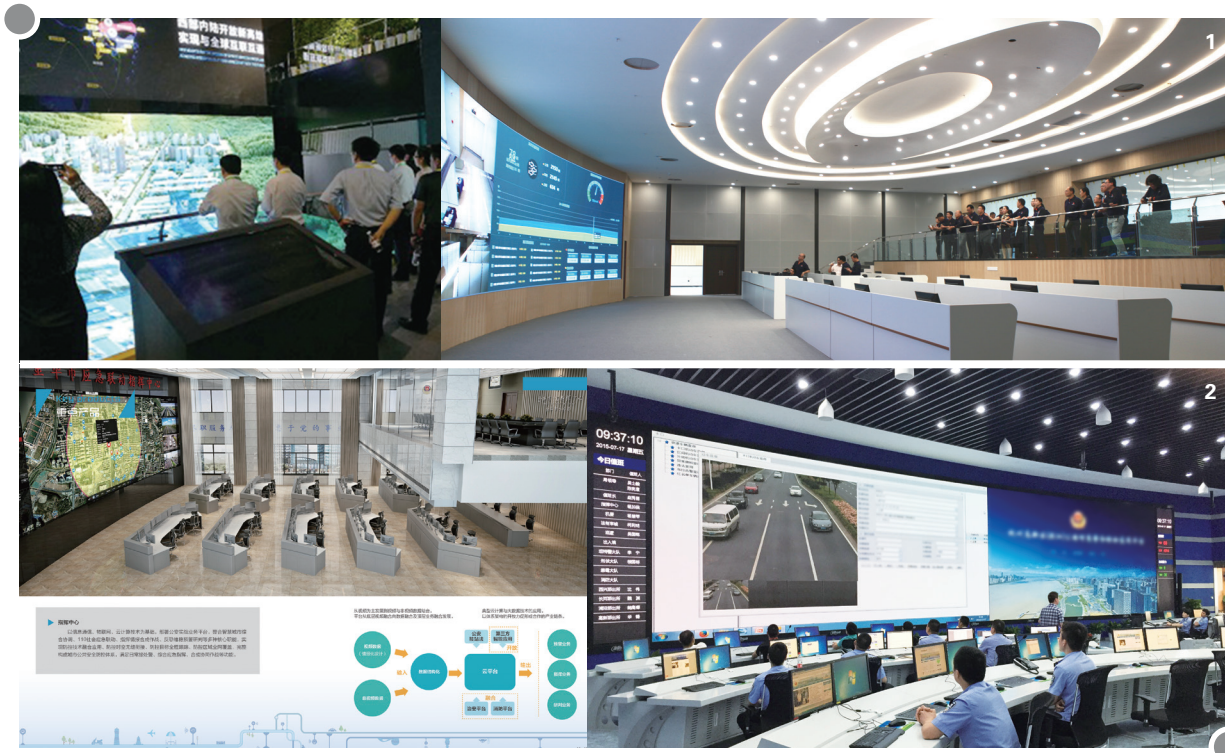
1.   The Group undertook the "Smart Park" project of Qianbei Logistics Town in Guizhou Province

2.   The Group undertook "Smart Security" projects

In recent years, we have been paying close attention to the development trend of informatization of industries. Through innovation and transformation, the Company achieved rapid growth of its business from domestic non-telecom operator customers and witnessed sustained optimization of its revenue structure. In 2017, the Group built consensus, focused on key industries, strengthened collaboration among its products and services both internally and externally and unleashed overall advantages to promote constructive and interactive development between its emerging and traditional businesses. Revenue from domestic non-telecom operator customers market amounted to RMB26,656 million, representing a year-on-year growth of 12.4%. Excluding products distribution business with low efficiency which has been proactively controlled by the Group, the revenue from Core Businesses of domestic non-telecom operator market recorded a year-on-year growth of 26.5%, which became the largest contributor to the incremental revenue of the Group during the period. In 2017, the Group has already developed the group-level products including Smart City[3], Smart Security[4], Smart Park[5], Smart Transportation[6] and Information Security[7]. Currently, the sales and marketing system of the Group covers 88% of professional companies with around 6,000 sales and marketing staff. Meanwhile, the Group expedited the

3   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 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.

4   Based on the video surveillance construction for Safe City and through accessing and integrating massive video and non-video data, the Group launched the Smart Security integrated application platform incorporating functions of information warning, emergency command and case study, which caters for the needs of the base smart police for the four major categories of police force, namely the public security intelligence, public order, command and criminal investigation.

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

6   The Group constructed its Big Data-based highway design, operation, maintenance and service supporting platform, which, through automatic collection, integration, tapping and intelligent analysis of the mass data of full network of the highways, enables the transparent perception of the operation status of highways, the whole Internet of Things and intelligent integration and power-divided sharing of internal and external information resources.

7   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.

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The Group promoted "Smart Town" solutions

cultivation of the team of technical experts for core products and currently have owned a team of almost 20,000 staff specialized in consultation planning and software development. The Group intends to continue to increase its training efforts and encourage self-study and research by employees, with a target to cultivating new teams of professionals and experts. In addition, the Group devoted more efforts in the development of supply side reform and actively adopted the "Consultant + Staff" model[8] while the commercialization of projects achieving initial results with Smart Transportation being promoted in a comprehensive way, the integrated solutions of Smart Town being enriched continuously and Smart Safety products being replicated and promoted across provinces. Currently, annual contracted revenue of the Group generated from customers in sectors of government, transportation, electricity, internet and IT, construction exceeded RMB1 billion each. By grasping important opportunities arising from the opening-up of certain businesses in electricity distribution and sales subsequent to the implementation of national power reforms, the Group applied and obtained 172 business licenses covering power network construction turnkey projects and sales of electricity, which equipped us with strategic reserves for scale development and breakthroughs in the power sector in the future.


1. The Group undertook metro rail transportation telecommunications projects

2. The Group undertook power network projects

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[8] "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.

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In 2017, the Group made further adjustment to the deployment and development direction for overseas market to optimize the business structure, and put proactive control over businesses with low efficiency to enhance the quality of its revenue. In the year, revenue from overseas customers of the Group amounted to RMB2,836 million, representing a year-on-year decrease of 26.2%. During the year, for the purpose to further keep abreast of the market and customers, the marketing and supporting system for overseas businesses kept moving to the front end and was divided into five major business regions by geographical location with four supporting systems in technology, financing, accounting and risk. Resources allocation were centralized to provide support for the development of overseas projects. The Group achieved encouraging developments in several key projects and sound progress was made in several turnkey projects such as the education network project in Cameroon progressed smoothly. The Group closely followed the national "Belt and Road" Initiative, strengthened its cooperation with domestic telecommunications operators and the "Go Abroad" Chinese enterprises and continued to expand proactively the regional markets including Africa, the Middle East and Southeast Asia. On one hand, the Group actively pushed forward the progress of projects financed by two types of preferential facilities in countries such as Tanzania, Mali and Niger, all of which have achieved staged progress, and on the other hand, closely followed up the local large-scale projects and won the biddings for the large-scale projects such as the FTTH construction project in Saudi Arabia, the Ethiopia education network project including cloud system integration for 310 schools and ICT project for the initial development area of Djibouti Free Trade Zone (Phase I). Meanwhile, the Group reinforced its efforts in business transformation to develop new business and markets such as electricity, education and healthcare sectors with encouraging breakthroughs achieved in countries such as Saudi Arabia, Ethiopia and Zambia.
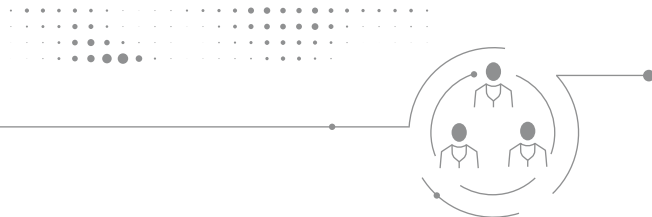
1. The Group proactively expanded its overseas market
2. The Group attended overseas communications exhibitions
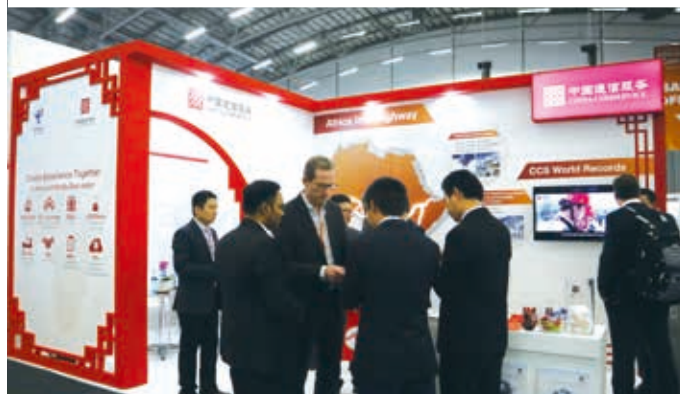
The Group undertook IDC data centre projects

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 2017, revenue from telecommunications infrastructure services amounted to RMB50,511 million, representing a year-on-year growth of 10.1%.

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 2017, 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 RMB38,649 million, representing a year-on-year growth of 7.9%.

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 2017, revenue of telecommunications infrastructure services from domestic non-telecom operator customers amounted to RMB9,710 million, representing a year-on-year growth of 30.3%. The strong growth momentum has been maintained which has a significant contribution to the overall sustainable growth of telecommunications infrastructure services.

Despite the expected changes of the investment of domestic telecommunications operators, 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 business of domestic telecommunications operators steadily. With the further implementation of national strategies of "Digital China", "Cyberpower" and "Smart Society", demands on infrastructure construction and informatization of industries such as Smart City and Safe City will increase. In addition, the overseas market potential brought by the national "Belt and Road" Initiative will also create new opportunities for the growth of the Group.

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The Group undertook network maintenance projects for domestic telecommunications operators

BUSINESS PROCESS OUTSOURCING SERVICES

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 2017, the Group continued to exploit the OPEX-driven business of domestic telecommunications operators and the revenue from the Core BPO Services[9] amounted to RMB25,808 million, representing a year-on-year growth of 17.0% while the overall revenue from the business process outsourcing services (including products distribution business which is proactively controlled by the Group) amounted to RMB32,763 million, representing a year-on-year increase of 0.7%.

The Group provides Network Maintenance services for telecommunications operators covering fiber optic cables, electric cables, mobile base stations, network equipment and terminals. In 2017, the Group proactively undertook on-site integrated maintenance services from the three domestic telecommunications operators and China Tower, facilitated a relatively fast development in maintenance services of the Group with a revenue of RMB12,829 million, representing a year-on-year growth of 20.1%.

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 2017, revenue from the general facilities management business of the Group was RMB4,555 million, representing a year-on-year growth of 9.5%.

The Group undertook integrated construction and maintenance projects of the towers

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9　　Core BPO Services include management of infrastructure for information technology (network maintenance), general facilities management and supply chain.

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In 2017, the Group further increased the influence of its brand of distribution business called "中通福"and set up an aggregate of 213 "中通福"distribution chain stores. The unified management system of the chain stores was launched with the operation capability for nationwide chain stores established. It is expected that the number of in-operation"中通福"physical stores will reach 3,000 within the next two years. The Group strives to develop "中通福" as the core distributor recognized by operators and large nationwide chain store recognized by consumers. During this year, the Group received the certification from China Telecom for the operation of the "cross-province large chain store", established a unified IT logistics system and a comprehensive and integrated logistics operating system, which offers nationwide integrated logistics service to its customers. In 2017, the Group's revenue in supply chain service was RMB8,424 million, representing a year-on-year increase of 16.8%. In the future, China Comservice Supply Chain Management Company Limited will further play its leading role in driving for the expansion of the Group's supply chain business.

Products distribution business mainly involves distribution of telecommunications products. 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 2017, the Group proactively controlled the development of products distribution business with low efficiency and realized revenue of RMB6,955 million, representing a year-on-year decrease of 33.6%.

The Group believes that the OPEX market 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. "中通福" store — the brand of distribution business of the Group

2. The Group provided storage and logistics services for customers

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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 2017, revenue from this business segment amounted to RMB11,298 million, representing a year-on-year increase of 12.7%.

In 2017, the Group leveraged on its integrated service advantages and system integration and software development capacities to expand its industrial ecosystem through external collaboration, such as the quantum communications market. During the year, the Group set up the Information Security Expert Committee and Big Data Expert Committee under the Product Innovation Committee and continued to increase its investment in research and development of key products through the mechanism of innovative fund and expert committees. As a result, the Group completed a comprehensive upgrade of the smart-series products such as the Smart City, Smart Park, Smart Transportation and Smart Security with certain of them achieving industry-leading level, which effectively addressed the needs of government and enterprise customers. 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 2017, the revenue from domestic non-telecom operator customers for applications, content and other services recorded a year-on-year increase of 22.5%, 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 of Internet of Things, Big Data and Information Security, so as to continuously carter for the needs of customers for construction of informatization.
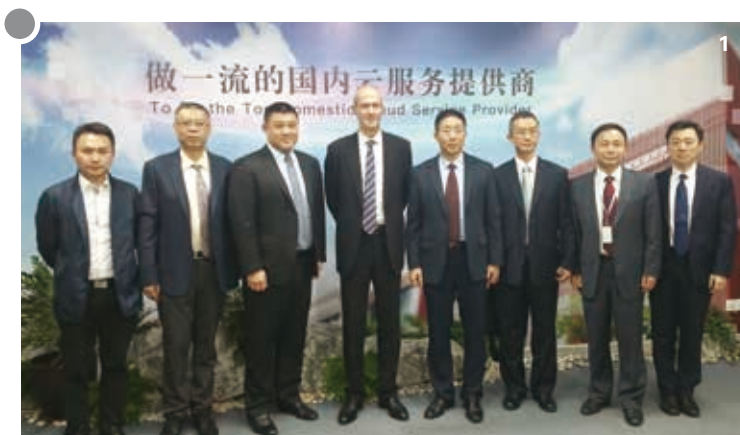
1. The Group cooperated with SAP in public cloud business

2. The Group established cloud computing bases and undertook cloud computing centre project