



AsialInfo Technologies Limited

(Incorporated in the British Virgin Islands with limited liability)
Stock Code: 01675

**ACCUMULATE
FORCE**

**MARCHING
NEW**

5G

CLOUD

BIG DATA

IoT

A.I.

**ANNUAL REPORT
2020**

IoT

A.I.

BIG DATA

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5G

CLOUD COMPUTING



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DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

DEFINITIONS

In this annual report, unless the context otherwise requires, the following expressions have the following meanings:

"AGM"	the forthcoming annual general meeting of the Company to be held on 28 May 2021
"Articles of Association"	the articles of association of the Company, as amended from time to time
"AsialInfo Chengdu"	AsialInfo Technologies (Chengdu), Inc. (亞信科技(成都)有限公司), a limited liability company incorporated in the PRC on 31 December 2001, which is a wholly-owned subsidiary of AsialInfo Security
"AsialInfo China"	AsialInfo Technologies (China), Inc. (亞信科技(中國)有限公司), a wholly foreign-owned enterprise incorporated in the PRC on 2 May 1995, which is an indirect wholly-owned subsidiary of the Company
"AsialInfo International"	AsialInfo International Investment Limited, a limited liability company incorporated in the British Virgin Islands on 24 July 2014, which is ultimately solely and beneficially owned by Dr. TIAN
"AsialInfo Security"	AsialInfo Security Technology Limited (亞信安全科技股份有限公司), a limited liability company incorporated in the PRC on 25 November 2014, which is ultimately controlled and beneficially owned as to approximately 58.73% by Dr. TIAN
"Audit Committee"	the audit committee of the Company
"Board"	the board of Directors of the Company
"Board Committees"	the Audit Committee, the Nomination Committee, the Remuneration Committee and the Strategy and Investment Committee
"CAICT"	the China Academy of Information and Communications Technology

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

"CG Code"	the Corporate Governance Code as set out in Appendix 14 to the Listing Rules
"Chief Executive Officer"	the chief executive officer of the Company
"China Mobile Group"	China Mobile Limited and its subsidiaries
"Company", "AsialInfo" or "AsialInfo Technologies"	AsialInfo Technologies Limited (亞信科技控股有限公司), an international business company incorporated in the British Virgin Islands on 15 July 2003, whose Shares are listed on the Stock Exchange (stock code: 1675)
"connected person"	has the meaning ascribed thereto under the Listing Rules
"Director(s)"	the director(s) of the Company
"ESG Guide"	the Environmental, Social and Governance Reporting Guide as set out in Appendix 27 to the Listing Rules
"ESG Report"	the Environmental, Social and Governance (ESG) Report
"ETSI"	the European Telecommunications Standards Institute, a non-profit telecommunication standardisation organisation approved and established by the European Commission
"Exercise Notice"	written or electronic notice of the grantee to the Company to exercise share options on or after the vesting date of the share options
"Group"	the Company and its subsidiaries
"GSMA"	the Global System for Mobile Communications Association, an industry organisation in the global mobile communication area
"Hong Kong"	the Hong Kong Special Administrative Region of the PRC
"HK\$"	Hong Kong dollars, the lawful currency of Hong Kong
"IEEE"	the Institute of Electrical and Electronics Engineers
"Independent Third Party(ies)"	third party(ies) independent of and not connected with the Company and any of its connected person(s)

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

“International Business”	the software business serving the telecom operators headquartered in Southeast Asia, Europe and other regions outside the PRC
“ITAIWC”	the Information Technology Application Innovation Working Committee
“ITU”	the International Telecommunication Union
“Lease Agreement”	the lease agreement entered into between AsialInfo China and AsialInfo Chengdu on 30 December 2019
“Lease Framework Agreement”	the lease framework agreement entered into between the Company and China Mobile Communication Co., Ltd. on 20 April 2020
“Listing Rules”	the Rules Governing the Listing of Securities on the Stock Exchange
“Model Code”	the Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules
“MPF”	mandatory provident fund
“MPF Scheme”	the MPF scheme operated by the Group for all eligible Hong Kong employees
“Network Security Business”	the business of providing network security-related software products and services in the PRC
“New International Management Support Framework Agreement”	the management support service framework agreement entered into between the Company and AsialInfo International on 29 December 2020
“New International Technological Service Framework Agreement”	the technological service framework agreement entered into between the Company and AsialInfo International on 29 December 2020
“New Security Management Support Framework Agreement”	the management support service framework agreement entered into between the Company and AsialInfo Security on 29 December 2020
“New Security Technological Security Service Framework Agreement”	the technological service cooperation framework agreement entered into between AsialInfo Security and the Company on 29 December 2020

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

“New Security Technological Service Framework Agreement”	the technological service cooperation framework agreement entered into between the Company and AsialInfo Security on 29 December 2020
“Nomination Committee”	the nomination committee of the Company
“PRC” or “China”	the People’s Republic of China
“Pre-IPO Share Award Scheme”	the pre-IPO restricted share award scheme of the Company
“Pre-IPO Share Option Scheme”	the pre-IPO share option scheme of the Company
“Prospectus”	the prospectus of the Company dated 6 December 2018
“Remuneration Committee”	the remuneration committee of the Company
“Reporting Period”	the year ended 31 December 2020
“R&D”	research and development
“RMB”	Renminbi, the lawful currency of the PRC
“RSU”	the restricted share units in relation to the Pre-IPO Share Award Scheme
“SFO”	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended or supplemented or otherwise modified from time to time
“Share(s)”	ordinary share(s) of the Company
“Shareholder(s)”	holder(s) of the Share(s)
“Software Products and Services Framework Agreement”	the software products and services framework agreement entered into between the Company and China Mobile Communication Co., Ltd. on 20 April 2020
“Stock Exchange”	The Stock Exchange of Hong Kong Limited
“Strategy and Investment Committee”	the strategy and investment committee of the Company
“TMF”	the International Telecommunication Management Forum
“Trust Management Committee”	the trust management committee of the Company

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

"US"	the United States of America
"USD" or "US\$"	US dollars, the lawful currency of US
"2019 Share Option Scheme"	the share option scheme adopted by the Company on 25 November 2019
"2020 Share Award Scheme"	the share award scheme adopted by the Company on 7 January 2020
"%"	per cent

GLOSSARY OF TECHNICAL TERMS

This glossary of technical terms contains terms used in this annual report that are related to business of the Group. As such, these terms and their meanings may not always correspond to standard industry meaning or usage of these terms.

"AI"	artificial intelligence
"AIOT"	artificial IOT
"BSS"	business support systems used for the management of customer information, customer business and service processes and customer related services and resources, often used together with OSS to form end-to-end comprehensive business and operation management systems for the telecom industry
"B domain"	BSS domain
"CMMI Level 5"	international standard for measurement of Software Capability Maturity Model (SW-CMM), CMMI Level 5 represents the highest level
"CRM"	customer relationship management
"CSSP"	certified service solution partner
"DevOps"	development and operation system
"DSaaS"	data-driven operation, namely the date-driven SaaS operation services
"ERP"	enterprise resource planning

DEFINITIONS AND GLOSSARY OF TECHNICAL TERMS

"Internet of Things" or "IOT"

the network of physical objects — devices, vehicles, buildings and other items — embedded with electronics, software, sensors and network connectivity that enables these objects to collect and exchange data

"IT"

information technology, the application of computers and telecommunications equipment to store, retrieve, transmit and manipulate data

"MSP"

managed service provider

"NSA/SA"

non-standalone/standalone

"O domain"

OSS domain

"O-RAN"

open radio access network

"OSS"

operations support systems, a collective term for the software solutions telecom operators use to support their network operations, often used together with BSS to support various end-to-end telecommunications services

"SaaS"

software as a service, a software licensing and delivery model in which software is licensed on a subscription basis and is centrally hosted

"SDN/NFV"

software defined network/network function virtualisation

"3D"

3-dimension, referring to a spacing system in which a direction vector is added in the flat second dimension system

"4G"

the fourth-generation of mobile telecommunications technology, applied in amended mobile web access, IP telephony, gaming services, high-definition mobile TV, video conferencing, 3D television and cloud computing

"5G"

the fifth-generation of mobile telecommunications technology which has higher speed and capacity and lower latency than 4G

C O R P O R A T E

AsialInfo Technologies listed its shares on the Stock Exchange on 19 December 2018. The history of the Group dates back to 1993 when we served as the provider of China's first-generation telecom software, whereby we have collaborated extensively with each of China Mobile, China Unicom and China Telecom since the 1990s, supporting over one billion subscribers nationwide.

The Group is committed to becoming a digital transformation enabler of the large enterprises which aims to provide telecom operators and other large enterprise customers with software products and related service of business transformation and digitalisation by leveraging our products, services, operations and integration abilities. According to a Frost & Sullivan report, the Group is the largest telecom software product and related service provider in China, and the largest business

support software product and related service provider in the telecom industry in China, with an extensive portfolio of over 500 mission-critical, carrier-grade software products, ranging from CRM, charging & billing and big data to Internet of Things and 5G intelligent network products.

As of 31 December 2020, the Group had interests in the following subsidiaries/branches: AsialInfo Technologies (H.K.) Limited (香港亞信科技有限公司), AsialInfo Technologies (China), Inc. (亞信科技(中國)有限公司), AsialInfo Technologies (China), Inc. Fuzhou Branch, AsialInfo Technologies (China), Inc. Shenyang Branch, AsialInfo Technologies (China), Inc. Guangzhou Branch, AsialInfo Technologies (China), Inc. Shanghai Branch, AsialInfo Technologies (China), Inc. Chengdu Branch, AsialInfo Technologies (China) Inc., Hangzhou Branch, Shanghai AsialInfo Online Technology Limited (上海亞信在線科技有限公司), Shanghai AsialInfo Online Technology Limited Chongqing Branch, AsialInfo (H.K.) Limited (香港亞信有限公司), Hong Kong AsialInfo Technologies Limited (香港亞信技術有限公司), AsialInfo Technologies (Nanjing) Inc. (亞信科技(南京)有限公司), AsialInfo (H.K.) Development Limited (香港亞信發展有

CORPORATE PROFILE

限公司), Guangzhou AsialInfo Technology Co., Ltd. (廣州亞信技術有限公司), Guangzhou AsialInfo Technology Co., Ltd. Fuzhou Branch, Guangzhou AsialInfo Technology Co., Ltd. Chengdu Branch, Guangzhou AsialInfo Technology Co., Ltd. Shanghai Branch, Guangzhou AsialInfo Technology Co., Ltd. Hangzhou Branch, Guangzhou Zhihui Online Technology Co., Ltd. (廣州智匯在線科技有限), Beijing ShangxinYitong Information Technology Limited (北京尚信易通信息技術有限公司), Hangzhou AsialInfo Software Co., Ltd. (杭州亞信軟件有限公司), Hangzhou AsialInfo Cloud Information Technologies Limited (杭州亞信雲信息科技有限), Hangzhou AsialInfo Cloud Information Technologies Limited Beijing Branch, Nanjing AsialInfo Software Co., Ltd. (南京亞信軟件有限公司), Hunan AsialInfo Software Co., Ltd. (湖南亞信軟件有限公司), Hunan AsialInfo Software Co., Ltd. Fuzhou Branch, Hunan AsialInfo Software Co., Ltd. Shanghai Xucao Technology Branch (上海徐漕科技分

P R O F I L E

公司), AsialInfo Big Data Limited, AsialInfo Big Data (H.K.) Limited (亞信大數據(香港)有限公司), AsialInfo Technologies Holding (H.K.) Limited (亞信科技控股香港有限公司), Beijing AsialInfo Smart Big Data Co., Ltd. (北京亞信智慧數據科技有限), Beijing AsialInfo Smart Big Data Co., Ltd. Nanjing Branch, Beijing AsialInfo Smart Big Data Co., Ltd. Chengdu Branch, Beijing AsialInfo Smart Big Data Co., Ltd. Hangzhou Branch, Hunan AsialInfo Anhui Technology Limited (湖南亞信安慧科技有限), Beijing AsialInfo Xinan Technology Limited (北京信安數科科技有限), Beijing AsialInfo Xingyuan Technology Limited (北京亞信興源科技有限), AsialInfo Technologies Development Limited (亞信科技發展有限), Chongqing Logic Technology Co., Limited (重慶數智邏輯科技有限), AsialInfo Xincheng (Guangzhou) Corporate Management Consultant Partnership Enterprise (Limited Partnership) (亞信信成(廣州)企業管理諮詢合夥企業(有限合夥)), AsialInfo Zhixiangyun (Beijing) Technology Co., Ltd. (亞信智享雲(北京)科技有限) and Wanxin Technology (Shenzhen) Co., Ltd. (灣信科技(深圳)有限).

CORPORATE INFORMATION

BOARD OF DIRECTORS

Executive Directors

Dr. TIAN Suning (*Chairman*)
Mr. DING Jian
Mr. GAO Nianshu (*Chief Executive Officer*)

Non-executive Directors

Mr. ZHANG Yichen
Mr. XIN Yuesheng
Mr. ZHANG Liyang
Mr. YANG Lin
Ms. LIU Hong

Independent Non-executive Directors

Dr. GAO Jack Qunyao
Dr. ZHANG Ya-Qin
Mr. GE Ming
Ms. TAO Ping

AUDIT COMMITTEE

Mr. GE Ming (*Chairman*)
Dr. ZHANG Ya-Qin
Mr. ZHANG Liyang
Ms. TAO Ping

REMUNERATION COMMITTEE

Dr. GAO Jack Qunyao (*Chairman*)
Dr. ZHANG Ya-Qin
Mr. XIN Yuesheng

NOMINATION COMMITTEE

Dr. TIAN Suning (*Chairman*)
Mr. GAO Nianshu
Dr. GAO Jack Qunyao
Dr. ZHANG Ya-Qin
Mr. GE Ming
Ms. LIU Hong
Ms. TAO Ping

CORPORATE INFORMATION

STRATEGY AND INVESTMENT COMMITTEE

Mr. XIN Yuesheng (*Chairman*)
Dr. TIAN Suning
Mr. DING Jian
Mr. GAO Nianshu
Mr. YANG Lin

COMPANY SECRETARY

Ms. YU Wing Sze

AUTHORISED REPRESENTATIVES

Mr. GAO Nianshu
Ms. YU Wing Sze

REGISTERED OFFICE

Craigmuir Chambers
Road Town
Tortola, VG1110
British Virgin Islands

PRINCIPAL PLACE OF BUSINESS AND HEAD OFFICE IN CHINA

AsiaInfo Plaza, Dong Qu
10 Xibeiwang Dong Lu
Haidian District
Beijing 100193
PRC

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

31/F, Tower Two
Times Square
1 Matheson Street
Causeway Bay
Hong Kong

BRITISH VIRGIN ISLANDS PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Harneys Fiduciary (Cayman) Limited
4th Floor, Harbour Place
103 South Church Street
PO Box 10240
Grand Cayman, KY1-1002
Cayman Islands

HONG KONG SHARE REGISTRAR

Computershare Hong Kong
Investor Services Limited
Shops 1712-1716, 17th Floor
Hopewell Centre
183 Queen's Road East
Wan Chai
Hong Kong

LEGAL ADVISORS

As to Hong Kong law:
CFN Lawyers
27/F, Neich Tower
128 Gloucester Road
Wan Chai
Hong Kong

As to PRC law:
Han Kun Law Offices
9/F, Office Tower C1
Oriental Plaza
1 East Chang An Avenue
Beijing
PRC

As to British Virgin Islands law:
Harney Westwood & Riegels
3501, The Center
99 Queen's Road Central
Hong Kong

AUDITOR

KPMG
Certified Public Accountants
8th Floor, Prince's Building
10 Chater Road Central
Hong Kong

PRINCIPAL BANKERS

East West Bank
3237 E. Guasti Rd.
Ontario, CA
91761
United States

China Merchants Bank
Beijing Jianguo Road Sub-branch
116 Jianguo Road
Chaoyang District
Beijing
PRC

China Merchants Bank
Nanjing Gulou Sub-branch
4 Beijing East Road
Nanjing, Jiangsu Province
PRC

STOCK CODE

1675

COMPANY'S WEBSITE

www.asiainfo.com

FINANCIAL HIGHLIGHTS

Financial data	2020 RMB million	2019 RMB million	Changes
Revenue	6,020	5,721	5.2%
Revenue from "Three New" businesses	780	378	106.5%
Gross profit	2,303	2,127	8.3% 1.1 percentage points
Gross profit margin (%)	38.3%	37.2%	percentage points
Profit for the year	662	409	62.0% 3.9 percentage points
Net profit margin	11.0%	7.1%	percentage points
Earnings per share (RMB)	0.85	0.56	51.8%
Adjusted net profit¹	737	673	9.6% 0.4 percentage point
Adjusted net profit margin¹ (%)	12.2%	11.8%	percentage point


Note 1: To facilitate comparisons of the overall operating performance of the Group in different periods, certain non-recurring, non-cash or non-operating items, which were not indicative of our operating performance, were excluded. Adjusted net profit and adjusted net profit margin are not the measures required by, or presented in accordance with, HKFRS and are unaudited figures. The use of these measures has its limitations as analytical tools, and you should not consider them in isolation from, or as a substitute for analysis of, the Group's results of the operations or financial conditions as reported under HKFRS. Please refer to "MANAGEMENT DISCUSSION AND ANALYSIS — Non-HKFRS Measurement Indicators" for further details.

FINANCIAL HIGHLIGHTS


PROFIT FOR THE YEAR

 ^{RMB}
662 Million
62.0%

BUSINESS REVENUE

 ^{RMB}
6,020 Million
5.2%

REVENUE FROM “THREE NEW” BUSINESSES

 ^{RMB}
780 Million
106.5%

CHAIRMAN'S STATEMENT

“5G is bringing us a new and boundless world and the era of connecting everything is approaching at an accelerated pace.”

TIAN Suning
Chairman & Executive Director



CHAIRMAN'S STATEMENT

Dear Shareholders,

Looking back, 2020 was an extremely extraordinary year. The sudden onslaught of the COVID-19 epidemic had caused significant adverse impact on the economy and society with all industries facing unprecedented difficulties and challenges in production and operation. At the same time, guided by the national “new infrastructure” strategy, the transformation on digitisation, cyberisation and intelligentisation of the economic society was further accelerated, bringing new opportunities for the development of industrial internet.

During the Reporting Period, AsiaInfo Technologies boldly shouldered its social responsibilities to work with operators, governments and other social sectors to fully support the epidemic prevention and control, and facilitate the resumption of work and production on one hand, and it actively responded, turned crises into opportunities, and seized the development opportunities brought by the new infrastructure to accelerate its strategic transformation on the other hand. It achieved steady improvement in overall performance in the first half year and accelerated its development in the second half year with a sound growth for the entire year, especially the rapid development in the “Three New” businesses (data-driven operation DSaaS, vertical industries and enterprise cloudification, OSS), which accounted for double-digit of its total revenue for the first time and achieved a new milestone. The Company continued to accelerate its development pace and moved forward unwaveringly driven by its “One consolidation, Three developments” strategy.

On behalf of the Board, I hereby present the annual report of the Group for the year ended 31 December 2020 to the Shareholders.

OVERALL RESULTS

In 2020, despite the impact of the epidemic, the overall operation of the Company still maintained a sound growth momentum. Especially driven by the rapid development of the “Three New” businesses, our revenue amounted to approximately RMB6,020 million, increased by 5.2% year-on-year, among which, revenue from the “Three New” businesses amounted to approximately RMB780 million, increased by 106.5% year-on-year and accounted for double-digit (approximately 13.0%) of its total revenue for the first time. Profit for the year amounted to approximately RMB662 million, increased by 62.0% year-on-year. The adjusted net profit amounted to approximately RMB737 million and the adjusted net profit margin amounted to approximately 12.2%, representing a year-on-year increase of 0.4 percentage point, which recorded a new high in profitability.

The Board, after taking into full consideration of various factors including Shareholders’ returns, profitability, cash flow level and capital needs for future development of the Company, has decided to propose the distribution of the 2020 final dividend of HK\$0.345 per Share at the AGM with the annual dividend payout ratio of approximately 40%.

CHAIRMAN'S STATEMENT

BUSINESS DEVELOPMENT

Accelerating the development of DSaaS business with strong doubled revenue growth

The current digitalisation process in society is accelerating and the coverage of information services is further extended. Facing the COVID-19 epidemic, digitalised economy has rebounded and moved further ahead with robust development, and the value of data resources in the operation and management of various industries is further demonstrated. The Company continues to increase its efforts in expanding its DSaaS business with “abundant compliant data resources, innovative leading new technologies based on AIOT, cloudification and 5G, and digitalised products based on business scenarios” by cooperating with operators to provide assistance for customers in relevant key industries with precision marketing, intelligence-based operation, and quality and efficiency improvements to leverage on the value of digitisation.

In 2020, our products and applications of the DSaaS business continued to innovate and diversify and the results-based charging model was further promoted on a scalable basis, with expanding customer layout and strong willingness to continue in use and was highly recognised. In particular, we became the ecological partner for the Tencent Enterprise Wechat to jointly explore the large government and business customer-oriented market for the enterprise wechat and develop the wechat ecology-based private traffic. In addition, the value of the DSaaS business has become more prominent during the course of combating against the epidemic spread. We complemented with the National Health Commission and Ministry of Industry and Information Technology to provide systematic and all-round product support for epidemic prevention and control. Our self-developed products such as epidemic trend sensing products, visualisation of 3D immersive data on sensitive regions and joint public health emergency response plans of COVID-19 were strongly recommended by the Ministry of Science and Technology of the PRC, CAICT and the Cloud Computing Open Source Industry Alliance, and have been widely applied. In 2020, the revenue from the DSaaS business was approximately RMB352 million, up by 131.7% year-on-year, recording a new high in growth rate.

Focusing on the development of vertical industries and enterprise cloudification with continuous customer layout expansion

In 2020, the Company continued to expand its layout in the vertical industries and enterprise cloudification market by focusing on five strategic vertical industries including the finance, energy, transportation, government affairs and postal services sectors, tapping into customer demand and providing CRM, data management, DevOps, Cloud MSP, smart city development and other products and services, created benchmark product models, gradually replicated and promoted them in the industry, hence the network of large corporate customers was further expanded.

In the five strategic vertical industry sectors, we received high recognition from our insurance and banking customers in respect of our DataGo data governance, CRM, DevOps, unified certification and other products. We launched the 5G smart energy solutions to provide assistance in the new infrastructure of the energy industry. We built an enterprise-level comprehensive operation management system for expressways and promoted charging products to facilitate the informatisation of the expressways transportation industry. We built key projects such as CRM, data centers, and Postal Savings Bank of China big data platforms to contribute efforts in technological innovations in the postal industries. In the smart cities sector, we entered into “smart city” strategic partnerships with the two core cities Chongqing and Shenzhen, achieving a breakthrough in the “smart city” sector.

CHAIRMAN'S STATEMENT

In the cloud business sector, we provided customers with cloud-native technologies and products, cloud MSP, cloudification and cloud-based intelligent transformation services, and deepened the co-operation with mainstream cloud vendors to facilitate customers to adopt and apply cloud technology. We completed projects co-supported by Alibaba Cloud's technology one after another, and expanded new projects including Hebei Steel, Delong Steel and Sany Group after the successful implementation of the OCJ e-commerce project. Moreover, we were rated as the "Excellent" grade, the highest level of Trusted Cloud MSP certification in the Trusted Cloud · Cloud MSP Competency Assessment hosted by the CAICT.

As of the end of 2020, the Company provided services to 85 large-scale corporate customers, up by 44.1% year-on-year, and customer retention rate continued to maintain a high level of over 99%. The revenue from vertical industries and enterprise cloudification business amounted to approximately RMB180 million, up by 63.7% year-on-year.

Accelerating 5G business expansion with solid, leading position in operators market

Guided by the national "new infrastructure" strategy, the 5G construction was in full swing and had entered into its "fast track" development, and operators were accelerating the integration of cloud-network. The Company closely leveraged on the development trend of BSS & OSS integration in the 5G era, vigorously promoted the business integration in several segments, continued to enhance BSS software and service advantages, provided BSS systems that enable 5G business operation scenarios, provided strong support for operators' 5G business development as well as expanded and upgraded 5G OSS network intelligent products, deeply engaged in the formulation of 5G OSS system protocol to create first-mover advantages and provided assistance for operators in optimising 5G network quality and improving network experience.

For the BSS business, we proactively overcame the adverse impact of the epidemic, quickly established an emergency support mechanism, and utilised online collaborative tools to provide service support to customers to ensure project progress and improve efficiency. We actively engaged in the formulation of proposals and specifications for operators' smart middle office platform, assisted in the construction of projects for smart middle office platform in various regions. We actively explored 5G multi-quantity, multi-dimensional and multi-model billing capabilities and propelled the launching of the 5G SA billing system. We assisted operators in the construction of digitalised new IT, reconstructed the digitalised ecosystem and accelerated integrated new operations. In 2020, the number of telecom operator customers the Company served increased steadily, and the customer retention rate continued to maintain a high level of over 99%.

For the OSS business, we cooperated closely with the three major telecom operators and always committed to the innovation and commercialisation of 5G network intelligence. For the 5G OSS network intelligent products, we have established several provincial-level or the Group's commercialised works, provided assistance for operators in 5G network intelligent operation and maintenance. Further to the 27 commercialised works in the 5G OSS business in the first half of 2020, 73 commercialised works were achieved throughout the year, accelerated the development from "multi-sites layout" to "all-round deployment". In 2020, the revenue from the Company's OSS business amounted to approximately RMB248 million, up by 114.0% year-on-year.

CHAIRMAN'S STATEMENT

Creating quality products with leading technology R&D capabilities and craftsmanship

Adhering to the philosophy of "R&D first, innovation as priority", we continued to enhance our R&D innovation capabilities and technology-driven capabilities, increased the innovation and R&D efforts in emerging businesses, built a high-end product planning system, and empowered the vertical industries and ecological partners. In 2020, we have built an industry-leading 5G cloud network product system, in which the 5G network slicing technology and products are leading the industry and 5G network middle office system product has a demonstration effect in the industry. Customers experience management (i.e. CEM) covers all domain, SDN/NFV product accelerates the cloud network integration, and 5G private network is deployed in advance to continuously enhance the influence of the 5G cloud network intelligence industry. The Company has created a data and AI product system, and many products have been fully commercialised in vertical industries such as data middle office, AI middle office, edge AI, intelligent operation and maintenance (i.e. AIOps), knowledge mapping, RPA robot process automation platform, etc. The Company also further evolves the middle office product system, including cloud management platform, PaaS platform, big data platforms, GIS platform, AI platform, etc. to constitute the technical foundation that empowers various industries. In addition, the Company created a series of innovative product sets, including 5G urban digital twin platforms, 3D visualisation, 5G private network operation platforms, DevOps, etc. to help operators and vertical industry customers carry out digital transformation and innovation.

In 2020, we made great efforts to strengthen our capability, with multiple key innovative technologies and products granted with patents and software copyrights. At present, the Company owns over 900 software copyrights in total. While strengthening our technological innovation, we had also established an innovative closed-looped model from standardisation to commercialisation, and actively participated in 19 international/national technical standards organisations such as 3GPP, ITU, ETSI, IEEE, TMF and O-RAN, leading and contributing to the 19 international communication technology standards. Moreover, in the context of new infrastructure and IT innovation, we actively facilitated the construction of independent controlled products and technology stacks to promote IT innovation development in domestic software. Our data base product AntDB was selected as the key product on innovative aspect for information technology application by the ITAIWC.

Building an ecological cooperation system of "One Mainstay, Three Links", and co-operating with industry partners for synergistic development

By taking our own internal development as the mainstay and to coordinate with the external "Three Links", we had initially built an ecological co-operation system of "One Mainstay, Three Links" to explore the continuous deepening co-operation with all the parties in the industry through diversified co-operation methods, and jointly explore development opportunities to achieve complementary advantages, resources sharing, and win-win co-operation. In the capital link, we promoted the implementation and growth of the Company's strategic business through capital linkage. In the future, we will continue to proactively identify investment and merger opportunities which will achieve the Company's strategic synergy. In the strategic link, we had entered into strategic partnerships with 70 companies: we deepened the strategic co-operation

CHAIRMAN'S STATEMENT

with China Telecom, China Mobile and China Unicom to jointly propel the development of 5G technology, especially the strategic shareholding investment from China Mobile, which further promoted the long-term strategic co-operation between the two parties, and explored development opportunities in face of new strategic sectors. We promoted the cloud ecosystem construction and digital transformation for corporate customers with strategic partners such as Alibaba Cloud, Tencent Cloud, Baidu and Huawei. We established strategic partnerships with the governments of Shenzhen and Chongqing and their affiliated enterprises to promote the construction and operation of smart cities. In the business link, we deepened the business co-operation with industry partners to promote coordinated business development, especially the rapid development of the “Three New” businesses.

LOOKING FORWARD

Looking forward, opportunities and challenges still coexist for a long period of time.

We will embrace 5G, cloud computing, big data, AI, IOT and other advanced technologies actively, promote strategic transformation unswervingly and solidify “One consolidation” with high-quality and promote “Three developments” with high speed. For traditional business, we will continue to strengthen the leading position in operators market, explore business potentials vigorously and continue to improve efficiency. For “Three New” businesses, we will accelerate the scalable expansion, in which DSaaS business attaches equal importance to its scale and model innovation; vertical industries and enterprise cloudification business focuses on the industry and high-quality development; OSS business accommodates both stock and increment to increase their market shares.

We will work together with industry partners to build an open, co-operative ecosystem, continue to facilitate the reform of business models, accelerate to follow the pace with the construction of China’s “new infrastructure”, “IT innovation” and “new-type smart city”, aiming to become the enabler of the digital transformation for large enterprises in the 5G era.

Finally, on behalf of the Board, I would like to take this opportunity to express our heartfelt thanks to all Shareholders, our customers and all circles of society for their support to the Company. I would also like to express our gratitude to all our staff for their relentless efforts and contributions. We will work together to build AsialInfo Technologies into a respectable enterprise with pride for staff.

MANAGEMENT DISCUSSION AND ANALYSIS

BUSINESS OVERVIEW

Summary

In 2020, all industries experienced unprecedented difficulties and challenges under the impact of the pandemic. Facing this, the Company went all out to take active response, further deepened the “One consolidation, Three developments” strategy and achieved continuous efficiency improvement in the core business, full-speed growth for “Three New” businesses and sound growth in overall results. Meanwhile, the Company bravely undertook social responsibilities to fully support epidemic prevention and control. We ensured the safe and stable operation of IT support systems of customers, and also provided systematic and all-round product support for the epidemic prevention and control for government departments, for which we obtained many awards.

During the Reporting Period, revenue of the Company amounted to approximately RMB6,020 million, up by 5.2% year-on-year. Among them, the “Three New” businesses, namely DSaaS, vertical industries and enterprise cloudification and OSS, achieved revenue of approximately RMB780 million, up by 106.5% year on year. “Three New” businesses accounted for 13.0% of total revenue in 2020 when compared with 6.6% in 2019, marking a double-digit contribution. Profit for the year reached approximately RMB662 million, increased by 62.0% year-on-year, and the adjusted net profit reached approximately RMB737 million, hitting a new high in profitability.

I. Speeding up the expansion of DSaaS business, with continuous doubled growth in revenue

In 2020, the pandemic promoted the digital transformation demand for infrastructure, social governance, mode of production, work and life, accelerated the process of data being taken as a production factor in resources distribution, and data resources further demonstrated the value in operation and management of enterprises. The demand for data-driven operation in telecommunications, finance, government affairs, transportation, energy and other industries is increasing day by day.

During the Reporting Period, the Company leveraged the abundant compliance data resources, applied innovative leading AI technology development and developed digital products and services for different business scenarios. The Company also kept optimising the business models and helped customers to improve their quality and performance in marketing, service and operation.

MANAGEMENT DISCUSSION AND ANALYSIS

In terms of operation products and services, the Company provides financial marketing cloud, API service, risk control service and other personalised industry digital operation services for financial industry customers, and deliver government affairs customers with digital operation services of public governance, such as smart population, integrated governance, smart public security, smart park, etc.; provides operators with abundant products and services including stock operation, 5G innovative operation, smart middle office operation, equity operation, grid-based operation and multiple channel operation. In terms of business model optimisation, we have actively promoted the results-based charging, with the settlement commission revenue with a group customer exceeding RMB10 million and have successfully replicated and promoted the model to several provinces. As an ecosystem partner of Tencent Enterprise WeChat, we carried out private traffic projects around Tencent WeChat and other ecosystems, with continuous expansion in customer scale and tens of million of orders were accumulated for the whole year. The “Big Data Product Development and Joint Operation Laboratory” in collaboration with China Mobile was successfully selected into the “Benchmarking Project” of China Mobile, and was released and promoted to the entire group. In terms of customer base expansion, we added new key customers such as Migu Video, China Mobile Online, municipal governments, China Huarong, China UnionPay, Shanghai Pudong Development Bank, DIMA Industry, Enovate Motors, China Tobacco, Chongqing Gas, etc.

II. Focusing on the development of vertical industries and enterprise cloudification, and continuously expanding customer base

In 2020, the government intensely introduced new infrastructure, information innovation and other related policies, which further accelerated the digital transformation process in China. The size of China’s software market continues to grow at a high speed. According to the forecast by CAICT, the software industry revenue will exceed RMB15 trillion by 2025, with a compound annual growth rate of 13.8%. In the process of digital transformation, more large government and enterprise customers choose cloud services which enable the cloud market in continuous and rapid growth. Meanwhile, as a complex of information technology and various urban sectors, smart city is enjoying a strong momentum of development. Large smart city projects commenced construction one after another, and government departments at all levels are increasing their investments in the relevant fields.

During the Reporting Period, the Company continued to increase its presence in the vertical industries and enterprise cloudification, focusing on the five industries of finance, energy, transportation, government affairs and postal service by relying on our four core capabilities to expand customer base. In the field of energy and electricity, the Company offered 5G smart energy solutions to empower the new infrastructure of the energy industry, which won multiple orders in LTE/5G wireless private network, cloud platform construction and AI application from China Nuclear Power Engineering, China Energy, State Power Investment, etc., and signed strategic co-operation agreements with China National Nuclear Power, China Nuclear Power Engineering, CHN Energy, SPIC and YUDEAN Group. In the field of transportation, the Company built an enterprise-level comprehensive expressway operation and management system, promoted the informatisation of the transportation industry, and obtained multiple expressway projects of several provinces including Yunnan, Guangdong and Hunan. In the financial field, our DataGo data governance product and CRM products obtained orders from insurance customers such as PICC Life Insurance, our DevOps products obtained orders from Guangfa Bank and Huarong Technology, our unified certification

THE REVENUE
FROM DSaaS UP
BY

131.7%

MANAGEMENT DISCUSSION AND ANALYSIS

THE COMMERCIALISATION WORKS OF 5G OSS

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products obtained orders from Huatai Securities, and the Company continued to deepen the co-operation with China Construction Bank, Agricultural Bank of China, CITIC Bank, Harbin Bank and other customers. In the field of postal service, the Company delivered key projects such as China Post CRM and data center, and helped the head office and branches of Postal Savings Bank of China to build a big data platform to facilitate technological innovation in the postal industry.

In the field of cloud business, on one hand, the Company actively sought for co-operation opportunities with major cloud manufacturers, expanded the share of customer-side projects, and provided clients with cloud native technology and products, cloud MSP, cloudification and cloud intelligent transformation services. On the other hand, the Company created business opportunities in vertical industries and helped bring project orders of cloud infrastructure to the cloud cooperative partners. During the Reporting Period, the Company and Alibaba Cloud achieved fruitful results in their cooperation. On the basis of OJ e-commerce Project, we jointly expanded Hebei Iron and Steel, Delong Iron and Steel, Sany Group and other data middle office projects. In addition, the Company obtained the highest level of Trusted Cloud MSP, “Excellent Level” certification, in the Trusted Cloud • Cloud MSP Capability Assessment hosted by CAICT.

In the field of smart city, the Company reached a strategic co-operative relationship with two core cities, Chongqing and Shenzhen, and achieved a breakthrough in the “smart city” sector. Based on its core competence, the Company has made presence in niche fields such as government data governance, data middle office, AI middle office, smart environmental protection, smart energy, smart construction site, smart pension, and integrated visual cloud.

III. Seizing the development opportunity of BO domain integration in 5G era with OSS business growing rapidly

Under the guidance of the national “new infrastructure” strategy, 5G development has entered the “fast track”. In 2020, China built over 600,000 new 5G base stations and over 718,000 have been opened. With the commercialisation of 5G, operators will continue to accelerate 5G construction, and investment in OSS software and services will also maintain a healthy trend. In addition, 5G private network is accelerating its penetration into vertical industries, which will bring a new increment space to the OSS development.

In 2020, the Company followed the 5G development trend and continued to deepen BO domain integration and upgrade smart 5G network products. 5G network slicing, network middle office, ReTiNA, SDN and other products continued to improve, 5G network slicing products embraced the industry leading position, 5G private network gained a first-mover advantage, network middle office in the leading camp, and 5G network intelligent products possessed industry-leading influence.

In terms of technology leadership, the Company continued to build the influence of 5G network intelligent technology, and actively participated in the work of international standards and industrial alliances. The Company continued to promote 3GPP, ITU-T, ETSI, O-RAN, ISO, IEEE, CCSA, 5G Slicing Alliance and other related works, which passed 19 international standards in total and won 2 TMF Catalyst Awards in 2020. The Company jointly innovated with operators in 5G private network smart SLA, NWDAF and other fields, deeply participated in the specification formulation of the next generation OSS system, and seized the technical high ground for the subsequent commercialisation of 5G OSS.

MANAGEMENT DISCUSSION AND ANALYSIS

IV. Further consolidating the leading position in the operator market and continuing to guide the transformation and upgrading of BSS

The year 2020 was the year for the universal commercialisation of 5G in China. The three major operators accelerated 5G networks construction and business development. The number of current 5G package users in China has exceeded 300 million. With the growth of 5G users and the continuous business development, operators' investment in 5G business support, smart operation, IT transformation and centralisation, and product innovation will continue to grow.

During the Reporting Period, the Company actively followed up the development strategy of operators, continued to strengthen its leading position in the telecom BSS market and continued to expand its business presence and maintained high market shares. The Company sustained to strengthen the long-term stable cooperative partnership with existing customers including operator headquarters, provincial companies and municipal companies on the one hand, and followed the trend in the operators' investment diversion and sought cooperation opportunities proactively with potential customers including professional operator companies, government departments and enterprises on the other hand.

In terms of 5G business support, the Company has steadily promoted the construction of operators' 5G SA billing system, 5G multi-dimensional billing, 5G network slicing end-to-end management, 5G cloud network integration support, 5G integration package support, and 5G business end-to-end support upgrades and other 5G business support work. In terms of 5G smart operations, the Company actively participated in the construction of the smart middle office and rights center of operators, continued to deepen customer operations such as grid operations, digital content and service operations, and private traffic operations, so as to enable operators to refine their operations. In terms of IT support transformation and centralization, the Company continued to guide operators' IT support transformation planning, and promoted the construction of large-scale IT projects such as centralised nodes, big data platforms, business operation management center supported by China Mobile, IOT billing, government and enterprise billing centers, and accounting centers. In terms of digital product innovation, the self-developed databases supported the domestication of operator databases, the R&D of RPA robots helped automate and intelligentised business processes, the development of knowledge mapping products helped customer service systems to be more intelligent, and the building of an all domain AI platform contributed to smart front office business.

V. Leading in technology R&D and product strength, and building high-quality products with craftsmanship

In 2020, the Company adhered to the philosophy of "R&D first, innovation as priority", further improved technology and product R&D system, continued to improve the R&D innovation strength and technology leading capability, optimised the R&D layout, and increased the innovation and R&D investment in emerging businesses. Meanwhile, the Company continued to build AsialInfo Competitive Products Plan System, building quality products with craftsmanship, enabling vertical industry and ecosystem partners. In 2020, with the 5G commercial in acceleration, the Company has built the core product system of AsialInfo Technology, cultivated the capabilities of all domain products and solutions, and accelerated to promote the commercialisation of our products in the telecommunication and other vertical industries.

**CHINA'S MOST
INFLUENTIAL
SOFTWARE AND
INFORMATION
SERVICE ENTERPRISE**

MANAGEMENT DISCUSSION AND ANALYSIS

The Company has built an industry-leading 5G cloud network product system, in which the 5G network slicing technology and products are leading the industry and 5G network middle office system product has a demonstration effect in the industry. Customers experience management (i.e. CEM) covers all domain, SDN/NFV product accelerates the cloud network integration, and 5G private network is deployed in advance to continuously enhance the influence of the 5G cloud network intelligence industry. In the BSS field, the Company has successfully helped operators to achieve the upgrade of the core IT system for 5G SA, and the full commercialisation of smart middle office system. The Company has created a data and AI product system, and many products have been fully commercialised in vertical industries such as data middle office, AI middle office, edge AI, AIOps, knowledge mapping, RPA robot process automation platform and other products. The Company also further pushes forward the evolution of the middle office system, including cloud management platform, PaaS platform, big data platforms, GIS platform, AI platform, etc. to constitute the technical foundation that empowers various industries. In addition, the Company has established a IT application innovation system with AntDB selected as the key product on innovative aspect for information technology application by the ITAIWC and created a series of innovative product sets, including 5G urban digital twin platforms, 3D visualisation, 5G private network operation platforms, DevOps, etc. to help communication and vertical industry customers carrying out digital transformation and innovation.

VI. Building an ecological cooperation system of “One Mainstay, Three Links”, co-operating with industrial partners for synergistic development, and winning wide recognition in comprehensive strengths

During the Reporting Period, the Company constructed the preliminary ecological co-operation system of “One Mainstay, Three Links”, and the exploration in ecological co-operation achieved initial results. First of all, the Company used the capital link in the “capital ring” to promote the strategic business implementation and growth, sought investment as well as merger and acquisition opportunities which will bring strategic synergy to the Company proactively, invested in innovative enterprises with core technology, core product and new operation mode, or established joint ventures to expand new business, strengthened the synergies at capital level and business level, and injected new growth impetus to the outward development. Secondly, the Company reached strategic co-operation with more enterprises in the “strategy ring” to join hands with operators, cloud manufacturers and device makers for complementary purposes and win-win co-operation. In particular, after China Mobile made a strategic investment in Asialfno to be its second largest shareholder, both parties deepened strategic co-operation, jointly explored opportunities in digital intelligence, and provided customers with richer and multi-level communication, information infrastructure and digital services. Finally, the Company sought complementary co-operation opportunities in the “business ring”, realised rapid complement of their own technical and product capabilities through various forms of co-operation, and rapidly transformed product technical capabilities into business implementation. As of 31 December 2020, the Company had a total of 70 strategic partners, including operators, cloud manufacturers and 5G manufacturers, and enterprises in vertical industries.

In 2020, the Company also won a number of awards, and its industry influence continued to rise. The awards included the China’s Top 100 Comprehensive Competitiveness in Software and Information Technology Services in 2020, China’s Most Influential Enterprise Brand in Software Industry, the Top 100 “Leap Technology Enterprise” Award in Hong Kong Stock in 2020, and Outstanding Enterprise Award in Software and Information Services in China. The

OVER
900
SOFTWARE
COPYRIGHTS

MANAGEMENT DISCUSSION AND ANALYSIS

Company's technology and solutions have been highly recognised by the industry by winning two Golden Purple Bamboo Awards in the communication industry in 2020, namely "Excellent Product and Technical Solution" and "5G Scenario Billing Contribution Enterprise", and four awards of TMF, including "Best New Catalyst Project", "Digital Presentation Award", "Best Social Influence Award" and "Best Catalyst Award", as well as "2020 China Artificial Intelligence Leading Enterprise" Award, the runners-up for 2020 International AIOps Challenge, the Champion of 2020 International Telecommunication Union (ITU) 5G Artificial Intelligence Challenge in China, and the "2020 CIS Annual Innovation Product" Award for the Edge AI All-in-one Machine. Many of our products have won China Excellent Software Product Award by China Software Industry Association and the Annual 100 Independent Innovation Achievement Awards by China International Software Expo. The Company actively participated in the work of standardisation organisations and associations, and now serves as a member of international standardisation organisations such as 3GPP, GSMA, TMF, ETSI and ITU, as well as the standing director of the China Information Industry Technology Federation, and vice chairman unit of Alliance of Industrial Internet, Internet Society of China, China Software Industry Association, a member of the Working Group for DevOps Standards, a member of the Cloud Computing Standards and Open Source Promotion Committee, a vice chairman unit of the RPA Industries Development Alliance, and a vice chairman unit of the Modern Digital City Industry Alliance. In addition, based on the original qualifications, the Company has further won the capability assessment of Information System Construction and Service (CS4 level), the excellent qualification of the "Cloud Management Service Capability Assessment Certificate" by CAICT, the Level 3 evaluation in the continuous delivery of "DevOps Capability Maturity Model", the first batch of the highest certification of "Advanced Level" for the DevOps tool evaluation, and successively passed the international certification of CMMI Level 5, the world's highest international software certification.

FUTURE OUTLOOK:

The year 2021 is the inauguration year of China's "14th Five-Year Plan". The Company will seize the opportunity to build "One consolidation" with high quality, promote "Three developments" at a high speed. The Company will fully support 5G construction and promotion, assist the cloudification and cloud use of large enterprises in vertical industries, further promote the enhancement of data-driven operation value of various industries, and strive to become an enabler of the digital transformation of large enterprises.

In the DSaaS sector, we will further develop the leading edge, continue to expand the scale and seize the market share. On one hand, we will continue to deepen the success models such as results-based charging and make persistent efforts to promote it to more customers. On the other hand, we will actively expand customers in vertical fields such as finance, government affairs and public services, and continues to expand the customer base and business scale.

In the sector of vertical industries and enterprise cloudification, we will focus on five major industries for in-depth development, further enhance sales and product capabilities, and continue to expand the business scale. In the MSP sector, we will make deep binding with cloud vendors, facilitate the implementation of co-operation projects, build benchmarks and expand market share. In the smart city sector, we adhere to the product principle of "strengthening the middle office, participating in applications and integrating the bottom", and actively seek co-operation with local governments, operators, cloud giants and regional leading companies to promote the implementation of smart city projects.

JOIN **19**
INTERNATIONAL/
NATIONAL
TECHNICAL
STANDARD
ORGANISATIONS

MANAGEMENT DISCUSSION AND ANALYSIS

In the OSS sector, we will actively participate in operator network intelligence and network management system upgrades to expand market share. Relying on the industry-leading 5G cloud network product system, we will continue to enhance the influence of our 5G OSS products in the industry and help operators accelerating the cloud network integration and 5G private network layout to realise the sustained and rapid growth of 5G OSS.

In the telecom BSS sector, we will seize the opportunity to accelerate the 5G popularisation, provide customers with 5G business support, smart operations, professional company business support platforms, localised independent controllable products in the telecommunications industry, etc., further expand the business presence and continue to consolidate the leading position in the operator market.

FINANCIAL OVERVIEW

Summary

In 2020, the Company continued to enhance the “One consolidation, Three developments” strategic development thinking, and had achieved a good momentum of development and operating results. Driven by the rapid development of “Three New” businesses, in 2020, the revenue amounted to approximately RMB6,020 million (2019: approximately RMB5,721 million), increased by 5.2% year-on-year, among which, the revenue from the “Three New” businesses amounted to approximately RMB780 million (2019: approximately RMB378 million), increased by 106.5% year-on-year, with the growth reaching a new high. DSaaS business revenue was approximately RMB352 million, increased by 131.7% year-on-year; vertical industries and enterprise cloudification business revenue was approximately RMB180 million, increased by 63.7% year-on-year; OSS business revenue was approximately RMB248 million, increased by 114.0% year-on-year.

In 2020, the Company’s profitability continued to increase. Our gross profit was approximately RMB2,303 million (2019: approximately RMB2,127 million), increased by 8.3% year-on-year, and our gross profit margin was 38.3% (2019: 37.2%), representing a year-on-year increase of 1.1 percentage points. Profit for the year was approximately RMB662 million (2019: approximately RMB409 million), representing a significant year-on-year increase of 62.0%, and profit margin for the year reached 11.0% (2019: 7.1%), up by 3.9 percentage points year-on-year. The adjusted net profit amounted to approximately RMB737 million (2019: approximately RMB673 million), and the adjusted net profit margin was 12.2% (2019: 11.8%), representing a year-on-year increase of 0.4 percentage point.

In 2020, the net cash generated from operating activities amounted to approximately RMB710 million (2019: approximately RMB546 million), increased by 30.0% year-on-year, the net cash generated from operating activities remained increasing.

Revenue

During 2020, the Company adhered to the business development strategy of “One consolidation, Three developments”, and through industry-focused and digital transformation, the Company accelerated its scalable expansion in the new business sectors in DSaaS, vertical industries and enterprise cloudification, OSS business and brought revenue growth.

REVENUE

RMB

6,020

MILLION

MANAGEMENT DISCUSSION AND ANALYSIS

The following table sets forth the breakdown of our revenue by business category, both in absolute amounts and as percentages of our total revenue, for the periods indicated:

	2020		2019	
	RMB'000	%	RMB'000	%
Revenue				
Software business:				
Traditional business	5,239,769	87.0	5,341,013	93.4
New businesses	779,709	13.0	377,651	6.6
DSaaS	351,600	5.8	151,737	2.7
Vertical industries and enterprise cloudification	180,329	3.0	110,143	1.9
OSS	247,780	4.2	115,771	2.0
Total software business	6,019,478	100.0	5,718,664	100.0
Network security business	377	—	2,752	—
Total	6,019,855	100.0	5,721,416	100.0

Revenue in 2020 amounted to approximately RMB6,020 million (2019: approximately RMB5,721 million), representing a year-on-year increase of 5.2%. Among which, revenue from the “Three New” businesses was approximately RMB780 million (2019: approximately RMB378 million), a growth of 106.5% year-on-year, accounting for approximately 13.0% of the revenue (2019: approximately 6.6%), and became an important driver for the Company’s business expansion.

Traditional business includes BSS business and sale of third-party hard-ware and software, system integration services, business consulting services and corporate trainings. In 2020, revenue from traditional businesses amounted to approximately RMB5,240 million (2019: approximately RMB5,341 million), a slight decrease of 1.9% year-on-year, accounting for approximately 87.0% of the revenue (2019: approximately 93.4%), which was mainly due to the slowdown in contracts signed and project delivery due to COVID-19.

In 2020, the revenue of “Three New” businesses arising from the provision of DSaaS amounted to approximately RMB352 million (2019: approximately RMB152 million), representing a continuous and rapid year-on-year increase of 131.7%, which was primarily due to the fact that we kept abreast of market changes, quickly upgraded and optimised digital operation series products and services, and the customer distribution and scale expanded rapidly.

In 2020, the revenue of “Three New” businesses arising from vertical industries and enterprise cloudification achieved approximately RMB180 million (2019: approximately RMB110 million), a significant year-on-year increase of 63.7%, which was mainly due to our continuous focus on and assisted the digital transformation of the sectors such as government affairs, energy, postal, transportation and other industries and brought revenue growth.

MANAGEMENT DISCUSSION AND ANALYSIS

In 2020, the revenue of “Three New” businesses arising from OSS business grew rapidly, and achieved approximately RMB248 million (2019: approximately RMB116 million), a rapid increase of 114.0% year-on-year, which was mainly due to the accelerated popularisation of 5G commercialisation and breakthrough in 5G commercial implementation achieved by operators in many provinces for OSS business with rapid expansion in business scale.

Cost of Sales

In 2020, the cost of sales was approximately RMB3,717 million (2019: approximately RMB3,594 million), increased by 3.4% year-on-year, which was mainly due to the increase in implementation costs of projects resulting from the expansion of business scale.

Gross Profit and Gross Profit Margin

In 2020, our gross profit was approximately RMB2,303 million (2019: approximately RMB2,127 million), up by 8.3% year-on-year, and our gross profit margin was approximately 38.3% (2019: 37.2%), representing a year-on-year increase of 1.1 percentage points. The increase in gross profit margin in 2020 had reflected both our continuous strategic results in the product R&D of middle office as well as our enhanced project management and continuous efficiency improvement in project execution and delivery.

Selling and Marketing Expenses

In 2020, the selling and marketing expenses amounted to approximately RMB473 million (2019: approximately RMB462 million), representing a year-on-year increase of 2.3%, which was primarily due to our increased expansion of new business scale and the increase in manpower input.

Administrative Expenses

In 2020, the administrative expenses amounted to approximately RMB321 million (2019: approximately RMB293 million), representing a year-on-year increase of 9.9%, which was primarily due to the increase in recognised expenses this year resulting from the implementation of the 2019 share option scheme and the 2020 share award scheme.

R&D Expenses

R&D expenditures are fully expensed in the current period according to the Group’s accounting policies. In 2020, the R&D expenses amounted to approximately RMB840 million (2019: approximately RMB862 million), representing a slight year-on-year decrease of 2.6%. We focused on our corporate strategy, proactively responding customer’s continuous business needs during their digital transformation and market changes brought about by 5G, and continued to increase investment in 5G-related products, DSaaS series products and R&D of technical platform products with industrial characteristics.

Income Tax Expenses

In 2020, the income tax expenses amounted to approximately RMB102 million (2019: approximately RMB132 million), representing a year-on-year decrease of 22.5%, which was mainly due to the effect of the decrease in the taxable income. The effective income tax rate calculated based on the adjusted profit before tax was 12.2%.

THE GROSS
MARGIN

38.3%

MANAGEMENT DISCUSSION AND ANALYSIS

Profit for the Year

In 2020, we achieved a profit for the year of approximately RMB662 million (2019: approximately RMB409 million), representing a significant year-on-year increase of 62.0%. Profit margin for the year reached 11.0% (2019: 7.1%), representing a year-on-year increase of 3.9 percentage points. The main reason is the increase in revenue brought by the expansion of business scale and the diminishing impact of non-operating items in 2020.

Non-HKFRS Measurement Indicators

We believe that indicators such as adjusted net profit provide useful information for investors and others to compare operating performance across different periods and different companies by eliminating the impact of items which are, in the view of our management, not indicative of our business performance. Our management also adopts the same approach to understand and assess our operating results. The impact of adjustments in 2020 was significantly reduced year-on-year. The adjusted net profit for 2020 was approximately RMB737 million (2019: approximately RMB673 million). The following table reconciles our adjusted net profit for the periods indicated to the profit for the year in accordance with HKFRS:

	2020 RMB'000 (unaudited)	2019 RMB'000 (unaudited)
Reconciliation of profit for the year to adjusted net profit		
Profit for the year	662,103	408,815
Add:		
Pre-IPO share-based compensation plan related expenses	68,812	233,648
Amortisation of intangible assets due to acquisition	5,185	15,131
Interest expenses for the privatisation of syndicated loan	—	11,373
Net foreign exchange loss	841	3,570
Adjusted net profit	736,941	672,537

Financial Position

Net Current Assets

Our net current assets as at 31 December 2020 was approximately RMB2,911 million (31 December 2019: approximately RMB1,247 million), increased by 133.4% year-on-year. The change was mainly due to the combined effects of the capital injection by the China Mobile Group and the increasing income generated from operating activities of the Company. As at 31 December 2020, the Company had sufficient working capital and its net current assets continued to improve.

Trade and Notes Receivables

Our trade and notes receivables represented the outstanding trade and notes receivables from our customers for the purchase of our products or services. On 31 December 2020, trade and notes receivables amounted to approximately RMB942 million (31 December 2019: approximately RMB841 million), representing a year-on-year increase of 12.0%. The turnover days of trade and notes receivables were approximately 56.2 days (2019: approximately 51.2 days). Such change was mainly due to the expansion of the business scale (the data disclosed above included trade and notes receivables from the China Mobile Group).

MANAGEMENT DISCUSSION AND ANALYSIS

THE GEARING
RATIO
DECREASED TO
2.5%

Contractual Assets and Contractual Liabilities

On 31 December 2020, contractual assets amounted to approximately RMB1,722 million (31 December 2019: approximately RMB1,555 million), representing a year-on-year increase of 10.8%. On 31 December 2020, contractual liabilities amounted to approximately RMB393 million (31 December 2019: approximately RMB297 million), representing a year-on-year increase of 32.5%. Contractual assets and contractual liabilities changed in line with the expansion of the business scale.

Goodwill

As at 31 December 2020, our goodwill in total amounted to approximately RMB1,932 million (31 December 2019: approximately RMB1,932 million), which was derived from the business combination completed in 2010. The Company engaged a professional independent valuer to conduct an impairment evaluation on goodwill as at the end of 2020. During the Reporting Period, no indication for impairment of goodwill was identified and we did not record any goodwill impairment loss. We will embrace 5G, cloud computing, big data, AI, IOT and other advanced technologies actively, promote strategic transformation unswervingly and solidify "One consolidation" with high-quality and promote "Three developments" with high speed, which will have a positive impact on the scale of revenue and profit in the future year. Details of the value and assumptions for the goodwill evaluation were set out in Note 15 to the consolidated financial statements.

Trade and Notes Payables

The trade and notes payables represented outstanding trade and notes payables to third-party hardware and software suppliers and outsourcing service providers. As at 31 December 2020, the trade and notes payable amounted to approximately RMB149 million (31 December 2019: approximately RMB358 million), representing a year-on-year decrease of 58.3%. The turnover days of trade and notes payables decreased to approximately 24.9 days (2019: approximately 36.3 days), which was mainly attributable to the payment of amounts due to the suppliers.

Significant Investments Held, Significant Acquisitions and Disposals of Subsidiaries and Future Plans for Significant Investments on Capital Asset Acquisition

The Group had no significant investments held or significant acquisitions and disposals of subsidiaries for the year ended 31 December 2020. As at 31 December 2020, the Group had no future plans for significant investments in capital asset acquisitions or disposals of subsidiaries.

Indebtedness, Contingencies and Pledge of Assets

We are committed to ensuring a comprehensive financial security and maintain a healthy cash level and stable liability structure with sufficient solvency.

For the year ended 31 December 2020, we had total bank borrowings of approximately RMB137 million (2019: approximately RMB594 million), representing a year-on-year decrease of 76.9%, which was mainly due to the repayment of bank loans during the year. As of 31 December 2020, our working capital was mainly derived from the shareholders' investment and daily operation and the gearing ratio¹ was approximately 2.5% (2019: 15.2%).

Note 1: Gearing ratio was calculated by dividing total bank borrowings by total equity and multiplied by 100%.

MANAGEMENT DISCUSSION AND ANALYSIS

As of 31 December 2020, our total restricted cash deposits amounting to approximately RMB272 million (2019: approximately RMB350 million) had been pledged to secure bank borrowings, letters of guarantee and notes payable.

As of 31 December 2020, save as disclosed in this annual report, we did not have any plan for material external debt financing, nor there was any outstanding debt securities, charges, mortgages, or other similar indebtedness, leasing commitments, guarantees or other material contingent liabilities. For details of our capital commitments and operating leasing commitments, please refer to note 35 set out in the consolidated financial statements.

Cash Flow

Our business features enable us to maintain a healthy cash flow level. The net cash generated from operating activities in 2020 amounted to approximately RMB710 million (2019: approximately RMB546 million), representing a year-on-year increase of 30.0%. This was primarily attributable to the combined effects of the continuous growth in the business scale and the enhanced internal intensive management.

Our net cash used in investing activities in 2020 was approximately RMB1,012 million, which was mainly due to the purchase of wealth management products issued by various banks and other financial institutions by the Company. No single wealth management product investment accounted for over 5% of the Group's total assets. In 2019, we recorded a net cash generated from investing activities of approximately RMB823 million, which was mainly due to the discharge of mortgaged bank deposits.

Our net cash generated from financing activities in 2020 was approximately RMB199 million, which mainly due to the combined effects of the proceeds from the share subscription by the China Mobile Group and repayment of bank loans and payment of annual dividends. In 2019, we recorded a net cash used in financing activities of approximately RMB1,366 million. Such cash outflow was mainly used for the repayment of bank loans.

Foreign Exchange Risk

Foreign exchange risk is the risk of loss resulting from changes in foreign currency exchange rates. Fluctuations in exchange rates between RMB and other currencies in which the Group conducts business may affect its financial position and results of operations. The foreign exchange risk facing the Group mainly comes from movements in the HKD/RMB and USD/RMB exchange rates.

As of 31 December 2020, the Group did not have foreign currency hedging activity. However, the management of the Group monitors foreign exchange exposure and will consider hedging significant foreign currency exposure should the need arise.

Funding and Working Capital Management

Funding and liquidity are managed by the treasury department. The treasury department is responsible for the overall management and implementation of the Group's internal funding, including developing funding management policy of the Group, preparing the annual funding plan, supervising and evaluating the execution and implementation of funding plan and taking charge of the daily funding management of the members of the Group. We also adopt an intensive funding management policy and issue the administration measures on various aspects for funding management such as account management, capital budget, fund payment as well as credit and facility grants so as to ensure fund safety and improve the performance and efficiency in funding management.



THE
CASH FLOW
RMB
710
MILLION

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

1 ABOUT THIS REPORT

Guidelines for this Report

AsialInfo Technologies is pleased to publish the 2020 Environmental, Social and Governance (“ESG”) Report (“ESG Report” or this “Report”). This Report is prepared in accordance with the Environmental, Social and Governance Reporting Guide (“ESG Guide”) set out in Appendix 27 to the Listing Rules and published in both Chinese and English version.

Scope of this Report

Reporting scope: Unless otherwise stated, the reporting scope covers the Group.

Reporting period: Unless otherwise stated, the reporting period is from 1 January 2020 to 31 December 2020.

Statement on this Report

This Report is prepared based on the reporting principles of materiality, quantitative, balance and consistency in the ESG Guide and is disclosed in compliance with the provisions of “comply or explain”.

Materiality: The Group determines the impact of ESG-related issues on internal and external stakeholders through the materiality issue assessment process, so as to conduct key responses and disclosures on material issues.

Quantitative: The Group establishes data statistics mechanism for the measurable KPIs specified in the ESG Guide, and discloses the numerical calculation results in this Report and indicates the basis of calculation and statistical standard.

Balance: This Report reflects objective facts and discloses both positive and negative indicators information.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Consistency: This Report uses consistent methodologies as the previous ESG reports to allow meaningful comparisons of ESG data for the Reporting Period with historical data and future data. If adjustments are made to the methodologies, this Report explains the specific changes.

The Group attaches great importance to the contents of this Report and strives to ensure that all information and data derive from original records or financial reports during the daily course of the Group. The Board reviews this Report to ensure that there are no false records, misleading descriptions or major omissions in its content.

Advice and Feedback

This Report can be accessed and downloaded on the “HKEX news” website of the Stock Exchange (www.hkexnews.hk) and the official website of AsiaInfo Technologies (www.asiainfo.com).

Thank you so much for reading this Report. Your valuable advice will provide continuous impetus for improvement of our sustainability and the quality of ESG reports. Please feel free to contact us via the following way.

Email : aitech-boardoffice@asiainfo.com

2. THE GROUP'S ESG GOVERNANCE STRUCTURE

The Group conducts a top-down management approach regarding its ESG issues. The Board oversees and sets out the ESG strategy for the Group. To develop a systematic management approach for ESG issues, the Group has arranged designated personnel from various departments to manage the Group's ESG matters as a working group. The working group is responsible for collecting relevant information on the ESG issues for the preparation of the ESG Report. It periodically reports to the Board, assists in identifying and assessing the Group's ESG risk, and examines and reviews the Group's ESG performance against the Group's ESG-related goals and targets.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

3 STAKEHOLDERS' COMMUNICATION

Daily Communication with Stakeholders

The Group has always been committed to establishing diversified communication channels with stakeholders, attached great importance to the expectations and reasonable suggestions given to us by stakeholders and established a normalised and multi-channel communication mechanism for stakeholders to actively understand and respond to the reasonable demands of various stakeholders.

We look forward to obtaining valuable opinions on the sustainable development of the Group through the effective interaction with all parties, so as to truly integrate the ESG governance into our daily operation. The table below sets out the major external stakeholders identified by the Group, expectations and requirements and the communication channels during the Reporting Period.

Stakeholders	Expectations and Requirements	Communication Channels
Investors or Shareholders	Financial performance Information disclosure Investors interaction and communication	General meeting Annual report, financial statements and announcements Results release meetings and road shows The Company's website
Staff	Safety and health Development potential and platform	CEO direct contact line Staff satisfactory survey Training activities
Customers	Products and services Privacy security	Customer satisfactory survey Product release meetings and exhibitions Customer communication platform
Suppliers	Procurement policy Fair transaction Sound cooperation	Annual assessment Tendering and bidding activities Purchasing activities
Business partners	Product R&D Product support-based services capacity Supply chain management	Communication through meetings Public events
Government or regulatory bodies	Compliance with laws and regulations Anti-corruption Community investment Achieving high energy efficiency Environmental protection	Government-enterprise cooperation projects Special reporting Regular supervision
Media	Information security management Prevention from child and forced labour Employment management	Press conference Media interview New media such as MicroBlog and WeChat

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

During the Reporting Period, we organised a wide variety of activities to communicate with stakeholders and achieved good communication results.

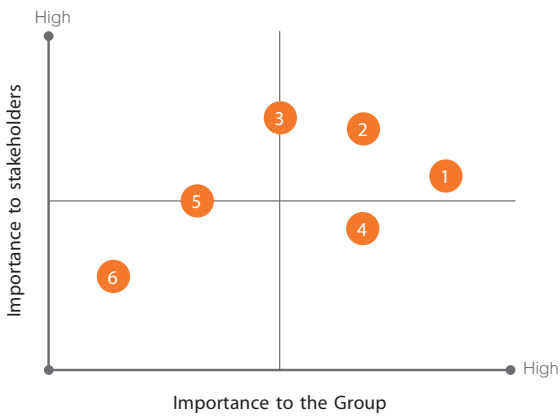
Since 2017, the Group has specifically developed the first real-time communication platform for its internal employees — Microservice Platform (微服務問詢群), which covers all employees in which every employee can raise questions about the processes and policies of various human resources, administrative, financial and other affairs, and can also ask questions about the office OA and “Xin Tribe (信部落)” App of the Group. The Group has collected suggestions from employees on the execution of policies, which provided reference for improvement for subsequent work. Meanwhile, internal employees will be notified of information on various activities, training, campus recruitment, internal position recommendation. Each functional department has a dedicated “customer service” staff to answer questions from employees. As of the end of the Reporting Period, the seven sub-groups of the Microservice group had completed online answers to 21,122 questions, and a part-time “customer service” staff had responded to 1,173 questions on average and had become a personal butler for every Asialnfo employee.

Materiality Analysis on ESG Issues

In order to ensure the continuity and consistency of material issues, during the Reporting Period, on top of the material issues identified in 2019 and taking into account the development trends of the industry in 2020 and the business characteristics of the Company, the Group re-analysed and updated the existing material issues. Compared with 2019, three new issues have been added: namely energy efficiency, protection of intellectual property rights and 5G product R&D and the issues of prevention of child and forced labor has been deleted. During the Reporting Period, with the increasing concern of all sectors of society on climate change, the emergence of 5G technology and the increasing efforts to protect intellectual property rights, the materiality of related issues has increased to a certain extent. The adjusted issues have been submitted to the Board for approval. The materiality of environmental and social issues is ranked in the following materiality analysis matrix diagram and table. The issues in the yellow areas in and near the upper right corner are identified as highly important ones and will be highly disclosed in the following chapters accordingly. Issues in the white areas in the upper left and lower right corners are identified as moderately important issues, and issues in the blue areas in the lower left corner are the least important issues. In addition, Asialnfo Technologies will make reference to the analysis results in our future sustainable development works to effectively promote the Group’s sustainable development process of various works.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Materiality Analysis on ESG Environmental Issues of AsialInfo Technologies in 2020



Environmental Aspects

Issues of high materiality

1. Resources utilisation and management
2. Achieving high energy efficiency
3. Pollutants emission and management

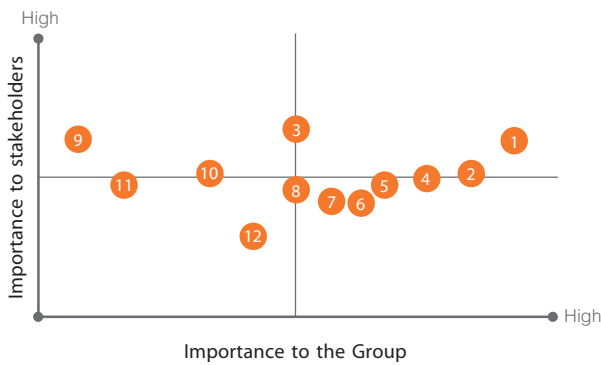
Issues of medium materiality

4. Environmental protection and natural resources
5. Electronic waste

Issues of low materiality

6. Mitigation and adaptation to climate change

Materiality Analysis on ESG Social Issues of AsialInfo Technologies in 2020



Social Aspects

Issues of high materiality

1. Product liability
2. Employment management
3. Information security management
4. Supply chain management

Issues of medium materiality

5. Employees development and training
6. Intellectual property protection
7. 5G product R&D
8. Occupational health and safety
9. Social-economic compliance
10. Anti-corruption

Issues of low materiality

11. Community investment
12. Interaction and communication with investors

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

4 MAINTAIN OUR PRODUCT RESPONSIBILITY AND EMPOWER INDUSTRY DEVELOPMENT THROUGH INNOVATION

Customer-oriented Product Responsibility Management

AsialInfo Technologies has in-depth insight into IT, network environment and business operation demand, and is committed to becoming an enabler of large enterprises' digital transformation. During the course of business operations, AsialInfo Technologies has always complied with the laws and regulations such as the Product Quality Law of the People's Republic of China (《中華人民共和國產品質量法》), Advertising Law of the People's Republic of China (《中華人民共和國廣告法》), Network Security Law of the People's Republic of China (《中華人民共和國網絡安全法》) and Interim Measures for the Administration of Internet Advertising (《互聯網廣告管理暫行辦法》) to ensure that no major violations of relevant laws and regulations that affect business operations occurred during the Reporting Period.

AsialInfo Technologies insists on its customer-centric business philosophy and actively embraces emerging technologies such as 5G, cloud computing, artificial intelligence, Internet of Things and big data. Leveraging our in-depth business abilities, solid industry experience, excellent project management capabilities and abundant software product mix, we focus on government, finance, transportation, postal, telecommunications and other sectors by deeply exploring customer demand, establishing smooth complaints and feedback channels, maintaining good customer relationships and improving customer service experience, so as to continuously improve our service quality, explore new business model in the industrial Internet era and empower customers to achieve digital transformation.

AsialInfo Technologies strictly protects customer privacy. During the Reporting Period, we issued several rules such as the AsialInfo Technologies Customer Support Security Management Requirements (《亞信科技客戶支撐安全管理要求》), AsialInfo Technologies Customer Support Network Security Management Standard (《亞信科技客戶支撐網絡安全管理規範》) to regulate the management in network security, employee security, environmental security, access control, and development security, office terminal security and data security, and establish a supervision mechanism to carry out regular supervision and inspections to discover and deal with problems in a timely manner. In addition, the Company has issued the AsialInfo Technologies Source Code Security Management Requirements (《亞信科技源代碼安全管理要求》), which provides for security management of the source code of the Company and its customers to ensure the security of the source code, which further improves the customer data protection system and privacy policy system, and effectively protects the privacy rights of customers.

AsialInfo Technologies attaches great importance to product after-sales service, establishes a sound customer complaint management mechanism, and expands customer complaint feedback channels. Once complaint cases received are confirmed by the customer service department, it will immediately coordinate with the relevant departments for handling, and customer service department will be responsible for the entire follow-up process, and will not treat the case as completed until the complaining customer confirms that the issue is resolved. During the Reporting Period, the total number of complaints about products and services received by the Group was nil, and there was no recall of products sold due to safety and quality issues.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Surpassing Self-developed Innovative Technology

Innovation is the primary driving force for development. AsialInfo Technologies keeps pace with the times with pioneering and innovative spirit. Guided by the business strategy of “One consolidation, Three developments” and in response to the national strategy, we leverage our expertise to facilitate the construction of “new infrastructure” and the technological upgrading of the entire society, making our contribution to the strategy of Digital China.

During the Reporting Period, AsialInfo Technologies continued to formulate and improve its internal policies such as the AsialInfo Technologies Product R&D Project Management Measures (《亞信科技產品研發項目管理辦法》) and 2020 R&D Project Performance Evaluation Plan (《2020年研發項目績效考核方案》) to standardise the establishment, process tracking, project closure, performance assessment and other processes of software product R&D projects in a systematic manner. AsialInfo Technologies has allocated different capital investment and project personnel and set up different approval procedures for different types of R&D projects, which has effectively improved the efficiency of resources allocation and optimised the management process of R&D projects.

AsialInfo Technologies adheres to the concept of “R&D first, innovation first”, continues to enhance R&D and innovation capabilities and technology leadership capabilities, optimise R&D layout, and enhance innovation in emerging business directions and R&D investment. From product to product leadership, AsialInfo Technologies will build a high-quality product planning system to create high-quality products with ingenuity, and empower vertical industries and ecological partners.

In 2020, for 5G to empower hundreds of industries, AsialInfo Technologies has built a core product system and cultivated product and solution capabilities. A number of high-quality products have been successfully commercialised in the communications and vertical industries.

We have built an industry-leading 5G cloud network product system, 5G network slicing technology and product industry leadership, 5G network mid-station system product industry demonstration effect, customer experience perception CEM covering the entire domain, SDN/NFV product cloud network integration accelerated, 5G dedicated and advanced network layouts, continuously improving the influence of the 5G cloud network intelligent industry.

In the BSS field, we have successfully helped operators upgrade their core IT systems for 5G SA, and the intelligent middle office system has been fully commercialised.

We have built a data and artificial intelligence product system. Data middle office, AI middle office, edge AI, AIOps intelligent operation and maintenance, knowledge graph, RPA robot process automation platform and other products are fully implemented in vertical industries.

We further continue to evolve the middle office system, including cloud management platform, PaaS platform, big data platform, GIS platform, AI platform, etc., which constitutes the technology base that empowers hundreds of industries.

We have created a series of innovative product sets, including 5G urban digital twin platform, 3D visualisation, 5G private network operation platform, DevOps, etc. to help customers in communications and vertical industries to carry out digital transformation and innovation.

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In 2020, AsialInfo Technologies has formed a more completed technology and product research and development system, and won multiple international/domestic industry awards, “Runner-up in the 2020 International AIOps Challenge”, “Champion of the International Telecommunication Union ITU 5G Artificial Intelligence Challenge in China”, “Best TMF New Catalyst Project”, “Best TMF Social Influence Award”, “TMF Digital Display Award”, “2020 China Artificial Intelligence Leading Enterprise Award”, etc.; while strengthening technological innovation, we have established an innovative closed-loop mode from standardisation to commercialisation, actively participated in 19 international/national technical standard organisations such as 3GPP, ITU, ETSI, IEEE, TMF, O-RAN, and contributed 19 international communication technical standards. In the context of new infrastructure and information innovation, we actively promote the construction of independent and controllable products and technology stacks and the information innovation of domestic software.

During the Reporting Period, AsialInfo Technologies continued to increase its R&D investment with a total R&D investment of RMB840 million, accounting for 14.0% of the revenue, which provided a strong support for AsialInfo Technologies to maintain its industry-leading product position and technological competitiveness.

During the Reporting Period, the Group received a number of awards and accolades granted by institutions for products it developed.



In January 2020, the “AsialInfo Open Source Database AISwareAntDB” was included in the 2020 Electronic Information Industry Independent Innovation Achievement Promotion Catalog: Independent Innovation Products by China Information Technology Industry Federation

In July 2020, AsialInfo Technologies made its debut at TMForum Digital Transformation World 2020 and won three awards: “Best New Catalyst Project”, “Digital Display Award” and “Best Social Impact Award”.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Case study 1: Scientific Anti-epidemic

During the Reporting Period, in order to implement the President Xi Jinping's important deployment on "Coordinating and Promoting the Prevention and Control of the COVID-19 and Economic and Social Development", AsialInfo Technologies independently developed the sensing products for pedestrian flow in affected areas and epidemic trend, solutions for visualisation of 3D immersive data on sensitive regions and joint public health emergency response plans of COVID-19, which were recommended in the Scientific Anti-epidemic — Advanced Technology Achievement Information Sharing and Service Platform by The Ministry of Science and Technology.

• Sensing products for pedestrian flow in affected areas and epidemic trend

This product was designed to provide services such as population insights, mass prevention and interaction and self-service inquiry for local health commissions, centers for disease control and prevention, epidemic prevention and control and emergency command offices and other command departments and enterprises and institutions. This standardised product gives full play to AsialInfo Technologies' "enterprise level" SaaS platform development capabilities, which is able to provide efficient, stable and safe service supports for entities in need.

• Solutions for visualisation of 3D immersive data on sensitive regions

Through this solution, which is based on its well-established software system and 3D modelling and display, AsialInfo Technologies provides epidemic monitoring, prevention and control investigations, self-examination and reporting for designated hospitals, mobile cabin hospital, out-patient and emergency buildings, quarantine area and other epidemic-sensitive areas. The solution supports the deployment in public cloud and private cloud.

• Joint public health emergency response plans of COVID-19

The solutions were designed for government, centers for disease control and prevention, urban management, emergency command departments for epidemic prevention and control, as well as communities, hospitals, enterprises etc., in which, by using big data, high-precision positioning, artificial intelligence and other technologies, it combines data from telecom operators, public available data and various emergency resource data to enable rapid set up of a joint operation command center for epidemic prevention and control and achieve panoramic insights, resources coordination, and joint prevention and control of the epidemic areas with responsibility by the governments and relevant departments at all levels.



Sensing products for pedestrian flow in affected areas and epidemic trend



Solutions for visualisation of 3D immersive data on sensitive regions

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Case study 2: 5G innovation

AsialInfo Technologies' intelligent operation and maintenance products focus on the weaknesses of the basic operation and maintenance system, center on the entire process of fault discovery, diagnosis, handling, prevention, as well as typical scenarios and requirements such as intelligent Q&A and resources optimisation and carry out AI algorithm innovation, and component-based encapsulation for different functional modules, empowering the operation and maintenance system. AsialInfo Technologies' self-developed key indicator anomaly detection technology features excellent accuracy, timeliness and adaptability of different characteristic data, and can be flexibly adapted to the key indicator monitoring of several complex operation and maintenance scenarios. The operational data shows that this technology can achieve 99% fault detection with over 90% accuracy. Compared with open source algorithms such as LSTM, resources consumption can be reduced by approximately 50%. It has been widely used in the intelligence operation and maintenance practice of major domestic communication operators and is suitable for using in sectors such as electric power, radio and television, finance and energy.

The AsialInfo Technologies' intelligent operation and maintenance product AISWare AIOps, which has adopted this technology, has been granted several industry awards, including the runners-up of the 2020 3rd International AIOps Challenge, TMF Asia Summit "Best Catalyst Award", etc. For cases such as "Network operation and maintenance anomaly detection based on dynamic threshold" and "cross-domain intelligent alarm root cause analysis" were included in the "Intelligent Autonomous Network Case Report" by Global System for Mobile Communications Association.

Case study 3: Publishing the White Paper on Digital Twin in 5G Cities in China

In November 2020, at the China Mobile Global Partner Conference, AsialInfo Technologies, together with Migu Culture Technology Co., Ltd., and Digital Twin Consortium jointly launched the AsialInfo Technologies 5G city digital twin products and published the White Paper on Digital Twin in 5G Cities in China, which aims to share the application practices of digital twin technology in the industry, and calls on enterprises to strengthen ecological cooperation, enhance industrial synergy and promote the standardisation of digital twin. AsialInfo Technologies officially launched the 5G city digital twin platform products with "massive, twins, integration of intelligence, scenario" as the core, to build a digital twin base for new smart cities and provides a universal capability platform with panoramic visualisation, intelligent connection of all things, flexible use, fast arrangement, smart simulation and efficient delivery.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Stringent and Meticulous Protection of Intellectual Property Rights

The Group adheres to the concept that protecting intellectual property rights means protecting innovation. It complies with the laws and regulations including the Patent Law of the PRC (《中華人民共和國專利法》), Implementation Rules for the Patent Law of the PRC (《中華人民共和國專利法實施細則》) and Copyrights Law of the PRC (《中華人民共和國著作權法》). During the Reporting Period, there was no violation of relevant laws and regulations.

In order to standardise the protection of intellectual property rights of the Group and enhance the technological innovation capabilities of the Company, the Group continuously optimises the management process of intellectual property protection, formulates and improves internal policies such as the Management Measures on Patent Applications (《專利申請管理辦法》) and Management Measures on Patent Incentives (《專利激勵管理辦法》). The Group stipulates that all patent applications must be reviewed and approved by the Patent Review Committee before the Patent Review Committee initiates the patent processing process and the Legal Department submits a patent application to the State Intellectual Property Office to ensure intellectual property right applications are made in a compliant, reasonable, scientific and efficient manner. In addition, the Group encourages to foster an innovative culture, builds a team of innovative talents, and establishes a patent value scoring method to evaluate the value of patents from the perspectives of innovation and novelty, uniqueness, versatility, commercial value, patent usage and patent discoverability, and supplement by the innovation incentive mechanism to reward employees who have made outstanding contributions to scientific and technological innovation.

During the Reporting Period, the Group registered 168 new software copyrights. As of the end of the Reporting Period, the Group had more than 900 software copyrights in total.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

5 FACILITATE SUSTAINABLE DEVELOPMENT THROUGH FIRST-CLASS OPERATION AND MANAGEMENT

Stringent and Efficient Information Security Management

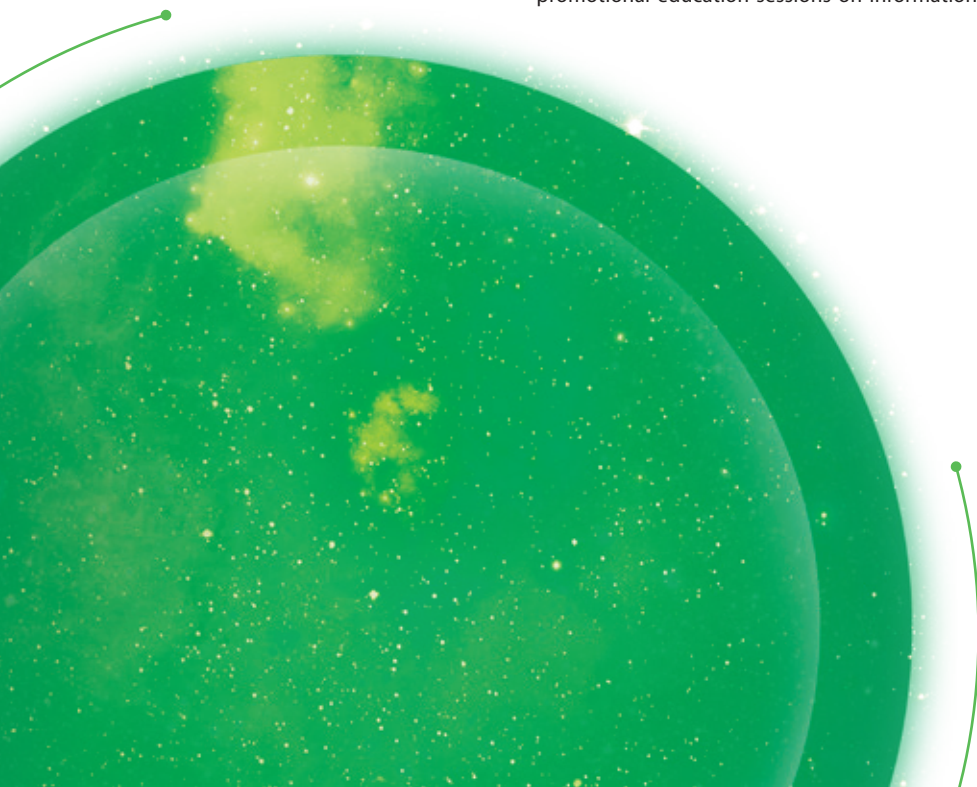
AsialInfo Technologies is committed to protecting the information security of customers and itself. During the year, the Group further improved the network and information security management system, always regarded information security management as an important part of security management, and strictly complied with relevant national laws and regulations. The Group has formulated and continues to amend a series of internal management policies, such as the AsialInfo Technologies Information Security Approach (《亞信科技信息安全方針》), AsialInfo Technologies Information Security Target (《亞信科技信息安全目標》), AsialInfo Technologies Information Security Management Manual (《亞信科技信息安全管理手冊》) and Staff Information Security Manual (《亞信科技員工信息安全手冊》). AsialInfo Technologies has always attached great importance to the protection of customers' information security, and published the AsialInfo Technologies Customer Support Security Management Requirements (《亞信科技客戶支撐安全管理要求》) and AsialInfo Technologies Customer Support Network Security Management Standard (《亞信科技客戶支撐網絡安全管理規範》) during the year to regulate the management in terms of cybersecurity, employee security, environmental security, access control, development security, office terminal security and data security, established a supervision mechanism to continuously improve management and technical practices, deliver to customers with safe and reliable products and services.

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Information security management is an important part of AsialInfo Technologies's daily management. The purpose of information security management is to protect the information security of customers and AsialInfo Technologies. According to the Company's development plan, AsialInfo Technologies has been continuously establishing and improving the security governance structure with reference to relevant laws and regulations and domestic and foreign standards, cultivating the awareness of information security for all employees, and emphasising the security of the entire process.

AsialInfo Technologies's information security management follows the concept of risk management, consisting of personnel security, asset management, encryption management, access control, environmental security, operational security, network security, supplier security, development security, business continuity security, and personal information protection, customer security and the system's own operation and management of 13 aspects, in order to ensure the confidentiality, integrity and availability of various assets from multi-level and multi-angle aspects, and ensure the information security of customers and the Company itself.

During the year, AsialInfo Technologies released the organisational structure of the Information Security Committee (SC) and appointed the Chief Information Officer as the director of the committee to promote and supervise the construction of the information security management system. During the Reporting Period, AsialInfo Technologies has fully established an information security management 2.0 system, revised or newly released 47 information security management systems, successfully passed the ISO 27001 international certification, identified and repaired 91 risk vulnerabilities, and promoted the launch of 2 security functions, organised one information security exam for all employees, and 4 promotional education sessions on information security.



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Win-win Supply Chain Management

AsialInfo Technologies is committed to establishing a fair, just and open supply chain management system to deepen the cooperation with suppliers in a responsible attitude, continuously improve suppliers' management standard in social and environmental issues, and enhance suppliers' ability to perform responsibilities. The Group strictly abides by the Bidding Law of the People's Republic of China (《中華人民共和國招標投標法》), Regulation on the Implementation of the Bidding Law of the People's Republic of China (《中華人民共和國招標投標法實施條例》), Measures for the Administration of Government Procurement by Non-Bid Procurement Methods (《政府採購非招標採購方式管理辦法》) and other laws and regulations. In the procurement management process, in order to manage the environmental and social risk related matters in the supply chain, AsialInfo Technologies has adopted a unified standard and scientific management for all suppliers, and formulated the Supplier Selection (Procurement) Process (《供應商選擇(採購)流程》) and Supplier Management Process (《供應商管理流程》). At the same time, on the premise of ensuring that costs are controllable and the quality is up to standard, we strengthened the supervision of suppliers' environmental and social management, reduced risks and safeguarded the Company's interests, and formulated relevant systems such as Procurement Control Management Process (《採購控制管理過程》) and Management Measures on Technical Cooperation Business (《技術合作業務管理》). The Group has made a clear specification for technical cooperation business by formulating a series of supply chain management policies to ensure efficient operation that is in compliance with relevant regulations. We stringently control project quality through the effective control and management for product provided by suppliers, checking whether the products are in compliance with the relevant regulations as well as scientific management of potential social and environmental risks in the supply chain.

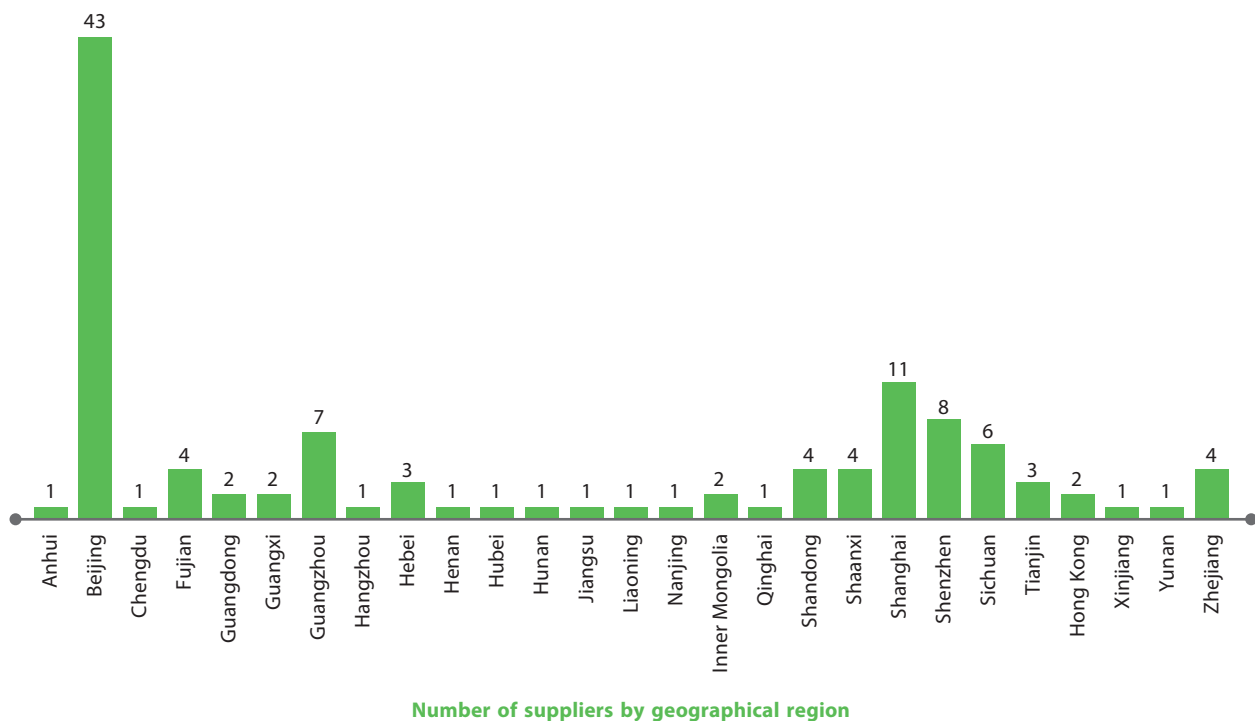
In order to identify and manage the potential social and environmental risks of the Group in the supply chain, the Group focuses on reviewing whether the suppliers possess certification for certain management systems such as ISO 14001 environmental management and OHSAS 18001 during the engagement and assessment stages of all suppliers. In the Notice of Stakeholders annexed to the contract entered into with the suppliers, we will also specify the requirements for suppliers in terms of environmental protection and occupational safety. For example, in the environmental control aspect, the Notice of Stakeholders requires suppliers and relevant service parties to meet the national and local emission standards for pollutants emitted during production process, business activities and rendering service. The production technology and construction equipment that are pollution-free should take priority during the production and construction process. We should adopt necessary measures to handle reduce noise pollution, dust, waste and harmful wastes and properly keep flammable, explosive or toxic and hazardous substances in safe locations to avoid accidents such as environmental pollution and incidents of endangering personal safety. With respect to the social management, the Notice of Stakeholders requires the Company to appoint site safety responsible person at the construction site of the Company to identify risk and implement safety operation plan only after obtaining the approval from relevant department. The use of fire and works involving safety risks such as performing work over 2

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meters high, hoisting and other operations are prohibited without the written permission of the Company. In addition, the Group has established a supplier assessment mechanism to monitor and evaluate suppliers:

- Preliminary assessment: complete supplier assessment and admission work before entering into the procurement contract/agreement.
- Regular comprehensive assessment: Before the third week of June each year, the business cooperation manager will determine the targets for assessment according to the frequency, importance, purchase amount, etc. of each category to complete the comprehensive assessment on the previous year's cooperative suppliers.
- Irregular comprehensive assessment: For past suppliers who have not participated in the regular comprehensive assessment, they must complete the comprehensive assessment before participating in the new supplier selection for the coming year. It is the same with the regular comprehensive assessment in terms of the assessment cycle, personnel, content, methods and results.

During the Reporting Period, the Group prepared the statistics regarding the number of suppliers for project procurement and technical outsourcing by region. All suppliers were under stringent selection in accordance with the Asialnfo Technologies Procurement Management — Supplier Selection Process (《亞信科技採購管理 — 供貨商選擇流程》). The number of suppliers by geographical region is shown in the chart below.



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Routine and Rigorous Anti-corruption Management

AsialInfo Technologies has always been committed to following high standards of business ethics and integrity in global business practices, firmly believes that fairness, honesty and integrity are the Company's important business assets, and completely eradicate any form of corruption and bribery. Integrity, honesty and justice are the core ethical thinking that all employees and partners of AsialInfo Technologies must adhere to at all times. The Group strictly abides by all applicable anti-corruption and anti-bribery laws, regulations and international conventions such as the Criminal Law of the PRC (《中華人民共和國刑法》) and Anti-Money Laundering Law of the PRC (《中華人民共和國反洗錢法》). For regulating the basic business ethics of its employees, prohibiting any form of bribery and corruption, and preventing the corruption, bribery and fraud of partners, AsialInfo Technologies formulated Technology Professional Ethics Code (《亞信科技職業道德規範》). For the management and control system and procedures for the acceptance of related whistle-blowing, and the protection of the personal information of the whistleblowers and all the reporting information provided by the whistleblowers, it formulated internal policies such as AsialInfo Technologies Complaint and Whistle-blowing Management System (《亞信科技投訴舉報管理制度》) and AsialInfo Technologies Whistleblower Protection System (《亞信科技舉報人保護制度》). During the Reporting Period, the Group did not violate any corruption-related laws and regulations that had a material impact on the Group and the number of concluded corruption lawsuits filed against the Group and its employees was nil.

In order to strengthen AsialInfo Technologies' internal compliance management, prevent operational risks, prevent and punish various violations of regulations and disciplines and protect the legitimate rights and interests of employees and various stakeholders, AsialInfo Technologies has established a professional ethics committee, which is responsible for implementing all the compliance policies including the AsialInfo Technologies Professional Ethics Code (《亞信科技職業道德規範》).

The AsialInfo Technologies' professional ethics committee has set up an internal whistle-blowing mailbox (disclosed on the corporate office platform) and an external complaint mailbox (disclosed on the homepage of the AsialInfo Technologies' official website), and set up a complaint reporting management mechanism. For any complaint concerning employee fraud and violations, the internal audit department of AsialInfo Technologies will organise and conduct independent investigation and prepare an investigation report, which, together with the suggestions from the human resources department, legal department, trade union and other departments, will be reported to professional ethics committee, who will review and make the final decision.

AsialInfo Technologies encourages all employees to jointly safeguard the interests of the Company, employees and various stakeholders. If unethical, non-complaint or illegal behaviors of certain employees are discovered, they are obliged to report them to the Company immediately. The reporting methods include directly informing any member of the professional ethics committee, or making a real-name or anonymous complaint through AsialInfo Technologies' internal or external whistle-blowing mailbox.

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AsialInfo Technologies has formulated the Complaint and Whistle-blowing Management System (《投訴舉報管理制度》) and Whistleblower Protection System (《舉報人保護制度》) which set out the stringent management and control systems and procedures for the acceptance and investigation of whistle-blowing. The personal information of the whistle-blower and all the information provided by such whistle-blower will be kept strictly confidential. The Group absolutely prohibits any form of retaliation against whistle-blower of violations. Any person who attempts to retaliate will be severely warned or even dismissed.

For any violations of AsialInfo Technologies' professional ethics, the Group will impose sanctions or terminate employment depending on the severity of violation. If it is an illegal or criminal act, the Group will report it to the judicial authority in accordance with the law.

During the Reporting Period, the Group continued to conduct professional ethics and anti-corruption training for all employees through induction training for new employees and special training for sales and project management personnel. During the Reporting Period, the Group completed trainings on professional ethics and anti-corruption for a total of 6,240 employees, produced professional ethics posters, and posted them in the Company's main office areas to publicise the culture of integrity and honesty.

6 ADHERE TO PEOPLE-ORIENTED PRINCIPLE AND SHARE THE RESULTS OF DEVELOPMENT WITH EMPLOYEES

Standardised and Professional Employment Management

Employment Management

The Group firmly believes that talents are the core resources for the Company's development and growth, and excellent employees assure the Group's core competitiveness. The Group strictly complies with the Labor Law of the PRC (《中華人民共和國勞動法》), Labor Contract Law of the PRC (《中華人民共和國勞動合同法》), Social Insurance Law of the PRC (《中華人民共和國社會保險法》), and other laws and regulations, and formulated internal policies such as the AsialInfo Technologies Staff Manual (《亞信科技員工手冊》). Employees of different races, nations, nationalities, skin colors, genders, religious beliefs, etc. are treated equally, and resolutely protects its employees' legal rights and interests in all aspects such as labour employment and dismissal, compensation and benefits, recruitment and promotion, working hours, vacation, equal opportunities and others. The Group always adheres to the employment philosophy of fairness, responsibility, equality and diversity. During the Reporting Period, the Group did not violate laws and regulations related to employment management.

The Group strictly complies with the Regulations on Prohibition of Child Labor (《禁止使用童工規定》) and strictly prohibits the employment of child labour. It is clearly stated in the AsialInfo Technologies Social Recruitment Management System (《亞信科技社會招聘管理制度》) formulated by the Group that only candidates who have reached the national legal age for employment can be recruited. During the Reporting Period, in addition to the recruitment processes in 2019, the Group added the third-party background check on all new candidates in the recruitment process, and strictly verified the identity information of candidates. The Group formulated and promulgated internal policies such as AsialInfo

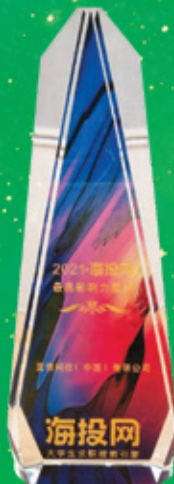
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Technologies Background Investigation Management Norms (《亞信科技背景調查管理規範》)。In addition, the Group strictly prohibits forced labor and complies with the laws and regulations of Labour Law of the PRC stringently. Every employee can only work during normal working hours as required in the local laws and regulations and the Asialnfo Technologies Staff Manual (《亞信科技員工手冊》) (under normal circumstances, the working hours of the Group are eight hours a day from Mondays to Fridays. In addition, in accordance with the relevant regulations of the government and considering the Company's specific situation, Asialnfo Technologies has formulated the Asialnfo Staff Vacation Management Regulations (《亞信科技員工假期管理規定》) and stated the implementation rules clearly, which regulate employees' vacation time and the procedures for vacation applications. Under this system, the Group guarantees employees' entitlement to vacation on national statutory holidays, marriage leave, maternity leave (or paternity leave), bereavement leave, annual leave and sick leave. Since its establishment, the use of child labour and forced labour has not occurred, so the steps to eliminate relevant non-compliance are not applicable to the Group.

Enhanced employer brand influence, facilitate corporate rebranding — employment-related awards received by Asialnfo Technologies during the Reporting Period



People.cn: People's Workplace Health Management Innovation Comprehensive Award



Zhaopin: The Best Employer in 2020



Shixisheng.com: Most Influential Employer in 2020



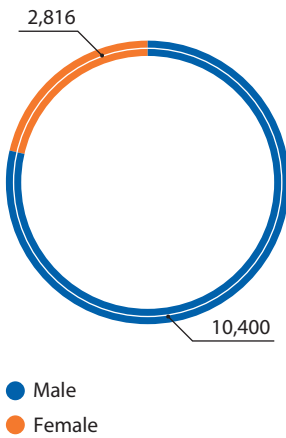
Beijing Youth Human Resources Service Chamber of Commerce: China's Outstanding HR Employer in 2020

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

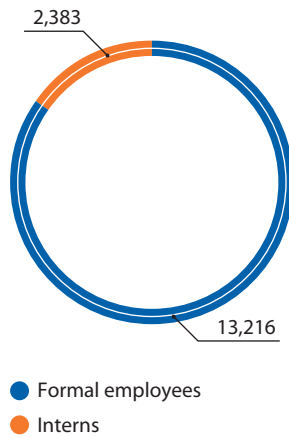
Employment data

As of the end of the Reporting Period, the number of formal employees of the Group was 13,216, of which:

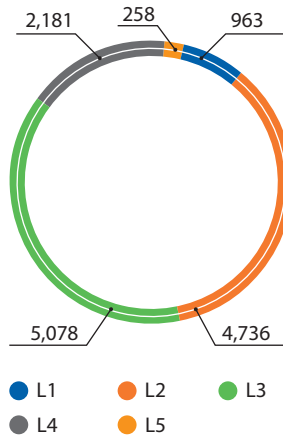
By gender:



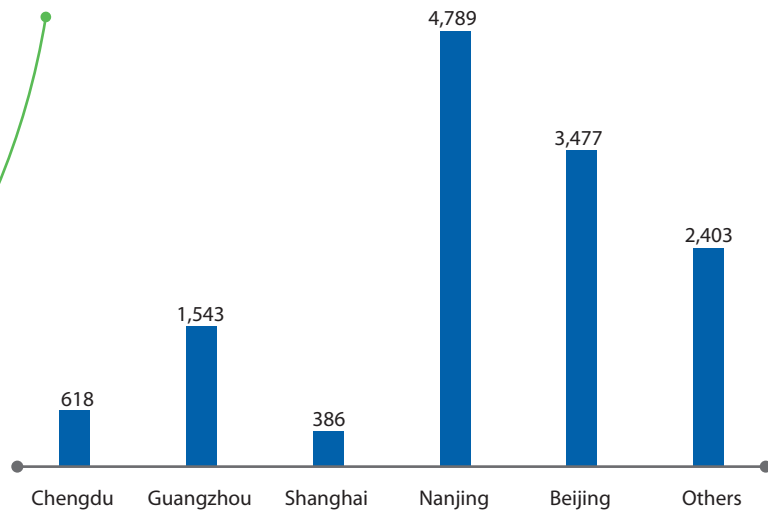
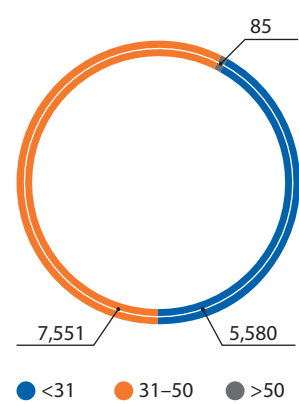
By type of employment:



By rank:²



By age group:



By geographical area

Note:

² The rankings were listed from low to high by L1 to L5 according to the Company's position level system.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Caring for employees

The Group has always adhered to the philosophy of “Talents are the most valuable asset of an enterprise”, actively creates a good working environment, and cares about the physical and mental health and quality of life of employees and advocates the concept of work-life balance. To this end, the Group holds a “Happy Day” themed event every month to enrich the lives of employees. During the Reporting Period, due to the impact of the COVID-19, the “Happy Day” themed events were conducted through online and offline channels, with online channel as the mainstay, supplemented by offline channel, and live-streaming were broadcast simultaneously through new media channels such as Tik Tok, live broadcast platforms and official accounts. During the Reporting Period, the Group successively held a series of activities such as Spring Outing, Women’s Day, Live Reading Club, Programmer Day, Christmas Day, etc. In addition, during the traditional festivals and summer and winter seasons, the Group distributed mooncake gift packs, thermal cups, portable powerbanks and other gifts to all employees, demonstrating the Group’s care to our employees.



Women’s Day in March 2020



Programmer Day in October 2020



Mid-autumn Festival gift



New Year’s gift pack

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

AsialInfo Technologies stabilises employee loyalty through multiple channels such as enriching employee caring activities, enhancing staff training and actively protecting employee occupational health and safety. During the Reporting Period, the total number of employee turnover of the Group was 2,721, of which:

Category	Turnover rate ³
By gender	
Male	21.28%
Female	18.04%
By age group	
< 31 years old	28.24%
31–50 years old	15.02%
> 50 years old	12.94%
By geographical area	
Chengdu	17.15%
Guangzhou	18.34%
Shanghai	15.03%
Nanjing	21.74%
Beijing	21.66%
Others	19.98%

Note:

³ Turnover rate = Number of employee turnover in the category/Total number of employees in the category

Systematic and Scientific Development Training

AsialInfo Technologies always emphasises the development and growth of the employees of the Group and firmly believes that talent reserve is the core strategic resource for enterprise development. In order to achieve a win-win synergy between employee value and corporate value, enhance AsialInfo Technologies' market competitiveness, build up first-class employee team and continuously improve employee professionalism, the Group established AsialInfo Institute, which is responsible for the training of employees of the Group, and the formulation of staff training plans and training budget at the beginning of every year, mapping out detailed plans for training courses on a monthly basis, implementing specific work according to the plan, tracking training implementation and budget completion on a regular basis, evaluate training effects, identifying problems and implementing improvement activities. During the Reporting Period, AsialInfo Technologies formulated the 2020 Corporate Training Plan (《2020年公司培訓計劃》) (the "Training Plan"). The Training Plan covers all employees of the Group and aims to enhance the Company's core competitiveness and foster outstanding employees and management team, improves the quality and ability of employees and managers. In the meantime, in order to regulate and standardise the Group's internal training work and ensure the orderly implementation of various training work, the

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Group formulated and issued a series of system policies such as the AsialInfo Technologies Internal Training Management System (《亞信科技內部培訓管理制度》) and AsialInfo Technologies Staff Education Fund Management Measure (《亞信科技職工教育經費管理辦法》), which promote the principle of “withdraw first then pay, withdraw and pay breakdwon, and special transfer for dedicated case”, and further regulates the withdrawal and application of the Company’s employee education funds at the system level, and ensures priority is given to employee training activities.

According to the Training Plan, during the Reporting Period, the Group’s employee training methods include:

Internal Training

- In-house training programs and training camps;
- In-house training courses;
- In-house online learning platform — Xin Xuetaang (信學堂);
- In-house special training and seminar workshops; and
- Technical and academic exchanges.

External training

The Group’s outsourced training refers to those trainings where the training location is outside the Company. Training lessons are provided by external lecturers and training course fees are borne by the Company, including participation in external qualifications certificate training, certification training, external public courses and various external training courses.

According to the Training Plan, during the Reporting Period, the Group carried out corresponding training for different course types and course audiences, mainly including the following training contents:

New staff training

The training mainly targets new staff, which covers company profile, organisational structure, corporate culture, professional ethics, basic business knowledge, technical skills, environmental and occupational health and safety system etc.

Ordinary staff on-the-job training

The general training targets all employees, which covers general capability, professional capability, technical training or corporate strategy, new system, new policy, etc.

Management training

The training mainly targets staff with management responsibilities in their capacities, which mainly covers training program, training courses, strategy or business workshops, large-scale or important conferences, etc.

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Professional and technical personnel training

The training mainly targets professional and technical personnel at different levels and types, which covers Cheetah Program-digital operation talent training program, PRD product certification training, technical open courses, project manager training camps, high-end external certification courses, etc.

Internal lecturer TTT training

The training mainly targets the internal trainer team of the Company, which covers teaching skills, curriculum development and courseware production.

Internal training in other departments

The job skill enhancement training organised by individual business departments based on the actual work situation of the departments.

Case study 1: General ability training

To allow employees to better understand stress, master effective stress management strategies, cultivate a positive attitude with hard working and happy life, AsialInfo Technologies organised Stress Management Course. The course information is as follows:

1. Understand the importance of stress management;
2. Understand the manifestation and source of stress;
3. Learn to regulate stress; and
4. Learn to manage stress.



General Ability Training of AsialInfo Technologies

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Case study 2: Leadership training

The Group has hundreds of junior officers. They are the cornerstone of the development of AsialInfo Technologies. They are not only a bridge between the Company and employees, a bridge between the Company and customers, but also the conveyors of the culture of AsialInfo technologies, so that the training of junior officers has always been the focus of AsialInfo technologies' senior management. During the Reporting Period, AsialInfo Institute conducted many discussions and adjustments on teaching materials and teaching activities in order to prepare for this leadership training, and invited senior lecturers from the Company to give lectures. In the class, the lecturers used easy-to-understand language, real and vivid cases to guide the trainees to explore management methods, which won rounds of applause from the trainees.



Leadership Training of AsialInfo Technologies

Case study 3: Technical training

In order to respond to business needs and improve technical capabilities, the Group organised the Machine Learning Modeling Training Camp. The particulars of the course are as follows:

1. Understand the concepts, principles, framework and methodology of machine learning.
2. Understand the principles, architecture and advantages of AsialInfo Technologies' machine learning platform.
3. Use the machine knowledge and technology acquired on the platform to solve practical business issues.



Technical Training of AsialInfo Technologies

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During the Reporting Period, Group had 8,459 employees participating in training, with total training time of 57,513 hours. The statistics of the trainees of the Group according to different criterion are as follows.

Number and percentage of trainees by gender and rank

Category	Trainees (Headcount)	Percentage ⁴
By gender		
Male	6,614	78.19%
Female	1,845	21.81%
By rank		
L1	931	11.01%
L2	2,746	32.46%
L3	3,021	35.71%
L4	1,557	18.41%
L5	204	2.41%

Average training hours of trainees by gender and rank

Category	Average training hours (H)
By gender	
Male	4.35
Female	4.37
By rank	
L1	5.40
L2	3.48
L3	3.90
L4	6.49
L5	7.21

Note:

⁴ The trainees rate in this category = the number of trainees in this category/the total number of trainees

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All-round and Timely Occupational Health Management

AsialInfo Technologies pays attention to the physical and mental health and safety of its employees, and offers employees with a working environment and conditions that meet the health and safety requirements. The Group has strictly complied with the national laws and local regulations such as the Work Safety Law of the PRC (《中華人民共和國安全生產法》), Fire Protection Law of the PRC (《中華人民共和國消防法》), Law of the People's Republic of China on the Prevention, Control of Occupational Diseases (《中華人民共和國職業病防治法》), and Measures for the Supervision and Management of Occupational Health Surveillance by Employers (《用人單位職業健康監護監督管理辦法》), constantly improved the relevant policy system, formulated the internal policies such as AsialInfo Technologies Safe Production Management System (《亞信科技安全生產管理制度》) to fully integrate health and safety work into all divisions and daily operations of the Group. During the Reporting Period, the Group did not violate any relevant laws and regulations that have a material impact on the Group, and the number of work-related fatalities in the Group for three consecutive years, including the Reporting Period, was nil. During the Reporting Period, the number of lost working days by employees of the Group due to work injury was nil.

The Group constantly improves the safety production management system, actively builds a stringent, efficient and responsible safety production responsibility system — established two levels of working groups, including the production safety leading groups and the production safety working group to implement the safety assurance and labour protection responsibility layer by layer to various departments. Every department has no less than one part-time security officer to supervise, inspect and report on safety matters, and effectively safeguards employees' legitimate rights and interests regarding health and safety. AsialInfo Technologies (China), Inc., a subsidiary of the Group, has received the OHSAS 18001 occupational health and safety management system certification.

AsialInfo Technologies' daily business is mainly based on computer applications and paperwork in the office. There are no material occupational safety and health hazards in these activities. Even so, AsialInfo Technologies is still committed to ensuring the occupational health and safety of employees, and has formulated various occupational health and safety systems with practical operational significance to effectively protect the health and safety of employees.

Firstly, in order to ensure the production and office activities of the Group are conducted in a safe manner, standardise relevant work, training and education, and supervision and inspection work, the following relevant systems have been introduced:

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- **Production safety education and training system**

The training includes pre-service education, daily security education, thematic safety education. The system serves the purpose of organising personnel of the Group to participate in work safety training, strengthening their safety consciousness and improving their working knowledge and skills. During the Reporting Period, a total of 49,452 people participated in a series of themed safety production training activities including occupational health and epidemic prevention, with a total duration of 148,356 hours.

- **Production safety inspection system**

The Group conducts regular and irregular inspection to eliminate hidden safety hazards, monitor the implementation of various safety regulations and systems to assure production safety. During the Reporting Period, the Group further strengthened production safety management, timely discovers and resolves hidden dangers in production safety, and conducts rectification in time.

Secondly, in order to offer a healthy, hygienic and safe working environment for all employees, the Group has introduced the following related measures on fire protection, office safety and employee health:

- **Fire protection publicity**

AsialInfo Technologies conducts fire safety education and training for employees, in order to increase employees' fire-protection awareness and survival skills. It carries out regular maintenance on fire equipment, checks fire potential safety hazard, and formulates and implements the fire and electricity management system to minimise fire risk to the lowest level at the same time. During the Reporting Period, AsialInfo Technologies organised 2 evacuation drills involving restaurant service providers and some property personnel in Beijing Building. A total of 75 people and about 20 departmental safety officers joined the fire-fighting knowledge training and fire-fighting equipment practice activities.

- **Office and equipment safety measures**

AsialInfo Technologies strictly implements the national regulations and standards on labour safety and labour hygiene, and provides employees with labour conditions and office space that meet the requirements. During the Reporting Period, the Group maintained and checked the electrical equipment and wiring regularly to find out hidden dangers in public.

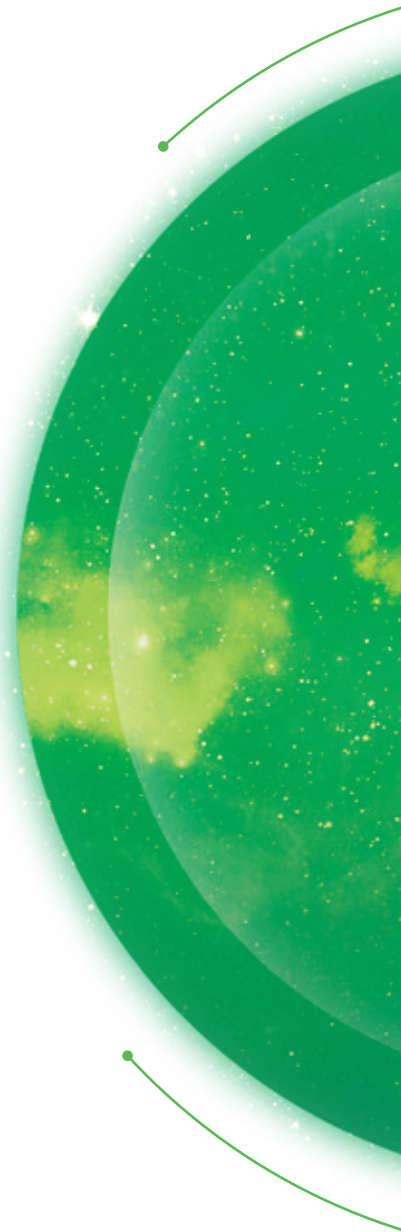
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- **Employee safety and health protection measures**

AsialInfo Technologies provides employees with necessary protective equipment according to their work needs, and arranges regular physical examinations to prevent occupational diseases. During the Reporting Period, all staff of the Group received physical examinations.

During the Reporting Period, since the outbreak of the COVID-19, AsialInfo Technologies had urgently purchased various anti-epidemic materials around the world, including face masks, alcohol, thermometers, etc., arranged anti-epidemic supplies in the Group's seven centralised office areas, and arranged administrative staff and volunteers on duty. Meanwhile, it issued the Guidelines for Anti-Epidemic Work (《防疫工作指南》) and Management Norms for Office Space in Special Periods (《辦公場地特殊時期管理規範》), launched various courses and publicised anti-epidemic knowledge every day. During the Reporting Period, the Group urgently launched 24 compulsory courses and elective courses on fighting against the epidemic, and organised learning plans and examinations covering all employees. As of the end of the Reporting Period, anti-epidemic courses have been broadcast more than 130,000+ times.

During the Reporting Period, AsialInfo Technologies not only prepared medical supplies such as face masks and disinfectant wipes for employees in a timely manner to ensure safety in resumption of production and work during the epidemic, and continued to build four lines of defence on occupational health for all employees: firstly, basic care, ensuring employees can enjoy a comprehensive welfare protection system; secondly, upgraded protection, a welfare to protect the whole family and relieve from worries; thirdly, fund support, setting up a special mutual aid fund to provide employees with solid support; fourthly, emergency management, for example, when the COVID-19 and other emergencies occur, we shall respond according to the emergency management mechanism as soon as possible with unified leadership and overall arrangements to ensure the safety and physical and mental health of employees.



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In October 2020, AsialInfo Technologies, with its outstanding performance in workplace innovation management and human resource practices, stood out from nearly two hundred companies and was honoured the “2020 People’s Workplace Health Management Innovation Case Award (2020人民職場健康管理創新案例獎)” by People.cn. The award is the highest comprehensive award in the “2020 People’s Workplace Health Management Forum (2020人民職場健康管理論壇)”.



AsialInfo Technologies was honoured the “2020 People’s Workplace Health Management Innovation Case Award”

7 COMMIT TO GREEN DEVELOPMENT AND INTEGRATE ECOLOGY INTO DEVELOPMENT CONCEPT

Reasonable and Efficient Use of Resources

As a provider of telecommunications software products and related services, AsialInfo Technologies has no material impact on the environment in its operations. However, as an active pioneer of green development, AsialInfo Technologies has always advocated the concept of green and environmental protection and actively promoted efficient and reasonable use of energy and resource development. The Group complies with the Energy Conservation Law of the PRC (《中華人民共和國節約能源法》) and other relevant laws and regulations, and actively practise the corporate citizenship mission of energy conservation and environmental protection. In order to ensure the standardised implementation of environmental protection related work of the Group, minimise the consumption of resources and energy by the Group, it issued internal policy documents such as Environmental Protection and Management System of AsialInfo Technologies, which, together with various energy-saving and high-efficiency utilisation measures, enable the Group to continuously reduce resource consumption and energy consumption. During the Reporting Period, the Group did not violate any relevant laws and regulations that have a material impact on the Group.

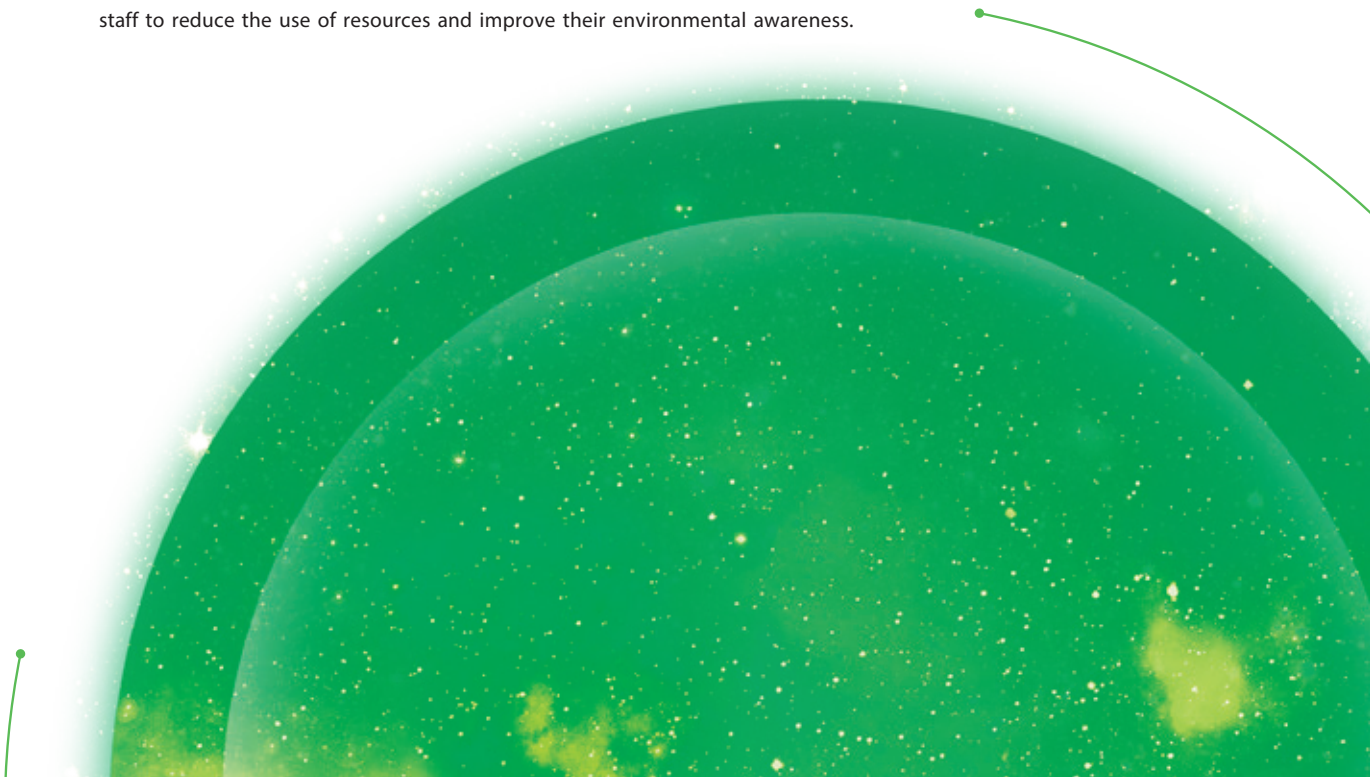
The Group consumed running water from the municipal pipe network. During the Reporting Period, the Group carried out a series of water-saving measures and had no issues in obtaining suitable water source. The Group is well aware that water resources as non-renewable resources are faced with severe challenges. Therefore, the Group adopted a series of water-saving measures in order to reduce the consumption of water resources:

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- Put up water conservation signs in toilets to promote water conservation and increase staff's water conservation awareness;
- adjusted the valve of the faucet, reducing the water output to achieve the purpose of water saving; and
- Report for responsive repairing when discovering problems with facilities such as water valve, water pipe and faucet.

The resources and energy used by the Group mainly include paper, water, purchased electricity, gasoline and natural gas. Due to the nature of business, the Group is not involved in the consumption of any packaging materials. In the process of daily operation, the Group advocates green office and puts in place a series of management measures such as energy conservation and environmental protection so as to realise the efficient utilisation of resources and energy:

- the Group implements the measure of turning off illumination in public office for one hour during lunch break, keeps saving electricity for lighting, raises summer air-conditioning temperature appropriately, and assures electrical appliances are turned off when nobody is using in response to the national call for environmental protection and energy conservation;
- the Group arranges the use of corporate vehicles reasonably to improve vehicle use efficiency continuously and reduce the unnecessary frequency of use; and
- the Group puts up slogans of saving paper and energy in public areas to remind the staff to reduce the use of resources and improve their environmental awareness.



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For the consumption of major energy resources by the Group during the Reporting Period, please refer to the table below.

Resource consumption ⁵		Unit	2020
Indirect Energy	Total electricity consumption ⁶	'000 kWh	6,371
	Electricity consumption intensity	kWh/revenue of RMB10,000	10.58
Direct Energy	Total fuel consumption (vehicle)	L	24,875
	Total natural gas consumption	m ³	127,237
	Total direct energy consumption	'000 kWh	1,607
	Direct energy consumption intensity	kWh/revenue of RMB10,000	2.67
Total water consumption		tonne	39,042
Total water consumption intensity		tonne/revenue of RMB10,000	0.07
Paper consumption (A4)		kg	5,228
Paper consumption intensity		kg/revenue of RMB10,000	0.01

Note:

⁵ Data on resource use above only covers AsialInfo Technologies (China), Inc. and AsialInfo Technologies (Nanjing), Inc., both of which are major operating subsidiaries of the Group.

⁶ During the year, electricity consumption increased for the year resulting from the operating expansion of certain branches and subsidiaries of the Group.



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Emissions Management under Stringent Control

As a software product and related service provider, the environmental impacts of Asialfno Technologies mainly derives from the consumption of energy and resource in the office area. Emissions are mainly from greenhouse gas (GHG) emissions (scope 2) generated by purchased electricity, air pollutants and GHG emissions (scope 1) generated by using of vehicles, domestic sewage discharge, waste computer (electronic waste) and domestic waste generated from daily office work and other hazardous and non-hazardous wastes. In order to control the compliant emission of various types of emissions, Asialfno Technologies will conduct ISO14001 environmental management system certification on an annual basis, and arrange tests on all types of emissions to ensure that each item meets the emission standards.

The Group is in strict compliance with the laws and regulations, including the Law of the PRC on the Prevention and Control of Atmospheric Pollution (《中華人民共和國大氣污染防治法》), Law of the PRC on the Prevention and Control of Water Pollution (《中華人民共和國水污染防治法》), Law of the PRC on the Prevention and Control of Environmental Pollution by Solid Waste (《中華人民共和國固體廢物污染環境防治法》) and Regulation on the Administration of the Recovery and Disposal of Waste Electrical and Electronic Products (《廢棄電器電子產品回收處理管理條例》). During the Reporting Period, the Group had continued to focus on environmental protection, actively responded to the waste classification policy advocated by the government, and actively promote waste classification to reduce white waste and other hazardous and non-hazardous waste pollution. For hazardous substances, the hazardous wastes produced by the Group are mainly fluorescent tubes and toner cartridges. In order to regulate the discharge of various types of emissions, in accordance with its internal environment policies regarding office environment monitoring and checking and receiving complaints on environment management, the Group carries out stringent management on solid waste, domestic sewage, air pollutants and greenhouse gas, has developed and implemented policy documents such as the Environmental Protection and Management System of Asialfno and the Procedure on Prevention, Treatment and Control of Solid Waste (《固體廢棄物防治控制程序》). There was no violation of the relevant laws and regulations in which they have any significant impact on the Group during the Reporting Period.

In terms of solid waste, the Group continues to promote waste management works and implements policies for reducing emissions at source and non-hazardous disposal in daily operation. The Group has formulated the Procedure on Prevention, Treatment and Control of Solid Waste (《固體廢棄物防治控制程序》) to manage all wastes that are produced from offices. The Group stores non-hazardous and hazardous wastes by sorting and delivering the same to qualified treatment companies for centralised disposal, with treatment rate of non-hazardous wastes reaching 100 percent. Moreover, for hazardous waste such as waste fluorescent tubes, toner cartridge and waste gas lead-acid batteries, the Group engages qualified companies for sorting, cleaning and non-hazardous disposal. Among them, the removal of daily waste from Asialfno Technologies (China), Inc., a subsidiary of the Group, was recorded by the property company, and daily waste is delivered to a service provider qualified for waste removal on a daily basis.

In terms of water pollutants and air pollutants, since the Group's business and operations does not involve industrial production, the sewage generated is basically domestic sewage. The main measure of reduction of water consumption at source has been adopted by the Group to reduce the sewage discharge of the Group. In addition, the Group produces relatively few air pollutants, mainly the emissions from vehicles owned by the Company and exhaust emission from heating boilers. The Group reduces the corresponding air pollution emissions by reducing the number of use of vehicle and improving the efficiency of vehicle use. The heating boiler adopts natural gas, and the emission complies with the Beijing DB11/139-2015 boiler air pollutant emission standard.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

The statistics below shows the information of emissions of the Group during the Reporting Period:

Emission	Unit	2020
GHG emissions² (Scope 1 and Scope 2)⁸		
Vehicle emission and natural gas consumption emission (Scope 1)	tonnes of CO ₂ e	332
Electricity consumption emission (Scope 2)	tonnes of CO ₂	5,405
Total GHG emissions	tonnes of CO ₂ e	5,737
Total GHG emission intensity	kg of CO ₂ e /revenue of RMB10,000	9.5
Air pollutant emissions⁹		
CO emission	kg	106
NO _x emission	kg	4.93
SO _x emission	kg	0.37
PM _{2.5} emission	kg	0.58
PM ₁₀ emission	kg	0.59
Non-hazardous waste produced¹⁰		
Office domestic wastes ¹¹	tonnes	107
Kitchen wastes	tonnes	35
Total non-hazardous waste emissions	tonnes	141
Intensity of non-hazardous waste emission	kg/revenue of RMB10,000	0.2346
Hazardous wastes produced		
Waste fluorescent tube	tonnes	0.976
Waste fluorescent tube recycled	tonnes	0.875
Waste battery	tonnes	0.025
Waste battery recycled	tonnes	0.024
Waste toner cartridge	tonnes	0.057
Waste toner cartridge recycled	tonnes	0.057
Total hazardous wastes produced	tonnes	1.057
Intensity of hazardous wastes produced	kg/revenue of RMB10,000	0.0018

Notes:

⁸ The calculation of GHG emissions has been arrived at with reference to the GHG Protocol Corporate Accounting and Reporting Standard 2012 (Amendment) (《溫室氣體核算體系企業核算與報告標準2012(修訂版)》) and Guidelines for Accounting Methods and Reporting of GHG Emissions of Public Building Operators (《公共建築運營企業溫室氣體排放核算方法和報告指南》). The grid emission factor used in the calculation of Scope 2 refers to the latest China's regional grid emission factors released by the National Development and Reform Commission of the PRC.

⁹ Air pollutant emissions are emissions from vehicles owned by the Group, including emissions from vehicles owned and operated by the Group, and are calculated with reference to the Technical Guide for Air Pollutant Emission Inventory for Road Motor Vehicles (Trial) (《道路機動車大氣污染物排放清單編製技術指南(試行)》).

¹⁰ With reference to the definition in Basel Convention, non-hazardous wastes of the Group include computers, digital communication circuits and devices, servers, printers etc. All electronic wastes are auctioned off by the Group.

¹¹ During the Year, AsiaInfo Technologies continued to improve the collection process of domestic waste data. The continuous improvement of data collection indicators resulted in an increase in data this year.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Low-carbon and Effective Environmental Protection

Although AsialInfo Technologies, as a provider of software products and related services, has little impact on the surrounding environment in respect of emissions generated during software development and testing, the Group is still committed to creating a low-carbon, green and environmental-friendly business model, and striving to reduce the impact of its own operations on the environment and natural resources. AsialInfo Technologies will proactively undertake the environmental responsibility, carry out green operating practice and push forward the construction of ecological civilisation in accordance with national laws and regulations such as the Environmental Protection Law of the PRC (《中華人民共和國環境保護法》) and Law of the PRC on the Prevention and Control of Pollution from Environmental Noise (《中華人民共和國環境噪聲污染防治法》). There was no violation of the relevant laws and regulations in which they have any significant impact on the Group during the Reporting Period.

AsialInfo Technologies is well aware that the current global climate change is becoming more and more intense. In order to reduce greenhouse gas emissions and cope with the challenge from global climate change, the PRC government supports the Paris Agreement and issued plans and strategies such as the Plan to Cope with Climate Changes (2014–2020) (《國家應對氣候變化規劃 (2014–2020年)》) and the National Strategy on Adaptation to Climate Change (《國家適應氣候變化戰略》) and made serious commitments to the international community in 2020 that “China will strive to reach the peak of carbon dioxide emissions by 2030 and achieve carbon neutrality by 2060”. As an active pioneer of sustainable development, AsialInfo Technologies actively supports the national climate change-related development strategies and objectives, and constantly promotes energy-saving and emission-reduction-related work within the Company to effectively reduce energy consumption and improve energy utilisation efficiency, and conveys environmental awareness related to energy conservation and emission reduction (for example, in order to reduce the carbon footprint of employees’ travel activities, the Group advocates the concept of green travel and encourages employees to take mass transit to reduce environmental impact) to its stakeholders, such as employees and communities, and strives to promote the achievement of national climate change related objectives.

8 ADVOCATE THE CONCEPT OF CHARITY AND CONTRIBUTE TO THE LIVELIHOOD OF THE COMMUNITY WITH KINDNESS

As a caring technological company, AsialInfo Technologies insists on advocating and inheriting the spirit of charity. It has been paying attention to and promoting charity undertakings for a long time, giving back to society and people’s livelihood with heart, and making contributions to the well-being of the public. In 2020, the Group actively gave full play of its professional expertise and continued to carry out creative and valuable charity programs in local communities, and encouraged employees to actively participate in voluntary actions and fulfill their social responsibilities as a corporate citizen.

During the Reporting Period, AsialInfo Technologies participated in charity activities such as the “AI Enlightenment Season (AI啟蒙季)”, with a total of 73 participating volunteers and a total of volunteering service time of 252 hours.

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Pay attention to education and public welfare

In response to the requirements of the State Council on “Extensively Carrying out Artificial Intelligence Education Activities” and “Implementing the National Intelligent Education Program, and Setting up Artificial Intelligence-related Courses in Primary and Secondary Schools” in the New Generation Artificial Intelligence Development Plan (《新一代人工智能發展規劃》), AsialInfo Technologies took the initiative to make use of its advantages in AI technology, organised AI engineer volunteers to visit primary and secondary school campuses to popularise cutting-edge scientific and technological concepts for students and strengthen their determination to change the world. This event has filled the gap in artificial intelligence education for the basic education of more than 2,000 students.

Case study 1: Sow the seeds of AI and look forward to sprouting slowly

In October 2020, AsialInfo Technologies and IBM jointly launched Season 2 of “AI Enlightenment Season” charitable teaching activities. GAO Nianshu, CEO of AsialInfo Technologies said, “Participate in charity activities and undertake social responsibilities. AsialInfo Technologies is willing to give out its profound accumulation in 5G, artificial intelligence and other fields over the years, and provide children with professional artificial intelligence enlightenment education.” With the strong support of the Company, 73 AsialInfo Technologies AI volunteers cooperated with 7 schools in Tangshan City, Hebei Province to provide 42 exciting AI online courses for more than 2,000 primary school students, which were highly praised by IBM partners and warmly received by local teachers and students.



AI online classroom

ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Support the anti-epidemic and resumption of work

Since the outbreak of the COVID-19 in 2020, Asialfno Technologies has been actively responding to the call of the government. It had taken actions to give play to their long-term accumulated technological advantages, donated money and materials, contributed its intelligence, and fully supported the country to win the battle against the epidemic and facilitated the nation to return to normal production and life order as soon as possible.

During the Reporting Period, Asialfno Technologies and telecom operators jointly guaranteed the normal operation of the network, provided a variety of big data methods to release epidemic information in a timely manner, and provided decision-making reference for the government and all walks of life. During the construction process of Wuhan Huoshenshan and Leishenshan mobile cabin hospitals, it promptly established a network expert team to donate network-related products and equipment to ensure the network security construction of the hospital. Asialfno Technologies team in Wuhan remained at its posts during the epidemic to support the online business of the telecom operators in Hubei Province and effectively guarantee the stable operation of the communication system during the epidemic.

Case study 2: Big data empowers Beijing’s fight against the “epidemic”

During the Reporting Period, Asialfno Technologies took advantage of its own big data platform and artificial intelligence product system to complete the setup of the “COVID-19 Epidemic Population Big Data Platform” in a very short period of time, realising real-time analysis and forecasting of population mobility in different regions and administrative divisions at all levels to help local operators to accurately grasp the structure, trends and characteristics of population flow, and provide the government with multi-scenario big data services for prevention of imported cases, spread within the city, gatherings, etc., to achieve real-time situational awareness and risk prevention and control of the epidemic, serving Beijing’s epidemic prevention work through various methods such as platform-based presentations, special analysis reports and real-time modeling responses.



Population big data platform for epidemic prevention and control

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Dr. TIAN Suning
(田溯寧)

Executive Director

DIRECTORS

Executive Directors

Aged 58, co-founded the Group in 1994, is the chairman and an executive Director. Dr. TIAN has over 20 years of experience in the business of software products, provision of IT services and software solutions, and is primarily responsible for the overall strategic planning and business direction of the Group.

Dr. TIAN served in various positions in China Netcom Group Corporation (Hong Kong) Limited. He served as the chief executive officer from 1999 to May 2006, as a director from August 2000 to July 2007 and as the vice chairman from April 2005 to July 2007. Dr. TIAN served as the deputy general manager at China Netcom Communications Group Corporation from April 2002 to May 2006. Dr. TIAN has been the founder and chairman of a private equity fund, China Broadband Capital Partners, L.P. since July 2006. Dr. TIAN has been an independent non-executive director of Lenovo Group Limited (listed on the Stock Exchange) from August 2007 to July 2019. Dr. TIAN has been an independent non-executive director of China Minsheng Banking Corp., Ltd. (中國民生銀行股份有限公司) (listed on the Shanghai Stock Exchange, also listed on the Stock Exchange) from June 2018 to October 2020. He was an independent director of Shanghai Pudong Development Bank Co., Ltd. (listed on the Shanghai Stock Exchange) from June 2016 to March 2018. He was also an independent non-executive director of Taikang Life Insurance Company Ltd. from July 2008 to July 2015. He was a non-executive director of Huayi Tencent Entertainment Company Limited (listed on the Stock Exchange) from January 2008 to February 2016, and served as an independent non-executive director of MasterCard Incorporated (listed on the New York Stock Exchange) from March 2006 to June 2016 and a deputy chairman and a non-executive director of PCCW Limited (listed on the Stock Exchange) from April 2005 to June 2007.

Dr. TIAN was awarded the New Century Talents — National Candidates (新世紀百千萬人才國家級人選) in 2004, which was issued by Ministry of Human Resources and Social Security of the PRC. Dr. TIAN obtained his Ph.D. degree in natural resource management from Texas Tech University in December 1993 and a Master of Ecology from Chinese Academy of Sciences in July 1988.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Mr. DING Jian
(丁健)

Executive Director

Aged 56, is an executive Director and was appointed as a Director in June 2018. Mr. DING joined the Group in January 2014. Mr. DING has over 15 years of experience in investment in telecommunications, media and technology industries and is primarily responsible for participating in formulation of business plans, strategies and major decisions of the Group.

Mr. DING served as the chairman of the board of AsialInfo-Linkage, Inc. (亞信聯創控股有限公司) between April 2003 and July 2010, and has also served as a co-chairman since July 2010. Mr. DING is currently a managing director and general partner of GSR Ventures, a venture capital fund, a role in which he has served since June 2005. Mr. DING has served as an independent director of Baidu, Inc. (百度公司)(listed on NASDAQ) since August 2005. Mr. DING served as an independent director of Huayi Brothers Media Corporation (listed on the Shenzhen Stock Exchange) from March 2011 to August 2017. Mr. DING obtained a Master of Library Science from the University of California, Los Angeles in September 1990.



Mr. GAO Nianshu
(高念書)

Executive Director

Aged 57, is an executive Director and was appointed as a Director in August 2017. Mr. GAO joined the Group in July 2016 as the Chief Executive Officer of the Company, who is primarily responsible for the overall business operations and management of the Group.

Mr. GAO has over 20 years of working experience as senior management in large telecommunications companies. He served as a non-executive director of Phoenix Media Investment (Holdings) Limited (listed on the Stock Exchange) between September 2006 and August 2016. Mr. GAO served as the general manager of both the data department and the market operations department of China Mobile Communications Corporation (中國移動通信集團公司) between September 2005 and July 2016. He served as the vice general manager of the billing business center and the market operations department, the general manager of the billing business center and the general manager assistant of Beijing Mobile Communication Company Limited (北京移動通信有限責任公司) between June 2002 and September 2005. Mr. GAO also served as a non-executive director of True Corporation Public Company Limited (listed on the Stock Exchange of Thailand) between 2014 and 2016. Mr. GAO was presented with the award "Outstanding Entrepreneur in China's Electronic Information Industry (中國電子信息行業卓越企業家)" issued by China Information Technology Industry Federation (中國電子信息行業聯合會) in January 2018. In January 2018, Mr. GAO also received the "2017 Outstanding Entrepreneur in China's Software Industry (2017年中國軟件行業優秀企業家)" award from China Software Industry Association (中國軟件行業協會). In the 2017 Information and Communication Technology ("ICT") Leaderboard & Excellence Program Award Ceremony (2017 ICT龍虎榜&優秀方案頒獎典禮) held by Communication World Omnimedia (通信世界全媒體) in December 2017, Mr. GAO was presented with the award of "2017 Top Ten ICT Influencers" (2017年ICT十大影響人物).

Mr. GAO was awarded the qualification as a senior engineer from the Chinese Academy of Sciences in 1996. Mr. GAO obtained a bachelor's degree in science of computing major from the department of mathematics in the Jilin University in July 1986, a master's degree in engineering from the Institute of Computing Technology, Chinese Academy of Sciences in August 1994 and an executive master of business administration degree from the Peking University in the PRC in June 2005.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Mr. ZHANG Yichen
(張懿宸)

Non-executive Director

Aged 58, is a non-executive Director and was appointed as a Director in June 2018. Mr. ZHANG joined the Group in January 2014. He has over 30 years of experience in the financial industry and is primarily responsible for providing professional opinion and judgment to the Board.

Mr. ZHANG began his career in Wall Street. In 1987, he worked for Greenwich Capital Markets, and then he was the head of proprietary trading in the Bank of Tokyo New York Branch, and Merrill Lynch, where he was the managing director of debt capital market for Greater China. In 2020, Mr. ZHANG joined the CITIC Group and served as the executive director of CITIC Limited and the president of CITIC Pacific Information Technology Co., Ltd. He participated in the founding of CITIC Capital in 2002 and witnessed the whole development process of the company. Mr. ZHANG currently serves as the chairman and CEO of CITIC Capital Holdings Limited. Under the leadership of Mr. ZHANG, CITIC Capital has taken the lead in multiple transactions with milestone significance so far and invested in a series of well-known domestic enterprises, including McDonald's China, Alibaba, Sina, Harbin Pharmaceutical, SF Express, AsialInfo and Focus Media. Mr. ZHANG currently serves as the chairman of the board of New McDonald's China. Mr. ZHANG served as the independent director of Weibo Corporation from January 2014 to December 2015, whose securities are listed on NASDAQ. From May 2002 to March 2021, Mr. ZHANG has been serving as the independent director of Sina Corporation, whose securities were listed on NASDAQ. From June 2012 to date, Mr. ZHANG has been serving as the chairman of the board and a non-executive director of Genertec Universal Medical Group Company Limited (listed on the Stock Exchange). Mr. ZHANG served as the non-executive director of Frontier Services Group Limited (listed on the Stock Exchange) from March 2020 to February 2021. Mr. ZHANG was appointed as the independent non-executive director of China Vanke Co., Ltd. (listed on the Stock Exchange) on 30 June 2020.

Mr. ZHANG is a member of the 11th, 12th and 13th National Committee of the Chinese People's Political Consultative Conference. Mr. ZHANG obtained a Bachelor of Science degree in computer science and engineering from the Massachusetts Institute of Technology, the US in June 1986.

Aged 51, is a non-executive Director and was appointed as a Director in June 2018. Mr. XIN joined the Group in August 2016. He has over 26 years of experience in finance and investment and is primarily responsible for providing professional opinion and judgment to the Board.

Mr. XIN currently serves as a senior managing director of CITIC Capital Holdings Limited and the managing partner of its private equity arm CITIC Capital Partners. He joined the firm in August 2002 and is responsible for the private equity investment business in China since 2004. Between December 1999 and August 2002, he served as a management consultant at McKinsey & Company in Shanghai and the Washington, D.C. to develop business strategies for global clients. From August 1992 to April 1996, Mr. XIN also served as a deputy manager for China Leasing Co., Ltd. (中國租賃有限公司), the largest leasing company in China and a subsidiary of CITIC Group Corporation Ltd. Mr. XIN served as a director of Focus Media Information Technology Co., Ltd. (分眾傳媒信息技術股份有限公司) (listed on the Shenzhen Stock Exchange) from March 2016 to November 2016.

He obtained a Bachelor of Economics degree from the Peking University in the PRC in July 1992 and a master of business administration degree from Harvard Business School in the US with honors in June 1999.



Mr. XIN Yuesheng
(信躍升)

Non-executive Director

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Mr. ZHANG Liyang
(張立陽)

Non-executive Director

Aged 35, is a non-executive Director and was appointed as a Director in June 2018. Mr. ZHANG joined the Group in January 2018. He is responsible for providing professional opinion and judgment to the Board.

Mr. ZHANG has over 10 years of experience in business strategy and finance. He joined CITIC Capital Holdings Limited in June 2010 and is currently an executive director of CITIC Capital Partners Advisory (Shanghai) Limited, who is responsible for private equity investments in the telecommunications, media, technology and industrial sectors. From August 2008 to June 2010, he worked for McKinsey & Company as a management consultant, providing strategic and operational advice for leading Chinese telecom and energy companies.

Mr. ZHANG obtained his master of business administration degree from Institut Européen d'Administration des Affaires (INSEAD) in December 2013 and a Bachelor of Engineering degree from Zhejiang University in the PRC in June 2008.



Mr. Yang Lin
(楊林)

Non-executive Director

Aged 49, was appointed as a non-executive Director on 2 September 2020. Mr. Yang is a senior engineer. Mr. Yang currently serves as the deputy general manager of the government and enterprise division in the Xiong'an office of China Mobile Communications Group Co., Ltd. He joined the China Mobile Communications Corporation in June 1999. Mr. Yang has extensive experience in engineering construction management, supply chain management and DICT project management. Mr. Yang obtained his bachelor's degree in communications engineering from the Beijing University of Posts and Telecommunications in 1994 and subsequently obtained a master's degree in business administration from the China Europe International Business School in 2003.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Ms. Liu Hong
(劉虹)

Non-executive Director

Aged 48, was appointed as a non-executive Director on 2 September 2020 and currently serves as a director and deputy general manager of China Mobile Information Technology Co., Ltd. From September 2010 to January 2018, Ms. Liu held the position of deputy general manager of the business support system department of China Mobile Communications Corporation. From June 2006 to September 2010, she served as the manager of the planning and construction division in the business support system department of China Mobile Group Corporation. Before that, Ms. Liu worked as a manager in the support office of China Mobile Group Corporation's billing business center from February 2002 to June 2006, and also respectively held the position of deputy director of the account clearing center, billing clearing center and the Beijing billing business center of China Mobile Group Corporation from January 2000 to February 2002. From August 1996 to January 2000, Ms. Liu successively worked in the billing center of the Mobile Communications Bureau of the Ministry of Posts and Telecommunications and the account clearing center of China Mobile Corporation. Ms. Liu obtained her bachelor's degree in computer mathematics and application software from the Beijing University of Technology in 1996, and subsequently obtained a master's degree in business administration from the Peking University in 2006.



Dr. GAO Jack Qunyao
(高群耀)

*Independent non-executive
Director*

Aged 63, was appointed as an independent non-executive Director in 19 December 2018. Dr. GAO has extensive experience in IT, media, entertainment and venture capital.

Dr. GAO has currently been the adjunct professor of the business school of The Chinese University of Hong Kong since 2011. Dr. GAO has been the founding partner and the chief executive officer at Beijing Times Digiwork Films Technology Co., Ltd. (Smart Cinema) (北京雲途時代影業科技有限公司 (移動電影院)) since April 2018. Dr. GAO has been an independent non-executive director of AGTech Holdings Limited (listed on the Stock Exchange) since May 2015. Dr. GAO was the interim chief executive officer of Legendary Entertainment LLC from January 2017 to October 2017, and was also a director of Legendary Entertainment LLC from January 2016 to October 2017. Dr. GAO served as a director at AMC Entertainment Holdings, Inc. (listed on the New York Stock Exchange) from September 2015 to October 2017. Dr. GAO also served as the senior group vice president and the chief executive officer of the international investments and operations, Wanda Cultural Industry Group from June 2015 to October 2017. Dr. GAO was previously a director of 萬通投資控股股份有限公司 (Vantone Holdings Co., Ltd.) (listed on the Shanghai Stock Exchange) from June 2010 to April 2017. Dr. GAO also served as the corporate senior vice president of News Corporation (listed on NASDAQ) from November 2006 to July 2014. Dr. GAO was an alternate director at Phoenix Media Investment (Holdings) Limited (listed on the Stock Exchange) from December 2008 to June 2013. Dr. GAO served as the corporate vice president at Autodesk, Inc. (listed on NASDAQ) from June 2003 to November 2006. He was also the general partner of Walden International, Inc. from May 2002 to April 2003. Dr. GAO served as the president and the general manager of Microsoft (China) Co. Ltd., a subsidiary of Microsoft Corporation (listed on NASDAQ) from December 1999 to May 2002.

Dr. GAO obtained his bachelor's degree, master's degree and his Ph.D. degree in engineering from Harbin Institute of Technology in January 1982, December 1984 and December 1994, respectively.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Dr. ZHANG Ya-Qin
(張亞勤)

Independent

Non-executive Director

Aged 55, was appointed as an independent non-executive Director of the Company on 19 December 2018. Dr. ZHANG is a famous scientist and entrepreneur in the digital video and artificial intelligence area, who has been an independent non-executive director of a number of companies, including Chinasoft International Limited (listed on the Stock Exchange) since December 2008 and Tarena (listed on NASDAQ) since April 2014. Dr. ZHANG served as an independent non-executive director of ChinaCache (listed on NASDAQ) from September 2010 to July 2017 and China Digital Video Holdings Limited (listed on the Stock Exchange) from January 2011 to June 2018. Dr. ZHANG was the president of Baidu, Inc (百度公司) (listed on NASDAQ), in charge of automatic driving, intelligent cloud computing, fundamental technology, internationalisation, quantum computing and other businesses from September 2014 to October 2019. Before joining Baidu, Dr. ZHANG held various positions at Microsoft Corporation (listed on NASDAQ) from January 1999 to September 2014, serving as the corporate vice president, the chairman of Microsoft Asia-Pacific Research & Development Group and the chairman of Microsoft China successively. Dr. ZHANG Ya-Qin has made outstanding contributions in the digital video, Internet and artificial intelligence industries. He has more than 60 U.S. patents. He also published more than 500 papers and 11 monographs. Dr. ZHANG Ya-Qin was elected as a member of the American Academy of Arts and Sciences in 2019, who was the only elected Chinese scientist in the engineering and computer science for that year. Dr. ZHANG was awarded a fellow of the Australian Academy of Technology and Engineering (ATSE) in December 2017, and in 1997, he was also awarded a fellow of the Institute of Electrical and Electronics Engineers (IEEE) at the age of 31, who was the youngest person awarded by the association in the centennial history. Dr. ZHANG obtained his bachelor's degree in radio electronics and master's degree in telecommunication and electrical systems from the University of Science and Technology of China (中國科技大學) in July 1983 and January 1986, respectively. In February 1990, Dr. ZHANG obtained his Ph.D. degree in electrical engineering from George Washington University, Washington D.C. In July 2020, he joined the Tsinghua University as the chair professor for "Intelligence Science" and established the Institute for AI Industry Research in Tsinghua University (清華大學智能產業研究院).

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Mr. GE Ming
(葛明)

Independent

Non-executive Director

Aged 70, was appointed as an independent non-executive Director on 19 December 2018. Mr. GE has extensive experience in the field of auditing and advisory services and has assisted in the listing of various PRC companies on the Stock Exchange.

Mr. GE served as an independent non-executive director of Amber Hill Financial Holdings Limited (listed on the Stock Exchange) from May 2017 to December 2018. Mr. GE is an independent director of Focus Media Information Technology Co., Ltd. (分眾傳媒信息技術股份有限公司) (listed on the Shenzhen Stock Exchange) since January 2016. Mr. GE served as a non-executive director of China Innovation Investment Limited (listed on the Stock Exchange) from June 2015 to February 2016 and also served as a non-executive director of China Trends Holdings Limited (listed on the Stock Exchange) from June 2015 to February 2016. Mr. GE served as an independent director of Shanghai Zhenhua Heavy Industries Co., Ltd. (listed on the Shanghai Stock Exchange) from April 2015 to November 2016. Mr. GE is an independent non-executive director of Ping An Insurance (Group) Company of China, Ltd. (listed on the Stock Exchange) since June 2015 and an independent non-executive director of Chong Sing Holdings FinTech Group Limited (listed on the GEM of Stock Exchange) from September 2014 to April 2020. Mr. GE also served as an independent non-executive director of Shunfeng International Clean Energy Limited (listed on the Stock Exchange) from January 2011 to February 2013. From July 1992 to July 1995, Mr. GE served as a deputy general manager at Ernst & Young Hua Ming; from July 1995 to August 2012, Mr. GE served as the chairman at Ernst & Young Hua Ming; from August 2012 to September 2014, Mr. GE served as a partner of management committee at Ernst & Young Hua Ming LLP and subsequently from September 2014 to January 2016, Mr. GE served as a senior consultant at Ernst & Young Hua Ming LLP. Mr. GE has been a certified public accountant of the Chinese Institute of Certified Public Accountants since October 1983, and is also a senior accountant as certified by the Ministry of Finance of the PRC. Mr. GE is a vice president of the Mergers & Acquisitions Association of All-China Federation of Industry and Commerce (全國工商聯併購公會), an overseas member of the Society of Chinese Accountants and Auditors (香港華人會計師公會) and a member of the Hong Kong Chinese Enterprises Association (香港中國企業協會).

Mr. GE obtained his master's degree in western accounting from the Research Institute for Fiscal Science, Ministry of Finance of the PRC in July 1982.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Ms. Tao Ping
(陶萍)

*Independent
Non-executive Director*

Aged 63, was appointed as an independent non-executive Director on 2 September 2020. Ms. TAO has been engaged in the telecommunications industry for 35 years and has accumulated rich management experience in provincial and group companies of the telecommunications industry. Ms. TAO served successively as the deputy general manager and the general manager in the Anhui branch office of China Telecom from June 2002 to February 2011. During that time, China Telecom's informatisation level was maintained at a leading position within the industry. In 2007, Ms. Tao was awarded the "Outstanding Informatisation Leader Award" by the National Informatisation Evaluation Center and in 2010, she was also awarded the honorary title of "National Model Worker". From March 2011 to November 2017, Ms. Tao served as the general manager and senior consultant of the strategic department of the China Telecom Group; and from July 2012 to December 2017, she also served as an employee director of the board of directors of the China Telecom Group. Ms. Tao obtained a bachelor's degree in engineering from Nanjing University of Posts and Telecommunications (formerly known as the Nanjing Institute of Posts and Telecommunications) in 1982. She subsequently obtained a master's degree in business administration from the Australian National University in 2004.



Ms. HUANG Ying
(黃纓)

*Senior Vice President and the
Chief Financial Officer*

Aged 52, has been a senior vice president and the chief financial officer of the Group since April 2017.

Ms. HUANG joined the Group in April 2017 and is primarily responsible for the management of finance, tax, auditing and legal matters of the Group. Ms. HUANG has over 20 years of working experience in financial management in the telecommunications industry, and has over ten years of experience in senior management roles. Prior to joining the Group, Ms. HUANG successively served as the general finance department manager, the deputy general manager and other positions of the finance department of China Mobile Communications Corporation (中國移動通信集團公司) from July 2002 to March 2017. She successively served as a principal staff of the finance department at the general post office of the Ministry of Posts and Telecommunications and a deputy director at the corporate finance office of the planning and finance department of the State Post Bureau of the PRC and other positions from May 1995 to June 2002.

In June 1990, Ms. HUANG obtained a bachelor's degree in economics from the Beijing University of Posts and Telecommunications, where she subsequently also obtained a master's degree in economics in April 1995. She obtained a master of business administration degree from the University of Wisconsin, the US in May 2006.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Mr. CHEN Wu
(陳武)

Senior Vice President

Aged 53, has been a senior vice president and the general manager of the business development and government affairs center of the Group since February 2015. Mr. CHEN joined the Group in April 2011 and is primarily responsible for the overall management of business development and government affairs.

Mr. CHEN has over 15 years of working experience in business development and dealing with government affairs, and has over ten years of experience in senior management roles. He served as the director of telecommunications division of Cisco Systems (China) Networking Technology Co., Ltd. from August 2007 to April 2011. Prior to that, he served as the deputy general manager of Mobile Navi (Beijing) Co., Ltd. (北京移動納維信息科技服務有限公司) from January 2005 to August 2007. Mr. CHEN also served as the general manager of the international department of Beijing Honglian 95 Information Industries Company Limited (北京鴻聯九五信息產業有限公司) from August 2003 to December 2004.

Mr. CHEN obtained a bachelor's degree in Japanese literature from Tianjin Foreign Studies University in July 1989, and further obtained a master of business administration degree from the Nanyang Technological University, Singapore in June 2007.



Mr. LIANG Bin
(梁斌)

Senior Vice President

Aged 50, joined the Group in August 2002 and has been a senior vice president and the general manager of the business division for China Mobile of the Group since January 2017. Mr. LIANG is primarily responsible for the overall operations management of the business division for China Mobile.

Mr. LIANG has over 20 years of experience in the IT and telecommunications industry, and has over 15 years of experience in middle and senior management roles. He served as the president of the business division for China Telecom, the chairman and the president of the cloud information division, the vice president of the China Unicom division, the deputy general manager of the cable division and the general manager of the wireless division of the Group from August 2002 to December 2016. He also served as the R&D manager of Jiangsu Hongtu High Technology Co., Ltd. (江蘇宏圖高科技股份有限公司) and UTStarcom Holdings Corp. from September 1998 to September 2002.

Mr. LIANG graduated from Nanjing University of Posts and Telecommunications (formerly known as Nanjing College of Posts and Telecommunications) with a major in communications engineering in July 1991.

PROFILES OF DIRECTORS AND SENIOR MANAGEMENT



Dr. OUYANG Ye
(歐陽曄)

*Vice President and the Chief
Technology Officer*

Aged 39, was appointed as a vice president and the chief technology officer in July 2018, has been promoted as a vice president in July 2020, and also the chairman of the technology committee and the head of PRD (product R&D center) of the Group, and is primarily responsible for the research, development, and innovation of the Group's products and technologies.

Dr. OUYANG has over ten years of distinguished experience of technology research, development, and management in telecommunication sector. Prior to joining us, Dr. Ouyang worked in Verizon, the largest mobile communications operator in USA. Dr. OUYANG has been a Verizon Associate Fellow in Verizon since March 2016 (a Fellow title is Verizon's highest commendation for technical excellence and indicates Verizon's top tier scientist). He is one of the only 48 Fellows in Verizon's 170,000 employees globally. Between July 2013 and March 2016, he was a principal member of technical staff in Verizon. Dr. OUYANG is the head of Verizon Modeling & AI System. He led a multi-national technical team to conduct research and development and innovation in interdisciplinary and cross sectors of cutting-edge technologies such as mobile communications, artificial intelligence and data science. Dr. OUYANG is an outstanding scientist, researcher, innovator and R&D manager. In the past over ten years, he was one of the first scientists in USA using artificial intelligence technology and data science mobile communication networks. He is an internationally renowned expert in mobile communication, artificial intelligence, and data science sectors. Dr. OUYANG's recent research fields focus on the innovation of mobile communications, data science and artificial intelligence, and he is committed to 5G empowerment for vertical industries, 5G network intelligence, 5G network management (OSS), multi-access edge computing (MEC), network slicing, 5G service and network (BSS & OSS) integration, 5G cloud network technology integration, network optimization, network experience, user perception, 4/5G network and terminal performance, capacity, traffic mode, user behavior and other disciplines.

Dr. OUYANG has won a number of awards in industry and academia. Recent international awards include the 2018-19 TMForum Future Digital Leader Award in the Telecommunications Industry, the 2017 Outstanding Asian American Engineer Award, and the 2017 IEEE International Big Data Conference Best Paper Award, 2016 and 2017 Fierce American Telecom Industry Innovation Award and Best OSS/BSS Product Award, 2017 North America Best Carrier Big Data System Award, 2015 IEEE Wireless Communications Annual Conference "Wireless Communication Cross-Sector Contribution Award", etc. He serves various roles in many international telecommunication standard bodies and technology, industry or academic organizations, including the chairman of industry sector of the IEEE 5G Forum, the industry sector chairman of IEEE Sarnoff, the industry panel chairman of IEEE ICII (International Conference on Industrial Internet), the chairman of Executive Forum of IEEE GLOBECOM, executive member of the IEEE Big Data Committee, seminar chairman of the IEEE computing, International Conference on Computing, Networking and Communications (ICNC), chairman of the IEEE Wireless Telecommunication Seminar (WTS), chairman of big data committee of the IEEE Wireless and Optical Communication Conference (WOCC), member of the expert advisory committee of China Machine Press, representative of the 3rd Generation Partnership Project (3GPP), and the corporate representative in the ETSI (European Telecommunications Standards Institute). And he serves as editorial board and reviewer in many academic conferences and journals.

Dr. OUYANG authored more than 30 academic papers, 40 patents, 7 international standards, and 5 books or book chapters. Dr. OUYANG obtained a Bachelor in Engineering in Information Engineering from the Southeast University, a Master of Science from the Tufts University, a Master Degree in Columbia University in USA and a Ph.D. from the Stevens Institute of Technology.

DIRECTORS' REPORT

The Board is pleased to present its report together with the audited consolidated financial statements of the Group for the year ended 31 December 2020.

PRINCIPAL ACTIVITIES

The principal activity of the Group is the provision of telecom software products and related services.

MAJOR SUBSIDIARIES

A list of our major subsidiaries together with the particulars of the place of incorporation/establishment, as well as their issued share capital/registered capital and their principal activities are set out in note 36 to the consolidated financial statements.

RESULTS

The results of the Group for the year ended 31 December 2020 are set out in the consolidated statement of profit or loss and other comprehensive income of this annual report.

DIVIDEND POLICY

The Company may declare and pay dividends by way of cash or by other means that we consider appropriate in the future. The distribution of dividends will be determined by the Board at its discretion. Whether the Company would declare or pay any dividends in the future and the amount of such dividends is subject to a number of factors, including the Group's results of operations, cash flows, financial condition, amount of cash dividends paid to the Company by our subsidiaries, requirements under the relevant accounting standards, future development needs and other factors that the Directors may consider relevant. By taking into considerations of the aforesaid factors properly, we will adopt a non-binding and general dividend policy with a dividend payout ratio of not less than 40% of our annual distributable net profits in each financial year, commencing from the financial year ended 31 December 2020. In addition, our dividend policy will also be subject to the Article of Association, Business Companies Act of British Virgin Islands, and any other applicable laws and regulations.

FINAL DIVIDENDS

The Board resolved to declare the proposed final dividends of HK\$0.345 per Share for the year ended 31 December 2020 (2019: HK\$0.252 per Share).

BUSINESS REVIEW

An analysis on the business performance review of the Group during the Reporting Period and the future business development of the Group is set out in the section headed "Management Discussion and Analysis" and "Chairman's Statement" of this annual report, respectively. The major risks faced by the Group is set out in the section headed "Corporate Governance Report" of this annual report. The analysis of the Group using the key financial performance indicators for the year ended 31 December 2020 is set out in the section headed "Management Discussion and Analysis" of this annual report.

FINANCIAL SUMMARY

A summary of the results and assets and liabilities of the Group for the past five financial years is set out on pages 219 to 220 of this annual report. The summary does not form part of the audited consolidated financial statements.

**DIRECTORS'
REPORT****USE OF NET PROCEEDS FROM LISTING**

The Company's Shares were listed on the Main Board of the Stock Exchange on 19 December 2018. The net proceeds raised during the period of initial public offering with issue price of HK\$10.5 per Share (after deducting the underwriting commission and the issuance expenses from listing and prior to the exercise of the over-allotment option in January 2019) was approximately HK\$871 million. Due to the issuance and allotment of over-allotment Shares pursuant to the partial exercise of over-allotment options on 15 January 2019, additional net proceeds of approximately HK\$31 million were raised. The proposed use of the net proceeds was in line with those disclosed in the Prospectus.

The following table sets out the detailed information of the said net proceeds that were utilised as of 31 December 2020:

	Approximate percentage of total amount %	Proceeds from initial public offering HK\$'000	Proceeds utilised up to 31 December 2020 HK\$'000	Unutilised funds as at 31 December 2020 HK\$'000	Expected timeline for utilising the unutilised funds
Enhance our R&D capabilities and expand DSaaS, IOT and 5G network intelligence businesses	35%	315,547	315,547	—	
Repayment of bank loans	30%	270,469	270,469	—	
Strategic investments and acquisition	25%	225,391	—	225,391	31 December 2022 (Note)
Working capital and other general corporate purpose	10%	90,156	90,156	—	
Total	100%	901,563	676,172	225,391	

Note: The expected timeline for utilising the unutilised funds is based on the best estimation of the future market conditions made by the Group. It may be subject to change based on the current and future development of market conditions.

DIRECTORS' REPORT

MAJOR CUSTOMERS AND SUPPLIERS

Major customers

For the year ended 31 December 2020, the Group's top five independent and contracted customers accounted for approximately 29.6% (2019: approximately 23.0%) of the Group's total revenue, while the transaction amount with the Group's single largest customer accounted for approximately 12.6% (2019: approximately 5.3%) of the Group's total revenue.

Major suppliers

For the year ended 31 December 2020, the Group's top five suppliers accounted for approximately 14.4% (2019: approximately 8.9%) of the Group's total purchases for the year ended 31 December 2020, while the transaction amount with the Group's single largest supplier accounted for approximately 6.0% (2019: approximately 2.7%) of the Group's total purchases.

During the Reporting Period, none of the Directors, any of their close associates (as defined in the Listing Rules) or any Shareholders (who, as far as the Directors are aware, own more than 5% of the number of issued Shares) of the Group had any interests in the Group's top five customers or suppliers.

During the Reporting Period, the Company maintained good relationships with our customers and suppliers.

Environmental Protection

The environmental policies and performance of the Company are set out in the section headed "Environmental, Social and Governance (ESG) Report" of this annual report.

The Group has complied with the applicable environmental laws and regulations where its business operations are located. The Company will review its environmental protection practices from time to time, and will consider implementing other environmental protection measures and practices in the business operations of the Group to enhance sustainability.

PROPERTY, PLANT AND EQUIPMENT

Details of the changes in the property, plant and equipment of the Group during the year ended 31 December 2020 are set out in note 12 to the consolidated financial statements.

SHARE CAPITAL

Details of movement in the share capital of the Company during the year ended 31 December 2020 are set out in note 28 to the consolidated financial statements.

RESERVES AND DISTRIBUTABLE RESERVES

Details of the changes in the reserves of the Group for the year ended 31 December 2020 are set out in note 37 to the audited consolidated financial statements, respectively, of which, the reserves available for distribution to shareholders amounted to approximately RMB2,180 million (2019: RMB1,261 million).

BANK BORROWINGS

Details of the bank borrowings of the Group as at 31 December 2020 are set out in note 25 to the consolidated financial statements.

MATERIAL ACQUISITIONS OR DISPOSALS

As at 31 December 2020, the Group did not have any significant investment plans, material acquisitions or disposals (2019: Nil).

DIRECTORS' REPORT

DIRECTORS

During the Reporting Period and up to the date of this annual report, the Directors are as follows:

Executive Directors:

Dr. TIAN Suning (*Chairman*)

Mr. DING Jian

Mr. GAO Nianshu (*Chief Executive Officer*)

Non-executive Directors:

Mr. ZHANG Yichen

Mr. XIN Yuesheng

Mr. ZHANG Liyang

Mr. YANG Lin (Appointed on 2 September 2020)

Ms. LIU Hong (Appointed on 2 September 2020)

Independent Non-executive Directors:

Dr. GAO Jack Qunyao

Dr. ZHANG Ya-Qin

Mr. GE Ming

Ms. TAO Ping (Appointed on 2 September 2020)

Pursuant to the article 14.2 of the Articles of Association, the Board shall have the power from time to time and at any time to appoint any person as a Director either to fill a casual vacancy or as an addition to the existing Board. Any Director appointed by the Board to fill a casual vacancy or as an addition to the existing Board shall hold office only until the next following general meeting of the Company and shall then be eligible for re-election at the relevant meetings. Accordingly, Mr. YANG Lin, Ms. LIU Hong and Ms. TAO Ping, who were appointed as Directors on 2 September 2020, will retire at the AGM, and being eligible, have offered themselves for re-election as Directors at the AGM.

Pursuant to article 14.18 of the Articles of Association, one-third of the Directors for the time being (or if their number is not three or a multiple of three, then the number nearest to but not less than one-third) will retire from office by rotation and will be eligible for re-election and re-appointment at every annual general meeting, provided that every Director shall be subject to retirement by rotation at least once every three years. Accordingly, Dr. TIAN Suning, Mr. XIN Yuesheng and Dr. GAO Jack Qunyao will retire and, being eligible, have offered themselves for re-election as Directors at the AGM.

Details of the Directors being re-elected at the AGM are set out in the circular issued before the AGM. The biographical details of the Directors and senior management are set out in the section headed "Profiles of Directors and Senior Management" of this annual report.

INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

Each of the independent non-executive Directors has confirmed his/her independence for the year ended 31 December 2020 in accordance with Rule 3.13 of the Listing Rules. The Company is of the view that all of the independent non-executive Directors are independent in accordance with Rule 3.13 of the Listing Rules.

DIRECTORS' REPORT

DIRECTOR'S INTEREST IN A SIGNIFICANT TRANSACTION, ARRANGEMENT OR CONTRACT

For the year ended 31 December 2020 and up to the date of this annual report, save as disclosed herein, none of the Directors had directly or indirectly a material interest in a transaction, arrangement or contract, to which the Company, any of its subsidiaries or its fellow subsidiaries is a party and is significant to the business of the Group.

MANAGEMENT CONTRACT

For the year ended 31 December 2020 and up to the date of this annual report, the Company had not signed or entered into any contract in relation to the management and administration of all or any of its significant business.

REMUNERATION OF DIRECTORS AND SENIOR MANAGEMENT EMPLOYEES AND REMUNERATION POLICY

As of 31 December 2020, the Group had a total of 13,216 full-time employees. The Company strives to align the remuneration level of its employees with market level, so as to maintain competitiveness. The remuneration of the our employees is subject to the remuneration and bonus policy of the Group, and determined in accordance with the performance of each staff. The Group also provides comprehensive benefit packages and career development opportunities to its employees, including insurance benefits etc. Internal and external training programs are provided according to the change in the industry, technological updates and needs of employees.

Details of the Group's relationship with the employees are set out in the section headed "Environmental, Social and Governance (ESG) Report" of this annual report.

According to the Group's remuneration policy, in evaluating the amount of remuneration payable to Directors and senior management, the factors to be considered by the Remuneration Committee include the salaries paid by similar companies, tenure of Directors and senior management, commitment, responsibilities and individual performance (as the case may be), etc.

The remuneration received by Directors and senior management include salaries, bonuses, contributions to pension schemes, long-term reward (including share-based incentives), housing and other allowances, and benefits in kind in compliance with applicable laws, rules and regulations.

Details of the remuneration of the Directors and the five highest paid individuals are set out in note 11 to the consolidated financial statements.

RETIREMENT AND EMPLOYEE BENEFIT SCHEME

As required under the rules and regulations in the PRC, the Company contributes to state-managed retirement plans for its employees in the PRC. In addition to the contributions required to be made to the retirement plans on a certain percentage of the basic salaries of its employees, the Company has no further obligation for the actual payment of the previous or post-retirement benefits. The relevant state-managed retirement plans are responsible for the entire present obligation to retired employees.

In accordance with the laws and regulations of the relevant mandatory provident fund in Hong Kong, the Company operates MPF Scheme for all qualifying employees in Hong Kong. The assets of the scheme are held separately from those of the Group and are under the control of an independent mandatory provident fund service provider. Under the rules of the MPF Scheme, each of the employer and its employees is required to make contributions to the scheme at the rates specified in the rules. The only obligation of the Group in respect of the MPF Scheme is to make the required contributions under the scheme.

Details of the retirement and employee benefit plans of the Company are set out in note 33 to the consolidated financial statements.

DIRECTORS' REPORT

DIRECTOR'S TERM OF OFFICE AND SERVICE CONTRACT

Each of the executive Directors has entered into a service contract with the Company, under which they have agreed to act as executive Directors for an initial term of three years commencing from 30 December 2019. Such contract shall be terminated by not less than three months' notice in writing served by the executive Director or the Company.

Each of the non-executive Directors, being Mr. YANG Lin and Ms. LIU Hong, and the independent non-executive Director, being Ms. TAO Ping, has entered into a letter of appointment with the Company for a term of one year commencing from 2 September 2020. In addition, each of the other non-executive Directors and independent non-executive Directors has signed an appointment letter with the Company for a term of one year commencing from 30 December 2020. Under their respective appointment letters, each of the independent non-executive Directors is entitled to a fixed Director's fee of USD60,000 (or equivalent in Hong Kong dollars) per annum.

Remuneration of each of the executive Directors and non-executive Directors will be first recommended by the Remuneration Committee and then determined by the Board as authorised by the Shareholders, in accordance with the Articles of Association.

DIRECTOR'S INTEREST IN COMPETING BUSINESS

Apart from the businesses of the Group, Dr. TIAN, the chairman and an executive Director, currently holds interests in the following businesses, which compete or are likely to compete, directly or indirectly, with the Group's businesses:

Name of Entity Engaging in Such Business	Equity Interest	Summary of Business
AsialInfo Security Limited	Indirectly held approximately 58.73%	Operation of software products and services related to the Network Security
Nanjing AsialInfo Rongxin Enterprise Management Center (Limited Partnership) (南京亞信雲互聯網信息科技有限公司)	Indirectly held approximately 30%	Operation of software R&D, sales, product system (platform and cooperation) and other related businesses
Beijing Youyou Tianyu System Technology Co., Ltd. (北京友友天宇系統技術有限公司)	Indirectly held approximately 26.52%	Operation of software technology development, data processing and other related businesses
Beijing Tianyun Rongchuang Software Technology Co., Ltd. (北京天雲融創軟件技術有限公司)	Indirectly held approximately 27.46%	Operation of software technology development business
Tianyun Rongchuang Data Technology (Beijing) Co., Ltd. (天雲融創數據科技(北京)有限公司)	Indirectly held approximately 9.73%	Operation of technology development, application software services and other related businesses

Save as disclosed above, the Directors confirm that they did not have any interest in a business, apart from the business of the Group, which competes or is likely to compete, directly or indirectly, with our business, which would require disclosure under Rule 8.10 of the Listing Rules.

DIRECTORS' REPORT

INTERESTS AND SHORT POSITIONS OF THE DIRECTORS AND THE CHIEF EXECUTIVE IN THE SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2020, the interests and short positions of Directors and chief executives of the Company in the shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO which will be required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under such provisions of the SFO) or which will be required under Section 352 of the SFO to be entered in the register referred to in that section, or which will be required under the Model Code to be notified to us and the Stock Exchange, once the Shares are listed, are as follows:

Name of Director/ chief executive	Nature of interest (Note 1)	Number of Shares	Approximate percentage of shareholding interest of the Company (Note 2)
Dr. TIAN Suning ¹	Beneficial owner (L)	48,932,670	5.34%
	Interest in controlled corporation (L)	1,151,111	0.13%
	Interest in controlled corporation (L)	31,209,360	3.41%
	Interest in controlled corporation (L)	39,442,000	4.31%
	Total:	120,735,141	13.18%
Mr. DING Jian ²	Beneficial owner (L)	11,516,704	1.26%
	Interest in controlled corporation (L)	1,198,440	0.13%
	Total:	12,715,144	1.39%
Mr. GAO Nianshu ³	Beneficiary of a trust (L)	10,147,390	1.11%
	Others (L)	8,476,424	0.93%
	Total:	18,623,814	2.03%
Mr. ZHANG Yichen ⁴	Interest in controlled corporation (L)	213,924,952	23.36%

Notes:

- (L) — Long position; (S) — Short position.
- As at 31 December 2020, a total of 915,767,433 Shares had been issued by the Company.

¹ Dr. TIAN is the sole shareholder of Info Addition Limited which in turns is a general partner of Info Addition Capital Limited Partnership. As such, Dr. TIAN is deemed to be interested in the 1,151,111 Shares in which Info Addition Capital Limited Partnership is interested. Dr. TIAN indirectly has full control over CBC Partners II L.P. which is the general partner of China Broadband Capital Partners II, L.P. which in turn is the sole shareholder of CBC TMT III Limited. Therefore, Dr. TIAN is deemed to be interested in the 31,209,360 Shares in which CBC TMT III Limited is interested. PacificInfo Limited is wholly owned by Dr. TIAN and therefore Dr. TIAN is deemed to be interested in 39,442,000 Shares in which PacificInfo Limited is interested.

² New Media China Investment I Limited is wholly owned by Mr. DING and therefore Mr. DING is deemed to be interested in the 1,198,440 Shares in which New Media China Investment I Limited is interested.

³ These interests comprise (i) 4,677,768 Shares; (ii) 3,798,656 underlying Shares in respect of the outstanding share options granted to Mr. GAO under the Pre-IPO Share Option Scheme held by the custodian Noble (Nominees) Limited; (iii) 466,792 underlying Shares in respect of the outstanding RSUs granted to Mr. GAO under the Pre-IPO Share Award Scheme held by AsiaInfo Technologies Trust II; and (iv) 9,680,598 Shares granted under the 2020 Share Award Scheme held by AsiaInfo SAS Management Trust, respectively

⁴ Each of Power Joy (Cayman) Limited (as the controlling shareholder of Skipper Investment Limited), CITIC Capital China Partners II L.P. (as the sole shareholder of Power Joy (Cayman) Limited), CCP II GP, Ltd. (as the general partner of CITIC Capital China Partners II L.P.), CCP LTD (as the general partner of CCP II GP, Ltd. and the shareholder of CCP II Advisory Ltd.), CITIC Capital Partners Limited (as the sole shareholder of CCP LTD), CITIC Capital Holdings Limited and CP Management Holdings Limited (which hold 51% and 49% shareholding of CITIC Capital Partners Limited, respectively) and Mr. ZHANG Yichen (as the sole shareholder of CP Management Holdings Limited) is deemed or taken to be interested in all the 213,924,952 Shares which are beneficially owned by Skipper Investment Limited for the purpose of Part XV of the SFO.

DIRECTORS' REPORT

DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed in this annual report, for the year ended 31 December 2020, at no time did the Company or any of its subsidiaries enter into any arrangement that would enable the Directors to acquire benefits by means of acquisition of shares in, or debentures of, the Company or any other body corporate, and none of the Directors or any of their respective spouses or children under the age of 18 were granted any right to subscribe for the share capital or debt securities of the Company or any other body corporate or had exercised any such right.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITION IN SHARES AND UNDERLYING SHARES

As at 31 December 2020, to the best of the Directors' knowledge, the following persons have interests or short positions in the Shares or underlying Shares which would fall under the provisions of Divisions 2 and 3 of Part XV of the SFO to be disclosed to the Company, or which were recorded in the register required to be kept by the Company under Section 336 of the SFO:

Name of Shareholders	Nature of interest (Note 1)	Number of Shares	Approximate percentage of shareholding interest of the Company (Note 2)
Skipper Investment Limited ⁵	Beneficial owner(L)	213,924,952	23.36%
Power Joy (Cayman) Limited ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CITIC Capital China Partners II L.P. ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CCP II GP, Ltd. ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CCPII Advisory Ltd. ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CCP LTD ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CITIC Capital Partners Limited ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CITIC Capital Holdings Limited ⁵	Interest in controlled corporation(L)	213,924,952	23.36%
CP Management Holdings Limited ⁵	Interest in controlled corporation(L)	213,924,952	23.36%

Notes:

- (L) — Long position; (S) — Short position.
- As at 31 December 2020, a total of 915,767,433 Shares had been issued by the Company.

⁵ Each of Power Joy (Cayman) Limited (as the controlling shareholder of Skipper Investment Limited), CITIC Capital China Partners II L.P. (as the sole shareholder of Power Joy (Cayman) Limited), CCP II GP, Ltd. (as the general partner of CITIC Capital China Partners II L.P.), CCP LTD (as the general partner of CCP II GP, Ltd. and shareholder of CCPII Advisory Ltd.), CITIC Capital Partners Limited (as the sole shareholder of CCP LTD), CITIC Capital Holdings Limited and CP Management Holdings Limited (which hold 51% and 49% shareholding of CITIC Capital Partners Limited, respectively) and Mr. ZHANG Yichen (as the sole shareholder of CP Management Holdings Limited) is deemed or taken to be interested in all the Shares which are beneficially owned by Skipper Investment Limited for the purpose of Part XV of the SFO.

DIRECTORS' REPORT

Name of Shareholders	Nature of interest (Note 1)	Number of Shares	Approximate percentage of shareholding interest of the Company (Note 2)
China Mobile (Hong Kong) Group Limited ⁶	Interest in controlled corporation (L)	182,259,893	19.90%
China Mobile Communications Group Co., Ltd. ⁶	Interest in controlled corporation (L)	182,259,893	19.90%
China Mobile Hong Kong (BVI) Limited ⁶	Interest in controlled corporation (L)	182,259,893	19.90%
China Mobile Limited ⁶	Interest in controlled corporation (L)	182,259,893	19.90%
China Mobile International Holdings Limited ⁶	Beneficial owner (L)	182,259,893	19.90%
Ocean Voice Investment Holding Limited ⁷	Beneficial owner (L)	62,418,728	6.82%
Sino Venture Capital 1B ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Sino Venture Capital 1 VCC ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Sino Capital Management Company Limited ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Mr. Liao Hsueh-Hsuan ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Sino Suisse Financial Holding Limited ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
A.M.Y. (Sinossuisse) Ltd. ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Mr. Liu Chung Hsing ⁷	Interest in controlled corporation (L)	62,418,728	6.82%
Ellington Investments Pte. Ltd. ⁸	Beneficial owner (L)	52,015,608	5.68%
Bartley Investments Pte. Ltd. ⁸	Interest in controlled corporation (L)	52,015,608	5.68%
Tembusu Capital Pte. Ltd. ⁸	Interest in controlled corporation (L)	52,015,608	5.68%
Temasek Holdings (Private) Limited ⁸	Interest in controlled corporation (L)	52,015,608	5.68%
Al Gharrafa Investment Company ⁹	Beneficial owner (L)	52,015,608	5.68%
Qatar Holding LLC ⁹	Interest in controlled corporation (L)	52,015,608	5.68%
Qatar Investment Authority ⁹	Interest in controlled corporation (L)	52,015,608	5.68%
InnoValue Capital Ltd. ¹⁰	Beneficial owner (L)	52,015,608	5.68%
Ms. LIU Tzu-Lien ¹⁰	Interest in controlled corporation (L)	52,015,608	5.68%

⁶ China Mobile International Holdings Limited is wholly owned by China Mobile Limited, which is owned as to 72.72% by China Mobile Hong Kong (BVI) Limited. China Mobile Hong Kong (BVI) Limited is wholly owned by China Mobile (Hong Kong) Group Limited, which is wholly owned by China Mobile Communications Group Co., Ltd. Hence, each of China Mobile (Hong Kong) Group Limited, China Mobile Communications Group Co., Ltd., China Mobile Hong Kong (BVI) Limited and China Mobile Limited is deemed or taken to be interested in the interests so acquired by the China Mobile International Holdings Limited for the purpose of Part XV of the SFO.

⁷ Sino Venture Capital 1B (as the sole shareholder of Ocean Voice Investment Holding Limited), Sino Venture Capital 1 VCC (as the sole shareholder of Sino Venture Capital 1B), Sino Capital Management Company Limited (as the management shareholder of Sino Venture Capital 1 VCC) and Mr. Liao Hsueh-Hsuan (holding 99% equity interest of Sino Capital Management Company Limited) are deemed or taken to be interested in all the Shares beneficially owned by Ocean Voice Investment Holding Limited for the purpose of Part XV of the SFO. In addition, Sino Suisse Financial Holding Limited (as the sole shareholder of Sino Suisse Capital Pte. Ltd. (as the manager of Sino Venture Capital 1 VCC)), AMY (Sinossuisse) Ltd. (holding 80% equity interest of Sino Suisse Financial Holding Limited) and Mr. Liu Chung Hsing (as the sole shareholder of AMY (Sinossuisse) Ltd.) are deemed or taken to be interested in all the Shares beneficially owned by Ocean Voice Investment Holding Limited.

⁸ Each of Bartley Investments Pte. Ltd. (as the sole shareholder of Ellington Investments Pte. Ltd.), Tembusu Capital Pte. Ltd. (as the sole shareholder of Bartley Investments Pte. Ltd.) and Temasek Holdings (Private) Limited (as the sole shareholder of Tembusu Capital Pte. Ltd.) is deemed or taken to be interested in all the Shares which are beneficially owned by Ellington Investments Pte. Ltd. for the purpose of Part XV of the SFO.

⁹ Each of Qatar Holding LLC (as the sole shareholder of Al Gharrafa Investment Company) and Qatar Investment Authority (as the sole shareholder of Qatar Holding LLC) is deemed or taken to be interested in all the Shares which are beneficially owned by Al Gharrafa Investment Company for the purpose of Part XV of the SFO.

¹⁰ Ms. LIU Tzu-Lien (as the sole shareholder of InnoValue Capital Ltd.) is deemed or taken to be interested in all the Shares which are owned by the controlled corporation of InnoValue Capital Ltd. for the purpose of Part XV of the SFO.

**DIRECTORS'
REPORT****SHARE OPTION INCENTIVE SCHEME****SHARE OPTION SCHEME**

The (i) Pre-IPO Share Option Scheme and (ii) 2019 Share Option Scheme were approved and adopted by the Shareholders on 26 June 2018 and 25 November 2019, respectively, in order to grant eligible Directors, management and employees such related share-based compensation. The Remuneration Committee will, from time to time, determine the eligibility of participants to be granted any option as an incentive pursuant to, including but not limited to, the current and expected contribution of such participant, general financial position of the Group, general business targets and future plans of the Group. The Pre-IPO Share Option Scheme and the 2019 Share Option Scheme are aimed to approve and reward eligible participants who have contributed to the Group's growth and development.

PRE-IPO SHARE OPTION SCHEME

Eligible participants under the Pre-IPO Share Option Scheme include (i) any member of the Group or executive, non-executive or independent non-executive directors of any entity of the Group who are holding an interest; (ii) any full-time or part-time employee or affiliate of any member of the Group; (iii) any member of the Group or consultants, advisors and independent contractors of any entity of the Group who are holding an interest; or (iv) a qualified former grantee. The maximum number of shares involved in Share options that may be granted under the Pre-IPO Share Option Scheme (including the Shares involved in share options granted (whether exercised or not) and Shares issued under cancelled share options) is 15,055,107 Shares (being 120,440,856 Shares after taking into account the share subdivision), accounting for approximately 1.6% of the issued Shares as at the date of this annual report.

The exercise price per Share for share options granted under the Pre-IPO Share Option Scheme is determined by the Remuneration Committee and set out in the grant letter. The exercise price must not be lower than the nominal value of the Shares involved in the relevant share options. There is no consideration to be paid by eligible participants to accept the options. The grantee may exercise all share options on or after the vesting date of the share options (rather than before) by giving the Exercise Notice to the Company. The Exercise Notice must state the number of Shares under which the share option to be exercised and exercised. If requested by the grantee in writing, the Remuneration Committee may in its absolute discretion accept "non-cash exercise" options. The Remuneration Committee may also direct the grantee to exercise "non-cash exercise" if considers it appropriate. Otherwise, any Exercise Notice announced must be accompanied by a full remittance of the exercise price of the Shares. Any Exercise Notice issued without the relevant remittance or confirmation is an invalid notice. Within 30 days after receiving the Exercise Notice with the full remittance of the relevant exercise price and (if applicable) the certificate of the independent financial adviser (excluding any period of suspension of the Company's share registration procedures), the Company must allot and issue the relevant number of Shares to the grantee, and issues the Shares allotted and issued to the grantee. Unless otherwise stated, vested share options may be exercised by the grantee at any time during the applicable exercise period.

The Pre-IPO Share Option Scheme has expired after 11:59 p.m. on the business day before the listing date. The Company will no longer grant share options under the Pre-IPO Share Option Scheme. The provisions of the Pre-IPO Share Option Scheme shall remain in full force and effect to the extent necessary for the grant of any share options before the expiration of validity or other circumstances that may be required under the provisions of the scheme.

DIRECTORS' REPORT

Please refer to the Prospectus for further information of the Pre-IPO Share Option Scheme. No options had been cancelled during the Reporting Period. Details of movements in share options granted under the Pre-IPO Share Option Scheme during the year are as follows:

Grantees	Date of Grant ¹	Outstanding	Number of options exercised/ cancelled/lapsed during		Outstanding	Exercise Price (US\$)
		as at 1 January 2020	the period from 1 January 2020 to 31 December 2020		as at 31 December 2020	
			Exercised	Lapsed		
Director						
GAO Nianshu	11 July 2018	800,000	—	—	800,000	1.9225
	1 August 2018	2,998,656	—	—	2,998,656	1.2725
Sub-total		3,798,656	—	—	3,798,656	
Other employees and advisors	11 July 2018	947,600	224,600	9,000	714,000	0.5525
	1 August 2018	19,704	6,680	1,024	12,000	0.5525
	11 July 2018	120,000	120,000	—	—	0.7925
	1 August 2018	56,000	25,600	4,800	25,600	0.84
	11 July 2018	548,000	548,000	—	—	0.92375
	11 July 2018	520,000	—	—	520,000	1.13
	1 August 2018	25,272,800	2,771,606	1,374,488	21,126,712	1.2725
	11 July 2018	29,679,968	—	2,098,424	27,581,544	1.9225
1 August 2018	53,149,184	—	3,798,552	49,350,632	1.9225	
Sub-total		110,313,256	3,696,480	7,286,288	99,320,488	
Total		114,111,912	3,696,480	7,286,288	103,129,144	

Notes:

¹ The validity period of all the options is ten (10) years from the date of grant. As at the latest practicable date (being 16 April 2021), the options were fully vested.

² The weighted average closing price immediately before the dates of the exercise of the options was approximately HK\$11.29 per Share.

2019 Share Option Scheme

The eligible participants of 2019 Share Option Scheme include any director(s), employee(s) or consultant(s) of the Group (whether on an employment or contractual or honorary basis or otherwise and whether paid or unpaid) who the Remuneration Committee considers, in its sole discretion, has/have contributed or will contribute to the Group. The consultants of the Group may include: (a) any person or entity that provides research, development or other technical support to any member of the Group, i.e. senior professionals who provide consulting services for the Group with cutting-edge technical support such as 5G, big data, artificial intelligence and the Internet of Things; and (b) any adviser or consultant to any area of business or business development of any member of the Group, i.e. senior professionals who provide strategic advisory or consulting services for the Group's new business, new customers and new model of business development.

**DIRECTORS'
REPORT**

Pursuant to and subject to the terms of the 2019 Share Option Scheme, the Remuneration Committee shall be entitled (but shall not be bound) at any time, to grant share options to any eligible participant as the Remuneration Committee may in its absolute discretion select. Such grant shall be made to an eligible participant in such written form of a grant letter as the Remuneration Committee may from time to time determine and shall remain open for acceptance by the eligible participant concerned for a period of not less than seven (7) business days from the date of grant. A grant shall be deemed to have been accepted when the Company receives the duly signed grant letter from the grantee with the number of Shares in respect of which the offer is accepted and clearly stated therein together with a remittance of HK\$1.00 (or such other nominal sum in any currency as the Remuneration Committee may determine) in favour of the Company as the consideration for the grant thereof. Such remittance shall in no circumstances be refundable and shall not be deemed to be a part payment of the exercise price. Once accepted, the share option is deemed to be granted as from the date on which it was offered to the relevant eligible participant.

The maximum number of Shares which may be issued in respect of which share options may be granted under the 2019 Share Option Scheme together with the number of Shares which may be issued in respect of any options to be granted under any other share option scheme(s) shall not in aggregate exceed 10% (being 72,590,211 Shares, accounting for approximately 7.9% of issued Shares as at the date of this annual report) of the total number of Shares (being 725,902,116 Shares) in issue on the date of approval of the 2019 Share Option Scheme at the extraordinary general meeting of the Company dated 25 November 2019 by the Shareholders, provided, however, that: (a) the maximum number may be “refreshed”, with the separate approval of the Shareholders in a general meeting, up to a maximum limit of 10% of the total number of Shares then in issue at the date of such approval of the Shareholders, and the circular containing the requisite information in accordance with Rule 17.03(3) of the Listing Rules will be sent to the Shareholders prior to such general meeting; and (b) the total maximum number of Shares which may be issued upon exercise of all outstanding share options granted but yet to be exercised under the 2019 Share Option Scheme and any other options granted but yet to be exercised under the other share option scheme(s) shall not exceed 30% of the total number of Shares in issue from time to time. No share option may be granted under the 2019 Share Option Scheme and no option may be granted under any other share option schemes if it will result in such limit being exceeded.

Unless separately approved by the Shareholders in general meeting (with the relevant eligible participant and such eligible participant’s close associates (with the meaning ascribed thereto under the Listing Rules) (or such eligible participants’ associates if the eligible participant is a connected person of the Company) abstaining from voting), no eligible participant shall be granted a share option if the total number of Shares issued and to be issued upon exercise of the share options (including exercised, cancelled and outstanding share options but excluding lapsed share options) granted and to be granted to such eligible participant in any twelve (12)-month period up to and including such further grant would in aggregate exceed 1% of the total number of Shares in issue from time to time.

Each share option shall be exercisable at such times and subject to terms and conditions set out in the 2019 Share Option Scheme (in particular, the provisions relating to early termination) and such other terms and conditions as the Remuneration Committee determines, provided that the term of any share option shall not exceed ten (10) years from the date of grant of the share option. The terms of the 2019 Share Option Scheme do not specify a minimum period for which a share option must be held before the share option can be exercised, but provide that the Remuneration Committee has the power to specify the requirement as to the said minimum period.

The exercise price of each share option shall be a price determined by the Remuneration Committee in its absolute discretion at the time of grant but not be less than the higher of: (i) the nominal value of a Share; (ii) the closing price of a Share as stated on the Stock Exchange’s daily quotations sheet on the date of grant of such share option; and (iii) the average closing price of a Share as stated on the Stock Exchange’s daily quotations sheets for the five (5) business days immediately preceding the date of grant of such share option. In determining the exercise price, the Remuneration Committee will take into account, among other things, the performance of the relevant eligible participants and/or their contributions (past or future) to the Group, the then prevailing market price of the Share at the date of grant, any minimum holding period, any vesting conditions, etc.

DIRECTORS' REPORT

Unless otherwise terminated by the Board or the Shareholders in a general meeting in accordance with the terms of the 2019 Share Option Scheme, the 2019 Share Option Scheme shall be valid and effective for a period of ten (10) years from the adoption date (being 25 November 2019), after which no further share options will be granted or offered, but the provisions of the 2019 Share Option Scheme shall remain in full force and effect to the extent necessary to give effect to the exercise of any subsisting share option granted prior to the expiry of this ten (10)-year period or otherwise as may be required in accordance with the provisions of the 2019 Share Option Scheme. The remaining validity of 2019 Share Option Scheme is about 8 years and 8 months. For further details of 2019 Share Option Scheme, please refer to the circular of the Company dated 4 November 2019.

On 16 June 2020, the Company granted a total of 14,516,000 share options to 156 eligible participants of the Group under the 2019 Share Option Scheme. Each option shall entitle the grantee to subscribe for one Share upon exercise of such option at an exercise price of HK\$9.56 per Share (Note 1). For details, please refer to the Company's announcement dated 16 June 2020.

Grantee	Number of share options outstanding as at 1 January 2020	Share options granted during the period from 1 January 2020 to 31 December 2020 (Note 2)	Share options exercised during the period from 1 January 2020 to 31 December 2020	Share options cancelled/lapsed during the period from 1 January 2020 to 31 December 2020 (Note 3)	Number of share options outstanding as at 31 December 2020
Directors					
Dr. GAO Jack Qunyao	N/A	112,000	—	—	112,000
Dr. ZHANG Ya-Qin	N/A	112,000	—	—	112,000
Mr. GE Ming	N/A	112,000	—	—	112,000
Other employees (in total)	N/A	14,180,000	—	800,000	13,380,000
Total of all grantees	N/A	14,516,000	—	800,000	13,716,000

Notes:

- The closing price was HK\$9.18 per Share immediately before the date of grant.
- The validity period of options is ten (10) years commencing from the date of grant, and 50%, 20% and 30% of the options granted shall be vested on the date falling on the first, second and third anniversary from the date of grant, respectively. The Company has used the Binomial Model to determine the fair value of the options as at the date of grant, which is to be recorded in profit or loss over the vesting period. The weighted average fair value of the options granted by the Company was approximately HK\$3.52 per Share. Other than the exercise price mentioned above, details of determining the fair value of options are set out in note 32 to the consolidated financial statements.
- No options had been cancelled during the Reporting Period.

Share Incentive Schemes

The Pre-IPO Share Award Scheme and the 2020 Share Award Scheme were approved and adopted by Shareholders on 26 June 2018 and 7 January 2020, respectively, in order to grant eligible members of the management and employees such related share-based compensation. The Remuneration Committee will, from time to time, determine eligibility of participants to be granted any award as incentive pursuant to, including but not limited to, the current and expected contribution of such participant, the general financial position of the Group, the general business targets and future plans of the Group.

DIRECTORS' REPORT

Pre-IPO Share Award Scheme

The Pre-IPO Share Award Scheme will provide such participants the opportunity to obtain ownership rights and interests of the Company to achieve the following main objectives: (i) motivate such participants with their best performance and highest efficiency to create benefits for the Group; (ii) encourage and retain relevant parties to cooperate with the Group and provide them with additional incentives to achieve performance goals; and (iii) allow former holders to directly hold relevant restricted share awards to be granted by the Company.

The maximum number of Shares subject to Pre-IPO share awards which may be granted under the Pre-IPO Share Awards Scheme (including the Shares involved in the vested or not yet vested restricted share awards and those granted under the issued restricted share awards) must not exceed 2,561,241 Shares on the date of the adoption of the Pre-IPO Share Award Scheme (after taking into account the share subdivision being 20,489,928 Shares), accounting for approximately 2.2% of issued Shares at the date of this annual report, or other limits may be determined by the Remuneration Committee at its sole discretion.

Pursuant to the terms of the Pre-IPO Share Award Scheme and specific terms and conditions applicable to each granted restricted share award, the granted restricted share award is subject to a vesting period to achieve performance and/or other conditions determined by the Board and/or Remuneration Committee.

The Pre-IPO Share Award Scheme has expired after 11:59 p.m. on the business day before the listing date. The Company will no longer grant restricted share awards under the Pre-IPO Share Award Scheme. The provisions of the Pre-IPO Share Award Scheme shall remain in full force and effect to the extent necessary for the grant of any Pre-IPO share awards before expiration of validity or other circumstances that may be required under the provisions of the scheme.

Please refer to the Prospectus for further information of the Pre-IPO Share Award Scheme. The weighted average fair value of the restricted share awards on the date of grant is US\$1.185.

Details of movements in restricted share awards granted under the Pre-IPO Share Award Scheme during the year are as follows:

Name of grantee of RSU	Number of Shares in relation to outstanding RSU as at 1 January 2020	RSU vested during the year	RSU forfeited during the year	Number of Shares in relation to outstanding RSU during the year
Director				
GAO Nianshu	907,984	441,192	—	466,792
Other employees (in total)	6,708,212	3,324	279,912	3,103,348
Total	7,616,196	3,766,144	279,912	3,570,140

DIRECTORS' REPORT

2020 Share Award Scheme

The adoption of the 2020 Share Award Scheme is for the purposes of (i) recognizing the contributions and to fully motivate the potential and vitality of talents of the eligible persons; and (ii) encouraging the eligible persons to continue contributing to the long-term growth and development of the Group. Subject to the criteria and conditions as set out in the 2020 Share Award Scheme, any employee whom the Board or the Remuneration Committee or their respective delegate(s) considers, in its sole discretion, to have contributed or will contribute to the Group is eligible to receive an award.

The Board or the Remuneration Committee or their respective delegate(s) may, from time to time, at their absolute discretion, grant an award to a selected participant by way of an award letter. The award letter will specify the grant date, the number of award shares underlying the award, the vesting criteria and conditions, the vesting date and such other details as the Board or its delegate(s) may consider necessary.

According to the 2020 Share Award Scheme, the Company may transfer to the trustee the necessary funds and instruct the trustee to acquire Shares through market transactions at the prevailing market price or through the over-the-counter markets at the price determined by the Company, so as to satisfy the awards. During the Reporting Period, the trustee purchased a total of 36,302,000 Shares on the Stock Exchange.

The aggregate number of Shares underlying all grants made pursuant to the 2020 Share Award Scheme (excluding award shares which have been forfeited in accordance with the 2020 Share Award Scheme) shall not exceed 5.0% (i.e. 36,302,245 Shares, accounting for approximately 3.9% of issued Shares as at the date of this annual report) of the total number of issued Shares as at the adoption date which can be adjusted and/or refreshed by the Board as it may deem appropriate.

Neither the selected participant nor the trustee may exercise any voting rights in respect of any Shares held under the trust, unless the trustee of the 2020 Share Award Scheme will exercise in accordance with the voting mechanism as set out below:

- (i) in respect of each general meeting of the Company, the Company will send a voting instruction form to each of the selected participants to solicit votes from such selected participants. The voting instruction form will be very similar to the proxy form for the relevant general meeting and will set out a general description of the resolutions proposed at the general meeting and will allow the selected participants to select whether to vote for or against each of the resolutions. A copy of the relevant corporate communication concerning matters to be proposed at such general meeting (such as Shareholders' circular and annual report) will also be made available to each of the selected participants so that the selected participants will have all relevant information for considering the relevant resolutions as if they were Shareholders. Each selected participant shall be entitled to one vote for each of the award share, whether vested or unvested. The selected participants will be required to return the signed and completed voting instruction forms to the Trust Management Committee by the deadline stated in the voting instruction form, which deadline shall be no less than seven days before the time for holding the relevant general meeting and the selected participants will be given at least seven days to consider how they would like to cast their votes. In so far as the duly signed and completed voting instruction forms from the selected participants have been received by the Trust Management Committee prior to the proposed deadline, the Trust Management Committee will calculate the total of votes for and against each proposed resolution and will instruct the Trustee accordingly, and the trustee shall vote only in accordance with the instructions of the Trust Management Committee which reflect the instructions of the selected participants;
- (ii) for those selected participants who fail to return a duly signed and completed voting instruction form to the Trust Management Committee prior to the proposed deadline as set out in the voting instruction form, the Trust Management Committee will not give any instruction to the trustee so that no votes will be cast for such award shares and the trustee shall abstain from voting with respect to such award shares; and

DIRECTORS' REPORT

- (iii) for the avoidance of doubt, for other Shares held by the trustee which have not been granted to any selected participants, the Trust Management Committee will not give any instruction to the trustee so that no votes will be cast for those ungranted Shares and the trustee shall also abstain from voting with respect to such Shares.

The 2020 Share Award Scheme should be valid and effective for a period of 10 years from the date of adoption (being 7 January 2020) unless the Board may decide to terminate in advance. The remaining effective period for the 2020 Share Award Scheme was approximately 8 years and 10 months. Please refer to the announcements of the Company dated 8 January 2020 and 27 February 2020, respectively, for further details of the 2020 Share Award Scheme.

On 30 December 2020, the Company granted a total of 21,270,897 award shares to 14 eligible persons of the Group under the 2020 Share Award Scheme. Subject to the applicable vesting criteria and conditions, the award shares will be vested to eligible persons during the vesting period. The vesting period shall commence from the date of grant to the end of the three-year period after the date of grant. For further details, please refer to the Company's announcement dated 30 December 2020.

	Number of award shares granted during the period from 1 January 2020 to 31 December 2020	Number of award shares vested during the period from 1 January 2020 to 31 December 2020	Number of award shares cancelled/lapsed during the period from 1 January 2020 to 31 December 2020	Number of award shares not vested on 31 December 2020
Grantees				
Director				
GAO Nianshu	9,680,598	9,680,598	—	—
Other employees (in total)	11,590,299	10,190,299	—	1,400,000
Total	21,270,897	19,870,897	—	1,400,000

Issued Shares

On 14 April 2020, the Company and China Mobile International Holdings Limited (the "Subscriber") (a wholly-owned subsidiary of China Mobile Limited, the shares of which are listed on the Main Board of the Stock Exchange (stock code: 00941)) entered into the subscription agreement (the "Subscription Agreement"), pursuant to which the Company has conditionally agreed to allot and issue, and the Subscriber has conditionally agreed to subscribe for 182,259,893 new Shares (with a total nominal value of approximately HK\$2.3) at the subscription price of HK\$7.6 (the "Subscription Price") per subscription share (the "Subscription"). The Directors consider that the Subscription could consolidate the Company's financial position to provide the Group with additional fundings for exploring future development. The closing price of HK\$10.5 per Share was quoted on the Stock Exchange on the date of the Subscription Agreement.

DIRECTORS' REPORT

The Subscription was completed on 2 September 2020 (the “**Completion**”), which raised total proceeds and net proceeds of approximately HK\$1,385 million and approximately HK\$1,384 million, respectively. The net issue price per subscription share was approximately HK\$7.6. The intended use of the net proceeds is consistent with the intended use as disclosed in the Company’s circular dated 28 May 2020.

The following table sets out the details of the proceeds from the Subscription that the Group had utilised as of 31 December 2020:

	Approximate proportion of total amount %	Proceeds from the Subscription HK\$'000	Proceeds utilised as of 31 December 2020 HK\$'000	Proceeds not yet utilised as at 31 December 2020 HK\$'000	Expected timetable for utilising the unused amount (Note)
R&D investment in new products and new technologies and business development of DSaaS, vertical industries and enterprise cloudification and OSS	40%	553,640	—	553,640	31 December 2021
Invest or acquire assets and businesses that complement the Group’s business and complement the Group’s development strategy	35%	484,435	—	484,435	31 December 2023
General working capital (including administrative purposes and sales and marketing purposes)	25%	346,025	—	346,025	31 December 2021
Total	100%	1,384,100	—	1,384,100	

Note: The expected timeline for utilising the unused amount is based on the best estimation of the future market conditions made by the Group. It may be subject to change based on the current and future development of market conditions.

EQUITY-LINKED AGREEMENT

Save as disclosed in this annual report, for the year ended 31 December 2020, no equity-linked agreement was entered into or renewed by the Company or subsisting.

PURCHASE, SALE OR REDEMPTION OF LISTED SECURITIES

Save for the purchase conducted by the trustee under the 2020 Share Award Scheme as disclosed in the section “2020 Share Award Scheme” above, for the year ended 31 December 2020, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company’s listed securities.

DIRECTORS' REPORT

ARRANGEMENTS ON PRE-EMPTIVE RIGHTS AND SHARE OPTIONS

For the year ended 31 December 2020, there were no provisions relating to pre-emptive rights, which required the Company to offer new Shares on a pro-rata basis to existing Shareholders, or any share option arrangement under the relevant laws of the British Virgin Islands and the Articles of Association.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code as its own code of conduct regarding Directors' securities transactions. Having made specific enquiries of all Directors, each of the Directors has confirmed that he/she has complied with the required standards as set out in the Model Code for the year ended 31 December 2020.

For the year ended 31 December 2020, the Company has also adopted its own code of conduct regarding employees' securities transactions on terms no less exacting than the standard as set out in the Model Code for the compliance by its relevant employees who are likely to be in possession of unpublished inside information of the Company in respect of their dealings in the Company's securities.

CONTINUING CONNECTED TRANSACTIONS

Below are the continuing connected transactions conducted or entered into by the Group during 2020 which were subject to reporting, annual review, announcement and independent Shareholders approval requirements pursuant to Chapter 14A of the Listing Rules.

Non-exempted continuing connected transactions

1 The provision of software products and services by the Group to China Mobile Group

The Group provides software products and services to China Mobile Group (the associate of a connected person of the Group under the Listing Rules).

The Company entered into a comprehensive software product and service framework agreement with China Mobile Communication Co., Ltd. on 20 April 2020, pursuant to which, the Company agreed to provide software products and services to the members of the China Mobile Group, including but not limited to, the provision of software products and related deployment services, ongoing operation and maintenance services, data-driven operation services, business consulting services, system integration services, corporate trainings and procurement and sale of third-party hardware and software. The validity period of the Software Products and Services Framework Agreement is from the date of Completion (being 2 September 2020) to 31 December 2022.

Pricing Policy: The prices to be charged by the Group for products and/or services to be provided to the China Mobile Group under any separate definitive agreements pursuant to the Software Products and Services Framework Agreement shall be determined based on arm's length negotiation between the parties and on order-by-order basis with reference to the prevailing market price, being the price offered to or charged by Independent Third Parties in contemporaneous transactions in respect of similar types of products or services in the ordinary course of business in the same or nearby service area and subject to normal commercial terms and in accordance with the principle of fairness and reasonableness.

The annual caps for 2020, 2021 and 2022 are RMB4,210,000,000, RMB4,840,000,000 and RMB5,730,000,000, respectively. The actual transaction amount from 2 September 2020 (being the date when China Mobile Group became a connected person of the Company) to 31 December 2020 was approximately RMB1,775,532,000.

DIRECTORS' REPORT

Partially exempted continuing connected transactions

1 Technological services provided to the Group by AsialInfo Security

AsialInfo Security, being a company controlled by Dr. TIAN (the chairman and executive Director), provides technological services to the Group and is hence a connected person of the Group pursuant to the Listing Rules.

On 29 December 2020, AsialInfo Security entered into the New Security Technological Security Service Framework Agreement with the Company, pursuant to which AsialInfo Security agreed to (i) provide professional technical staff to support the projects undertaken by the Group; and (ii) provide certain network security services and products to the Group. The term of the New Security Technological Security Service Framework Agreement is from 1 January 2021 until 31 December 2023.

Pricing Policy: The service fees payable by the Group to AsialInfo Security under any separate technological service agreement pursuant to the New Security Technological Security Service Framework Agreement will be determined based on an arm's length negotiation between the parties with reference to (i) the staff costs (including salaries and staff expenses) and/or (ii) market rate of the similar products and services. In any event, such service fees shall not be higher than the price charged by AsialInfo Security to its independent customers for similar services and products.

The annual caps for 2021, 2022 and 2023 under the New Security Technological Security Service Framework Agreement shall be RMB15,000,000, RMB15,000,000 and RMB15,000,000, respectively. The annual cap for 2020 under the old Security Service Framework Agreement shall be RMB24,000,000. The actual transaction amount for the year ended 31 December 2020 was approximately RMB1,418,000.

2 Management support services provided to AsialInfo Security by the Group

The Group provides certain management support services to AsialInfo Security.

On 29 December 2020, the Group entered into the New Security Management Support Framework Agreement with AsialInfo Security, pursuant to which the Group agreed to provide certain management support services to the AsialInfo Security group, which include legal support, human resources, management system and network, daily administration, etc. The term of the New Security Management Support Framework Agreement is from 1 January 2021 until 31 December 2023.

Pricing Policy: The service fees payable to the Company pursuant to the New Security Management Support Framework Agreement will be determined based on an arm's length negotiation between the parties with reference to (i) all of the costs for the provision of the relevant services; and (ii) a 6% premium on such costs on a "cost-plus" basis.

The annual caps for 2021, 2022 and 2023 under the New Security Management Support Framework Agreement shall be RMB5,000,000, RMB5,000,000 and RMB5,000,000, respectively. The annual cap for 2020 under the old Security Management Support Framework Agreement shall be RMB10,000,000. The actual transaction amount for the year ended 31 December 2020 was approximately RMB7,027,000.

3 China Mobile Group leases workspace stations to the Group

The members of China Mobile Group lease workspace stations to the Group.

On 20 April 2020, the Company entered into the Lease Framework Agreement with China Mobile Communication Co., Ltd., pursuant to which China Mobile Communication Co., Ltd. has agreed to lease and use its reasonable endeavours and good faith to procure other members of the China Mobile Group to lease workspace stations to any members of the Group to facilitate the Group's provision of software services to members of the China Mobile Group. The validity period of the Lease Framework Agreement is from the date of Completion (being 2 September 2020) to 31 December 2022.

**DIRECTORS'
REPORT**

Pricing Policy: The pricing terms of the Lease Framework Agreement and each definitive agreement shall be consistent with the following guidelines: (i) the terms of the lease shall be negotiated and agreed by the parties on an arm's length basis and shall be fair and reasonable; (ii) the rentals shall represent the prevailing market rentals of similar premises in neighboring areas based on available property rental market comparables and, actual gross floor area of each of the leased premises; (iii) annual increments in rentals shall be determined by reference to the potential increase in the value of the premises; and (iv) where property rental market comparables are not available, the pricing terms shall be determined on a fair and reasonable basis which is equivalent or comparable to those offered to or quoted by Independent Third Parties to the Group for similar premises in proximity.

The annual caps for 2020, 2021 and 2022 under the Lease Framework Agreement shall be RMB6,000,000, RMB7,500,000 and RMB10,000,000, respectively. The actual transaction amount from 2 September 2020 (being the date when China Mobile Group became the connected person of the Company) to 31 December 2020, was approximately RMB1,579,000.

4 Provision of work spaces and certain ancillary office maintenance services to AsialInfo Security by the Group

To comply with the Listing Rules, AsialInfo China, a wholly-owned subsidiary of the Company, entered into the Lease Agreement with AsialInfo Chengdu (a wholly-owned subsidiary of AsialInfo Security) on 30 December 2019 to replace the old framework agreement, pursuant to which AsialInfo China agreed to provide work spaces and certain ancillary office maintenance services to AsialInfo Security. The Lease Agreement is valid for a term of three years commencing from 1 January 2020.

Rentals and fees: The fees payable under the Lease Agreement shall not exceed approximately RMB14,500,000 for the first year ended 31 December 2020 (assuming no change in the leased areas), which include rentals for the work spaces and fees arising from the ancillary office maintenance services to be provided by AsialInfo China to AsialInfo Chengdu. The specific amount of the fees payable under the Lease Agreement shall be calculated per RMB7.10/sq.m./day, comprising (i) rental fee at RMB6.00/sq.m./day; and (ii) service fee at RMB1.10/sq.m./day, subject to the actual office area to be used by AsialInfo Chengdu, which are inclusive of facilities usage charges and management fee and exclusive of other IT utilities charges and tax.

The annual caps under the Lease Agreement for 2020, 2021 and 2022 shall be RMB14,500,000, RMB15,000,000 and RMB15,500,000 respectively. The actual transaction amount for the year ended 31 December 2020 was approximately RMB9,494,000.

For the year ended 31 December 2020, the independent non-executive Directors have reviewed the above continuing connected transactions and has confirmed that such transactions:

- (i) are entered into during the ordinary and usual course of business of the Group;
- (ii) are on normal commercial terms or better terms; and
- (iii) are in accordance with the agreements related to such transactions, the terms of which are fair and reasonable and in the interests of the Shareholders as a whole.

The Company's independent auditor was engaged to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The independent auditor has issued an unqualified letter containing his findings and conclusions in respect of the continuing connected transactions in accordance with paragraph 14A.56 of the Listing Rules.

DIRECTORS' REPORT

The independent auditors' letter has confirmed that nothing has come to their attention that cause them to believe that the continuing connected transactions:

- (A) have not been approved by the Board;
- (B) were not, in all material respects, in accordance with the pricing policies of the Group as stated in this annual report;
- (C) were not entered into, in all material respects, in accordance with the relevant agreements governing the continuing connected transactions; and
- (D) have exceeded their respective annual caps for the financial year ended 31 December 2020 set out in the previous announcements of the Company.

Save as disclosed above, the related party transactions referred in note 34 to the consolidated financial statements do not constitute the connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules.

New-type continuing connected transactions

During the Reporting Period, the Group has entered into the New Security Technological Service Framework Agreement with details as follows:

Technological services provided to AsialInfo Security by the Group

On 29 December 2020, the Group entered into the New Security Technological Service Framework Agreement with AsialInfo Security, pursuant to which the Group agreed to (i) provide technical staff to support projects undertaken by the AsialInfo Security group; and (ii) certain software products and services to the AsialInfo Security group. The term of the New Security Technological Service Framework Agreement is from 1 January 2021 until 31 December 2023.

Pricing Policy: The service fees payable to the Group under any separate technological service agreement pursuant to the New Security Technological Service Framework Agreement will be determined by the parties with reference to (i) the staff costs (including staff salaries and disbursements) or cost of the products to be sold; (ii) the complexity of the nature of work and/or services to be provided; and (iii) a margin as agreed between the Group and AsialInfo Security taking into account the margin for the services/products of similar nature in the market by referring to margins for provision of similar services/sale of similar products by the Group to independent customers.

The annual caps for 2021, 2022 and 2023 under the New Security Technological Service Framework Agreement shall be RMB20,000,000, RMB20,000,000 and RMB20,000,000, respectively.

Save as disclosed in this annual report, and except continuing connected transactions that were granted full exemptions on the requirements under Chapter 14A of the Listing Rules by the Stock Exchange, there were no connected transactions or continuing connected transactions which are required to be disclosed by the Company in the reporting period in accordance with the provisions concerning the disclosure of connected transactions under Chapter 14A of the Listing Rules.

DIRECTORS' REPORT

COMPLIANCE WITH UNDERTAKING OF NON-COMPETITION

In order to ensure that we do not have direct competition between our activities and those of our substantial Shareholders, Skipper Investment Limited entered into an undertaking of non-competition in favor of the Company on 5 July 2018, pursuant to which Skipper Investment Limited has undertaken to the Company (for itself and for the interest of its subsidiaries) that it would not, and would use its best efforts to procure that its associates (except any members of the Group) shall not, whether directly or indirectly (including through any physical entities, partnership, joint venture or other contractual arrangement) or as a principal or agent, and whether on their own account or with each other or in conjunction with or on behalf of any person, firm or company or through any entities (except in or through any member of the Group) to carry on, engage, participate or hold any right or interest in or render any services to or otherwise be involved in any business which is in competition, directly or indirectly, with the business of any member of the Group. If any investment or other business opportunities relating to our business are identified by Skipper Investment Limited (the "Business Opportunities"), it shall refer such Business Opportunities to the Company and shall not seek such Business Opportunities unless the Directors or Board decline the Business Opportunities. For details of the non-competition undertakings, please refer to the Prospectus.

Skipper Investment Limited has provided the Company with the confirmation in writing of compliance of the non-competition undertakings. The independent non-executive Directors have also reviewed the compliance of the undertaking of non-competition (in particular, the right of first refusal relating to any Business Opportunities) by Skipper Investment Limited, and considered that the non-competition undertakings has been complied with for the year ended 31 December 2020.

CONTRACT OF SIGNIFICANCE

During the year ended 31 December 2020, save as disclosed in this annual report, no contract of significance have been entered into between the Company or any of its subsidiaries and the controlling Shareholders or any of its subsidiaries.

PERMITTED INDEMNITY PROVISIONS

In accordance with the Articles of Association, each Director shall be entitled to be indemnified out of the assets of the Company against all losses or liabilities incurred or sustained by him as a Director in defending any proceedings, whether civil or criminal, in which judgment is given in his favour, or in which he is acquitted. The Company has arranged appropriate insurance cover in respect of legal action against the Directors.

DONATIONS

During the year ended 31 December 2020, charitable and other donations made by the Group was approximately RMB1 million (2019: RMB3 million).

COMPLIANCE WITH CORPORATE GOVERNANCE PRACTICES

For details, please refer to the Corporate Governance Report in this annual report.

PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors, the Directors confirmed that for anytime for the year ended 31 December 2020 and up to the latest practicable date (being 16 April 2021) prior to the issue of this annual report, at least 25% of the total issued share capital (the minimum public float percentage required by the Stock Exchange and the Listing Rules) of the Company was held by the public.

DIRECTORS' REPORT

TAX RELIEF AND EXEMPTION

The Directors are not aware of any tax relief and exemption available to the shareholders by reason of their holding of the Company's securities.

MATERIAL LEGAL PROCEEDINGS AND COMPLIANCE

For the year ended 31 December 2020 and up to the date of this report, to the knowledge of Directors, the Group has complied with applicable laws and regulations in all material respects, and there are no material legal proceedings or claims which are pending or threatened against the Company.

AUDIT COMMITTEE

The Audit Committee had, together with the management and the auditor of the Company, KPMG reviewed the accounting standards and practices adopted by the Group, and discussed internal control and financial reporting matters, including the review of the audited consolidated financial statements for the financial year ended 31 December 2020.

AUDITORS

Deloitte Touche Tohmatsu has retired as the auditor of the Company at the conclusion of the 2020 AGM. Approved by the 2020 AGM, KPMG was appointed as the auditor to review the consolidated financial statements prepared in accordance with Hong Kong Financial Reporting Standards for the year ended 31 December 2020, and hold office until the conclusion of the next AGM of the Company. KPMG shall retire and, being eligible, have offered themselves for re-appointment as the auditors of the Company at the forthcoming AGM. A resolution for the re-appointment of KPMG as the auditors of the Company is to be proposed at the forthcoming AGM. KPMG has audited the accompanying consolidated financial statements prepared based on the Hong Kong Financial Reporting Standards.

A resolution will be proposed at the forthcoming annual general meeting of the Company for the approval to appoint KPMG as the auditor of the Company for the year ending 31 December 2021.

By order of the Board of Directors

TIAN Suning

Chairman and Executive Director

CORPORATE GOVERNANCE REPORT

The Board is pleased to present the corporate governance report set out in this annual report for the year ended 31 December 2020.

CORPORATE GOVERNANCE PRACTICES

The Company strives to maintain high standards of corporate governance in order to safeguard the interests of its Shareholders and enhance the corporate value and accountability. The Company has adopted the principles of the CG Code as set out in Appendix 14 to the Listing Rules as its own code of corporate governance. The Company has applied the principles of the CG Code on the Company's corporate governance structure and operation in the manner as stated in the report, and has complied with all applicable code provisions of the CG Code for the year ended 31 December 2020. We will continue reviewing and overseeing the corporate governance practices to ensure its compliance with the CG Code.

RESPONSIBILITY OF THE BOARD

The Board is responsible for the overall leadership of the Group and oversees the strategic decisions and monitors business and performance of the Group. The Board has delegated the authority and responsibility for day-to-day management and operation of the Group to the senior management of the Group. To oversee particular aspects of the Company's affairs, the Board has established four Board Committees including the Audit Committee, the Nomination Committee, the Remuneration Committee and the Strategy and Investment Committee. The Board has delegated to the Board Committees responsibilities as set out in their respective terms of reference.

All Directors shall ensure that they carry out duties in good faith, in compliance with applicable laws and regulations, and in the interests of the Company and the Shareholders at all times.

The Company has maintained appropriate liability insurance for legal proceedings against Directors and will review the coverage of the insurance annually.

COMPOSITION OF THE BOARD

As at the date of this annual report, the Board comprises 12 Directors, which includes 3 executive Directors, 5 non-executive Directors and 4 independent non-executive Directors. The current members of the Board are set out as follows:

Name	Position
TIAN Suning	Executive Director (<i>Chairman</i>)
DING Jian	Executive Director
GAO Nianshu	Executive Director (<i>Chief Executive Officer</i>)
ZHANG Yichen	Non-executive Director
XIN Yuesheng	Non-executive Director
ZHANG Liyang	Non-executive Director
YANG Lin	Non-executive Director
LIU Hong	Non-executive Director
GAO Jack Qunyao	Independent non-executive Director
ZHANG Ya-Qin	Independent non-executive Director
GE Ming	Independent non-executive Director
TAO Ping	Independent non-executive Director

The biographies of the Directors are set out in the "Profiles of Directors and Senior Management" section in this annual report.

CORPORATE GOVERNANCE REPORT

During the year ended 31 December 2020 up to the date of this report, the Board has complied with requirements of Rule 3.10(1) and 3.10(2) of the Listing Rules in relation to the appointment of at least three independent non-executive Directors with at least one of them possessing appropriate professional qualifications or accounting or related financial management expertise at any time.

The Company has also complied with the requirement of Rule 3.10A of the Listing Rules in relation to appointing independent non-executive Directors as equivalent to one-third members of the Board. Each of independent non-executive Directors has confirmed its independence under Rule 3.13 of the Listing Rules for the year ended 31 December 2020. Therefore, the Company regarded them as independent parties.

Save as disclosed in biographies of the Directors set out in the section headed "Profiles of Directors and Senior Management" in this annual report, none of the Directors has any personal relationship (including financial, business, family or other material/relevant relationship) with any other Directors or chief executives.

We are committed to promoting the culture of diversity in the Company. We have strived to promote diversity to the extent practicable by taking into consideration a number of factors in our corporate governance structure. We have adopted the Board diversity policy which sets out the objective and approach to achieve and maintain diversity of our Board in order to enhance the effectiveness of our Board. Pursuant to the Board diversity policy, we seek to achieve Board diversity through the consideration of a number of factors, including but not limited to professional experience, skills, knowledge, gender, age, cultural and education background, ethnicity and length of service. Our Directors have a balanced mix of knowledge and skills, including knowledge and experience in the areas of business management, telecommunications, information technology, software solutions, finance, investment, auditing and accounting. They obtained degrees in various majors including business administration, natural resource management, library science, engineering, computer science, telecommunications, economics and accounting. Furthermore, our Board has a wide range of age, ranging from 35 years old to 70 years old. We have also taken, and will continue to take steps to promote gender diversity at all levels of our Company, including but without limitation at the Board and the management levels. In particular, two out of five of the existing senior management of our Company are female and, our company secretary is female. In order to effectively implement the diversity policy of the Board, the Company appointed three new Directors in September 2020, two of whom are female. While we recognise that the gender diversity at the Board level has been improved given its former composition of all-male Directors, we will continue to apply the principle of appointments based on merits with reference to our diversity policy as a whole.

We are also committed to adopting similar approach to promote diversity of the management (including but not limited to the senior management) of the Company to enhance the effectiveness of our corporate governance as a whole. All Directors, including independent non-executive Directors, have brought a variety of valuable business experience, knowledge and professional skills to the Board for its efficient and effective running. Independent non-executive Directors are invited to serve on the Board Committees like the Audit Committee, the Remuneration Committee and the Nomination Committee.

As regards the CG Code provision requiring Directors to disclose the number and nature of positions held in listed companies or organizations and other significant commitments as well as their identity and the time involved to the issuer, the Directors have agreed to disclose their commitments to the Company in a timely manner.

CORPORATE GOVERNANCE REPORT

INDUCTION AND CONTINUOUS PROFESSIONAL DEVELOPMENT

Each newly appointed Director is provided with necessary induction training and information to ensure that he has a proper understanding of the Company's operations and businesses as well as his responsibilities under relevant statutes, laws, rules and regulations. The Company will also arrange regular seminars to provide Directors with updates on latest development and changes in the Listing Rules and other relevant legal and regulatory requirements from time to time. The Directors are also provided with regular updates on the Group's performance, position and prospects to enable the Board as a whole and each Director to discharge their duties.

All Directors are encouraged to participate in continuous professional development to develop and refresh their knowledge and skills, ensuring that their contribution to the Board consistently remains well informed and thoroughly relevant. The company secretary of the Company has from time to time updated and provided written training materials relating to the roles, functions and duties of a Director.

All Directors have complied with code provision A.6.5 of the CG Code in relation to the training of Directors. During the year ended 31 December 2020, the Company has provided all Directors with training, including Directors' responsibilities, Listing Rules and corporate governance matters, and has provided executive Directors and management with internal training in relation to the Company.

A summary of training received by the Directors for the year ended 31 December 2020 is as follows:

Name of Directors	Nature of Continuous Professional Development Training ^{Note}
<i>Executive Director</i>	
TIAN Suning	A, B
DING Jian	A, B
GAO Nianshu	A, B
<i>Non-executive Director</i>	
ZHANG Yichen	A, B
XIN Yuesheng	A, B
ZHANG Liyang	A, B
YANG Lin	A, B
LIU Hong	A, B
<i>Independent non-executive Director</i>	
GAO Jack Qunyao	A, B
ZHANG Ya-Qin	A, B
GE Ming	A, B
TAO Ping	A, B

CORPORATE GOVERNANCE REPORT

Notes:

- A: Attending seminars and/or conferences and/or forums and/or briefings, or making speeches on seminars and/or conferences and/or forums, or participating in trainings provided by law firms that are relating to the business of the Company
- B : Reading materials on various topics, including corporate governance matters, Directors' responsibilities, Listing Rules and other relevant laws

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Under code provision A.2.1 of the CG Code, the roles of chairman of the Board and Chief Executive Officer should be separated and performed by different individuals. The chairman of the Board and the Chief Executive Officer are separately held by Dr. TIAN Suning and Mr. GAO Nianshu, respectively, with clear distinction in responsibilities. The chairman of the Board is responsible for providing strategic advice and guidance on the development of the Group, while the Chief Executive Officer is responsible for the day-to-day operations of the Group.

APPOINTMENT AND RE-ELECTION OF DIRECTORS

Each of the non-executive Directors, being Mr. YANG Lin and Ms. LIU Hong, and the independent non-executive Director, being Ms. TAO Ping, has entered into a letter of appointment with the Company for a term of one year commencing from 2 September 2020. Each of the other non-executive Directors and the independent non-executive Directors, has entered into a letter of appointment with the Company for a term of one year commencing from 30 December 2020. Pursuant to the requirement of the Articles of Association, the Board shall have the power from time to time and at any time to appoint any person as a Director either to fill a casual vacancy or as an addition to the existing Board. Any Director appointed by the Board to fill a casual vacancy or as an addition to the existing Board shall hold office only until the next following general meeting of the Company and shall then be eligible for re-election at the relevant meetings.

No Director has entered into any service contract with the Company which is not determinable by the Company within one year without payment of compensation (other than statutory compensation). The Company may from time to time by resolution of members increase or reduce the number of Directors, provided that the number of Directors shall not be less than two (2). Subject to the provisions of the Articles of Association and requirements under the statutes, the Company may by resolution of members elect any person to be a Director either to fill a casual vacancy or as an addition to the existing Directors. Any Director appointed to fill a casual vacancy or as an addition to the existing Board shall hold office only until the next following general meeting of the Company, and in each case such Director shall then be eligible for re-election at the relevant meeting.

No person shall, unless recommended by the Board, be eligible for election to the office of Director at any general meeting unless during the period, which shall be at least seven (7) days, commencing no earlier than the day after the despatch of the notice of the meeting appointed for such election and ending no later than seven (7) days prior to the date of such meeting, there has been given to the secretary of the Company notice in writing by a member (not being the person to be proposed), entitled to attend and vote at the meeting for which such notice is given, of his intention to propose such person for election and also notice in writing signed by the person to be proposed of his willingness to be elected.

The procedures and process of appointment, re-election and removal of Directors are set out in the Articles of Association. The Nomination Committee is responsible for reviewing the Board composition and making recommendations to the Board on the appointment and re-election of Directors and succession planning for Directors.

CORPORATE GOVERNANCE REPORT

BOARD MEETINGS

The Company will adopt the practice of holding Board meetings regularly, at least four times a year, and at approximately quarterly intervals. Notices of not less than fourteen days are given for regular Board meetings to provide all Directors with an opportunity to attend the regular meeting and discuss matters in the agenda therein.

For other Board and Board Committee meetings, reasonable notice will be given by the Company. Notices of meetings, which include the agenda and accompanying Board papers are dispatched to the Directors at least three days before the Board and Board Committee meetings to ensure that they have sufficient time to review the accompanying documents and be adequately prepared for the meetings. When Directors or Board Committee members are unable to attend a meeting, they will be advised of the matters to be discussed and given an opportunity to make their views known to the chairman prior to the meeting. The company secretary of the Company will keep the minutes of meetings and provide copies of such minutes to all Directors for reference and record purposes.

Minutes of the Board meetings and Board Committee meetings will record in sufficient detail the matters considered by the Board and the Board Committees and the decisions reached, including any concerns raised by the Directors. Draft minutes of each Board meeting and Board Committee meeting are sent/will be sent to the Directors for their consideration within a reasonable time after convening the meetings. The minutes of the Board meetings are open for inspection by all Directors.

The Board held 6 meetings in 2020. The attendance of each Director at the Board meetings, Board Committees meetings, annual general meeting and extraordinary general meeting (whether in person or electronically) is detailed in the table below:

Name of Directors	Attendance/Number of Board Meetings, Board Committee Meetings, Annual General Meeting and Extraordinary General Meeting						
	Board Meeting	Audit Committee	Nomination Committee	Remuneration Committee	Strategy and Investment Committee	Annual General Meeting	Extraordinary General Meeting
<i>Executive Director</i>							
Dr. TIAN Suning	6/6	—	1/1	—	1/1	1/1	1/1
Mr. DING Jian	3/6	—	—	—	1/1	1/1	0/1
Mr. GAO Nianshu	6/6	—	1/1	—	1/1	1/1	1/1
<i>Non-executive Director</i>							
Mr. ZHANG Yichen	6/6	—	—	—	—	1/1	0/1
Mr. XIN Yuesheng	6/6	—	—	1/1	1/1	1/1	1/1
Mr. ZHANG Liyang	6/6	4/4	—	—	—	1/1	1/1
Mr. YANG Lin*	1/6	—	—	—	—	0/1	0/1
Ms. LIU Hong*	0/6	—	0/1	—	0/1	0/1	0/1
<i>Independent non-executive Director</i>							
Dr. GAO Jack Qunyao	6/6	—	1/1	1/1	—	1/1	1/1
Dr. ZHANG Ya-Qin	6/6	4/4	1/1	1/1	—	1/1	0/1
Mr. GE Ming	6/6	4/4	1/1	—	—	1/1	1/1
Ms. TAO Ping*	1/6	0/4	0/1	—	—	0/1	0/1

* Appointed on 2 September 2020

CORPORATE GOVERNANCE REPORT

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted the Model Code as its own code of conduct regarding Directors' securities transactions. Specific enquiry has been made to all the Directors by the Company and each of the Directors has confirmed that he/she has complied with the requirements under Model Code for the year ended 31 December 2020.

For the year ended 31 December 2020, the Company also adopted its own code of conduct regarding employees' securities transactions on terms no less exacting than the standard set out in the Model Code for the compliance by its relevant employees who are likely to be in possession of unpublished inside information of the Company in respect of their dealings in the Company's securities.

DELEGATION BY THE BOARD

The Board reserves for its decision on all major matters of the Company, including: approval and monitoring of all policy matters, overall strategies and budgets, internal control and risk management systems, material transactions (in particular those that may involve conflict of interests), financial data, appointment of Directors and other significant financial and operational matters. Directors could have recourse to seek independent professional advice in performing their duties at the Company's expense. Directors are encouraged to access and to consult with the Company's senior management independently.

The daily management, administration and operation of the Group are delegated to the senior management. The delegated functions and responsibilities are periodically reviewed by the Board. Approval has to be obtained from the Board prior to any significant transactions entered into by the management.

CORPORATE GOVERNANCE FUNCTION

The Board recognises that corporate governance should be the collective responsibility of Directors and their corporate governance duties, which include:

- (a) to review and monitor the Company's policies and practices in compliance with legal and regulatory requirements;
- (b) to review and monitor the training and continuous professional development of Directors and senior management;
- (c) to develop, review and monitor the code of conduct and compliance manual applicable to employees and Directors;
- (d) to develop and review the Company's policies and practices on corporate governance and to make recommendations and report to the Board;
- (e) to review the Company's compliance with the CG Code and disclosure in the corporate governance report; and
- (f) to review and monitor the Company's compliance with the Company's whistleblowing policy.

The Board has reviewed and performed the above corporate governance functions in this year.

CORPORATE GOVERNANCE REPORT

BOARD COMMITTEES

Audit Committee

The Audit Committee consists of four members: i.e. three independent non-executive Directors, being Mr. GE Ming (Chairman), Dr. ZHANG Ya-Qin and Ms. TAO Ping, and one non-executive Director, being Mr. ZHANG Liyang, majority of them are independent non-executive Directors.

The primary duties of the Audit Committee include, among other things, the following:

1. to monitor the completeness of the financial statements of the Company and the annual reports and accounts, the half-year reports and (if to be published) the quarterly reports of the Company, and review the material accounting judgments stated in the statements and reports;
2. to review the financial statements and reports and consider any significant or unusual matters raised by the Company's staff responsible for the accounting and financial reporting function, compliance officer or the auditor before submission to the Board; and
3. to review the adequacy and effectiveness of the Company's financial control and reporting systems; internal control system and risk management system and associated procedures, including the adequacy of the resources, staff qualifications and experience, training programs and budget of the Company's accounting and financial reporting function.

The written terms of reference of the Audit Committee are available on the websites of the Stock Exchange and the Company.

Nomination Committee

The Nomination Committee consists of seven members: i.e. two executive Directors, being Dr. TIAN Suning (Chairman) and Mr. GAO Nianshu, four independent non-executive Directors, being Dr. GAO Jack Qunyao, Dr. ZHANG Ya-Qin, Mr. GE Ming and Ms. TAO Ping, and one non-executive Director, being Ms. LIU Hong.

The primary duties of the Nomination Committee include the following:

1. to review the structure, number and composition (including the skills, knowledge and experience) of the Board at least annually and make recommendations on any proposed changes to the Board to complement the Company's strategy;
2. to identify individuals suitably qualified to become Board members and select or make recommendations to the Board on the selection of individuals nominated for directorships;
3. to assess the independence of independent non-executive Directors;
4. to make recommendations to the Board on the appointment or re-appointment of Directors and the succession planning for Directors, in particular the chairman and the chief executive; and
5. to perform missions allocated by the Board from time to time.

The Nomination Committee assesses the candidate or incumbent on criteria such as integrity, experience, skill and ability to commit time and effort to carry out the duties and responsibilities. The recommendations of the Nomination Committee will then be put to the Board for decision.

CORPORATE GOVERNANCE REPORT

Policy for Nomination of Directors

The Company had adopted its policy for nomination of Directors through resolution on 19 December 2018 and the summary is as follows: the Company values the selection process of the Board members with high transparency. The nomination policy aims to ensure that the Board keeps balance on the skills, experience and diversity of views to meet the business needs of the Company. The Nomination Committee has been appointed to identify individuals suitably qualified to become Board members and select or make recommendations to the Board on the selection of individuals nominated for directorships. The Board is ultimately responsible for the selection and appointment of new Directors, and is subject to retirement by rotation and re-election at annual general meetings pursuant to the Articles of Association.

Board Diversity Policy

The Company had adopted the Board Diversity Policy along with setting the measurable targets for implementing this policy on 19 December 2018. The Company is convinced that the diversity of the Board is beneficial to improve the quality of its performance. The policy aims to set out the approach adopted to achieve the diversity of the Board. When setting up composition of the Board, the Company considers the diversity of the Board from various measurable aspects, including skills, experience, knowledge, expertise, culture, independence, age and gender. All appointments to the Board are based on the principle of meritocracy, while considering diversity, including gender diversity. The measurable targets for the implementation of this diversity policy include independence, educational background, professional qualifications and years of employment.

The written terms of reference of the Nomination Committee are available on the websites of the Stock Exchange and the Company.

Remuneration Committee

The Remuneration Committee consists of three members: i.e. two independent non-executive Directors, being Dr. GAO Jack Qunyao (Chairman) and Dr. ZHANG Ya-Qin, and one non-executive Director, being Mr. XIN Yuesheng.

The primary duties of the Remuneration Committee include the following:

1. to make recommendations to the Board on the Company's overall policy and structure for the remuneration of the Directors and senior management and on the establishment of a formal and transparent procedure for developing remuneration policy;
2. to review and approve the management's remuneration proposals with reference to the corporate goals and objectives determined by the Board from time to time;
3. to decide on the remuneration packages of all Directors and senior management, and make recommendations to the Board on the remuneration packages of all non-executive Directors. These, among other things, include benefits in kind, pension rights and compensation payments (including any compensation payable for loss or termination of their office or appointment);
4. to consider salaries paid by comparable companies, time commitment and responsibilities and employment conditions elsewhere in the Group;
5. to review and approve compensation payable to executive Directors and senior management for any loss or termination of office or appointment to ensure that it is consistent with contractual terms and is otherwise fair and not excessive;
6. to review and approve compensation arrangements relating to dismissal or removal of Directors for misconduct to ensure that they are consistent with contractual terms and are otherwise reasonable and appropriate; and

CORPORATE GOVERNANCE REPORT

7. to ensure that no Director or any of his/her associates (as defined in the Listing Rules) is involved in deciding his/her own remuneration.

The written terms of reference of the Remuneration Committee are available on the websites of the Stock Exchange and the Company.

Strategy and Investment Committee

The Strategy and Investment Committee consists of five members: i.e. three executive Directors, being Dr. TIAN Suning, Mr. GAO Nianshu and Mr. DING Jian, and two non-executive Directors, being Mr. XIN Yuesheng (Chairman) and Mr. YANG Lin.

The primary duties of the Strategy and Investment Committee include the following:

1. to conduct research on the long-term strategic planning, annual operational plans, investment policies and major investment and financing projects of the Company and make recommendations, and to monitor and follow up on major investment and financing projects approved by the Shareholders' meeting and the Board and to notify all Directors in a timely manner;
2. with the authorization of the Board, to approve major investment and financing projects with a total transaction amount (in a single transaction or transactions under the same project) of more than RMB20 million but not exceeding RMB50 million, other than ordinary operating loans, credits, privatization loans and income-based transactions in the ordinary course of business. Matters related to the approvals above shall also comply with the relevant requirements of the Listing Rules regarding notifiable transactions;
3. to conduct research on other major matters that may have impacts on the development of the Company and make recommendations to the Board; and
4. other matters stipulated by the terms of reference of the Strategy and Investment Committee and authorised by the Board.

The written terms of reference of the Strategy and Investment Committee are available on the websites of the Stock Exchange and the Company.

DIRECTORS' RESPONSIBILITIES FOR FINANCIAL REPORTING IN RESPECT OF THE CONSOLIDATED FINANCIAL STATEMENTS

The Directors understand and acknowledge their responsibility for preparing the consolidated financial statements for the year ended 31 December 2020 which give a true and fair view of the Group's conditions, results and cash flows.

The management has provided to the Board such explanation and information as are necessary to enable the Board to carry out an informed assessment of the Company's financial statements, which are put to the Board for approval. The Company provides all members of the Board with monthly updates on Company's performance, positions and prospects.

The Directors were not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Group's ability to continue as a going concern. The statement by the auditor regarding their reporting responsibilities on the consolidated financial statements of the Company is set out in the section headed "Independent Auditor's Report" of this annual report.

CORPORATE GOVERNANCE REPORT

REMUNERATION OF DIRECTORS AND SENIOR MANAGEMENT

Our Directors and senior management receive remuneration in the form of salaries, bonuses, contributions to pension schemes, long-term incentives (including share-based remuneration), housing and other allowances and benefits in kind subject to applicable laws, rules and regulations.

The remuneration of the Directors and senior management of the Company (whose biographies are set out in the section headed “Profiles of Directors and Senior Management” of this annual report) for the year ended 31 December 2020 falls under the following bands:

Band of remuneration	Number of individuals
HK\$4,000,000 to HK\$5,000,000	1
HK\$10,000,000 to HK\$15,000,000	2
HK\$55,000,000 to HK\$60,000,000	1
HK\$110,000,000 to HK\$120,000,000	1

REMUNERATION OF AUDITOR

For the year ended 31 December 2020, in respect of audit and non-audit services offered to the Company by the auditor of the Company, KPMG, the remuneration paid or payable by the Group are as follows:

Classification of services	Amount RMB'000
Audit services	
Audit services	4,380
Non-Audit services	
Tax advisory services	368
Services in relation to continuing connected transactions	100
Total	4,848

RISK MANAGEMENT AND INTERNAL CONTROL

The Board acknowledges that it is the responsibility of the Board for maintaining adequate risk management and internal control systems to safeguard Shareholders' investments and the Company's assets and reviewing the effectiveness of such systems. The Board reviews such systems on a semi-annual basis.

The Group's risk management and internal control team plays an important role in monitoring the Group's internal governance. The major duties of internal control team are to regulate and review the Company's financial condition and internal control and conduct comprehensive audits of all branches and subsidiaries of the Company on a semi-annual basis.

With the requirements of the CG Code, the Company has established a “three-level” risk management framework consisting of functional back office, internal audit and external auditor. Internal audit department has released risk management system and continuously monitors the completeness, rationality and effectiveness of the system by identifying and assessing major external and internal risks during risk surveys of the headquarters and business units. Effective procedures on internal control deficiencies were implemented to enhance the risk control and prevention ability.

CORPORATE GOVERNANCE REPORT

The Company has now established a complete and effective internal control system in which corporate management and business operations are controlled and supervised systematically. Now the scope of evaluation of the Company comprises internal environment, risk assessment, control activities, information and communication and internal supervision; major business within the scope of the evaluation are sales, costs, funding, finance, procurement, investment and related transactions. Meanwhile, the independent evaluation of the design of internal control and the efficiency and effectiveness of implementation is conducted by ways of risk inspection, internal audits, supervisors' inspection, etc in an effort to ensure legal and compliant operations, asset safety, and the authenticity and completeness of financial reports and relevant information.

The Company has formulated and complemented Asiainfo Inside Information and Insider Dealing Management System which stipulates the inside information scope, inside information insider scope, prescribes registration requirements for the insider before the disclosure of inside information and stipulates that insiders should not deal with the securities of the Company or should report his securities transactions.

The Board has reviewed risk management and internal control systems of the Group for the year ended 31 December 2020 and believes that such systems are effective and adequate.

RESPONSE TO MAJOR RISKS

In 2020, the Group conducted an annual risk review and assessment of the Company as a whole based on the corporate risk management framework, and formulated coping and monitoring measures for major risks so as to prevent or reduce possible occurrence of major risks in the Company.

The Company saw a rapid development in the results of operations in 2020. We derived a significant portion of our revenue from telecom operators in China, which depended on our ability to develop and maintain longstanding business relationships with telecom operators in China. Our close relationships with clients might be impaired if we failed to offer software products and services required by telecom operators or if telecom operators turned to our competitors instead for the purpose of sourcing software products and services. We owed our success of business to the continuing efforts made by our core management and technical personnel, and our business might be affected to a certain extent if we lost their services or they competed against us.

In order to cope with its potential operational risks and ensure its continuous and long-term development, the Company increased its input to business support, 5G intelligent network, data-driven operation, big data and AI products. Additionally, the Company also actively participated in the transformation and upgrading of telecom operators by supporting the R&D of various large-scale IT projects, further consolidating our leading position in the telecom software and service market. Moreover, we strengthened the management of core management and technical personnel, designed career development channels for talents, and simultaneously improved the incentive mechanism and continued to reinforce staff training; in the hope of offering and ensuring talents reserve for the Company's sustainable development.

COMPANY SECRETARY

The Company engages Ms. YU Wing Sze (余詠詩) from an external service provider as the company secretary. Ms. YU is the primary corporate contact person of the external service provider whose primary corporate contact person at the Company is Mr. ZHAO Yan, the senior office director of the Board office.

For the year ended 31 December 2020, Ms. YU has undertaken not less than 15 hours of relevant professional training in compliance with Rule 3.29 of the Listing Rules.

CORPORATE GOVERNANCE REPORT

SHAREHOLDERS' RIGHTS

To safeguard Shareholders' interests and rights, a separate resolution will be proposed for each issue at general meetings, including the election of individual Directors.

All resolutions put forward at general meetings will be voted by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and the Stock Exchange in a timely manner after each general meeting.

PROCEDURES FOR CONVENING OF EXTRAORDINARY GENERAL MEETING AND PUTTING FORWARD PROPOSALS/RESOLUTIONS

Pursuant to Article 10.3 of the Articles of Association, on the requisition of the Shareholders at the date of deposit of the requisition holding not less than one-tenth of the paid-up share capital of the Company at the principal place of business of the Company in Hong Kong having the right to vote at general meetings, the Directors are obliged to proceed to convene an extraordinary general meeting of the Company. The requisitionists must state the purposes of the meeting and sign the requisition letter. If the Board does not within 21 days from the date of deposit of the requisition proceed duly to convene the meeting to be held within a further 21 days, the requisitionist(s) themselves or any of them representing more than one-half of the total voting rights of all of them, may convene the general meeting in the same manner, as nearly as possible, as that in which meetings may be convened by the Board, provided that any meeting so convened shall not be held after the expiration of three (3) months from the date of deposit of the requisition, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to them by the Company. The Shareholders who wish to put forward proposals and/or resolutions may requisition an extraordinary general meeting and include a proposal and/or resolution at such meeting pursuant to Article 10.3 of the Articles of Association.

COMMUNICATION WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company considers that effective communication with Shareholders is essential for enhancing investor relations and understanding of the Group's business, performance and strategies. The Company also recognises the importance of timely and non-selective disclosure of its information, which will enable Shareholders and investors to make the informed investment decisions. The Company establishes an investor relations department and liaison mailbox (ir@asiainfo.com), which is responsible for providing Shareholders and investors with the necessary information. It maintains proactive communications with Shareholders, investors and other capital market participants, which enable Shareholders and investors to fully understand the Company's operation and development, by various means such as participating in domestic and foreign investor exchanges, performance conferences, press conferences, telephone conferences and investment analysts meetings.

The annual general meeting of the Company provides opportunity for Shareholders to communicate directly with the Directors. The chairman of the Company and the chairman of each of the Board Committees or their authorised representative will attend the annual general meetings to answer Shareholders' questions. The auditor will also attend the annual general meetings to answer questions about the conduct of the audit, the preparation and content of the auditor's report, the accounting policies and auditor independence. Any E-mail from our Shareholders to the aforesaid liaison mailbox to query the Board are also welcome.

To promote effective communication, the Company adopts a Shareholders' communication policy which aims at establishing a two-way relationship and communication between the Company and the Shareholders and maintains a website at www.asiainfo.com, where up-to-date information on the Company's business operations and developments, financial information, corporate governance practices and other information are available for public access.

CHANGE IN CONSTITUTIONAL DOCUMENTS

The Company made no amendment to the Articles of Association for the year ended 31 December 2020.

INDEPENDENT AUDITOR'S REPORT



TO THE SHAREHOLDERS OF ASIAINFO TECHNOLOGIES LIMITED

(Incorporated in the British Virgin Islands with limited liability)

OPINION

We have audited the consolidated financial statements of AsiaInfo Technologies Limited (the “**Company**”) and its subsidiaries (collectively referred to as the “**Group**”) set out on pages 119 to 218, which comprise the consolidated statement of financial position as at 31 December 2020, and the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2020, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards (“**HKFRSs**”) issued by the Hong Kong Institute of Certified Public Accountants (“**HKICPA**”) and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing (“**HKSA**s”) issued by the HKICPA. Our responsibilities under those standards are further described in the *Auditor’s Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Group in accordance with the HKICPA’s Code of Ethics for Professional Accountants (“**the Code**”) together with any ethical requirements that are relevant to our audit of the consolidated financial statements in the British Virgin Islands, and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

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

INDEPENDENT AUDITOR'S REPORT

KEY AUDIT MATTERS (Continued)

Revenue: Recognition of revenue from software products and related services

Refer to Note 3 to the consolidated financial statements and the accounting policies in Note 1(v).

The Key Audit Matter	How the matter was addressed in our audit
<p>A significant portion of the Group's revenue comes from the provision of software products and related services, which is recognised over time based on the stage of completion of a contract by reference to the proportion of the costs incurred relative to the estimated total costs to completion.</p> <p>Significant management judgement is required in estimating total contract costs throughout the contract period. Key assumptions include total estimated labour hours to complete the contract, labour rate, subcontracting costs, material costs and other related expenses.</p> <p>We identified revenue recognition of software product and related services as a key audit matter due to the involvement of significant management judgement in estimating total contract costs of each contract.</p>	<p>Our audit procedures on revenue recognised over time based on the stage of completion of the contract included the following:</p> <ul style="list-style-type: none"> • Assessing the design, implementation and operating effectiveness of the Group's key internal controls over revenue recognition of software business, with the assistance of our internal information technology specialist; • Agreeing the costs incurred to date and the total contract sum to expense invoices and the signed contracts and tracing the estimated total costs to the approved project budgets on a sample basis; • Assessing the mathematical accuracy of management's calculation of the percentage of completion and the relevant revenue recognised; • Inspecting, on a sample basis, the completion reports or other evidence for projects completed in the current year; • Comparing, on a sample basis, the actual costs incurred for completed contracts to the estimation of total costs, identifying any significant variance and inquiring with management for the reason; and • Evaluating the reasonableness of the disclosures with reference to the prevailing accounting standards.

INDEPENDENT AUDITOR'S REPORT

KEY AUDIT MATTERS (Continued)

Goodwill: Impairment of goodwill

Refer to Note 15 to the consolidated financial statements and the accounting policies in Note 1(f).

The Key Audit Matter	How the matter was addressed in our audit
<p>The Group recorded goodwill in software business amounting to RMB1,932,246,000 as at 31 December 2020. No impairment loss was recognised for the year ended 31 December 2020.</p> <p>Impairment of goodwill is assessed annually by management by comparing the recoverable amount and carrying amount of the relevant cash-generating unit at the end of the reporting period. Management engaged an external valuer to assess the recoverable amount based on the value in use method, which involved significant assumptions such as discount rate and the forecasts of future revenue growth rates and gross margins used in the estimated future cash flow.</p> <p>We identified impairment of goodwill as a key audit matter because of the magnitude of the carrying amount of goodwill and the impairment assessments prepared by management contain certain judgments which could be subject to management bias in their selection.</p>	<p>Our audit procedures on management's impairment assessment of goodwill included the following:</p> <ul style="list-style-type: none"> • Assessing the design, implementation and operating effectiveness of the Group's key control over the management's impairment assessment on goodwill; • Evaluating the competence, experience, capability and objectivity of the external valuer engaged by management to perform the calculation of the recoverable amounts; • Checking the mathematical accuracy of the calculation of the recoverable amount included in the valuation prepared by the external valuer; • With the assistance of our internal valuation specialist, assessing the appropriateness of the methodology adopted in determining the recoverable amount and evaluating the discount rate used in the discounted cash flow model by comparing with the industry practice; • Evaluating the key assumptions used in the estimated future cash flow, including forecasts of future revenue growth rates and gross margins, by comparing with historical performance and forecast approved by management; • Obtaining from management sensitivity analyses for key assumptions adopted in the discounted cashflow forecasts and assessing the impact of changes in the key assumptions on the conclusions reached in the impairment assessments and whether there was any indication of management bias; • Comparing forecast revenue, forecast cost of sales, forecast other operating expenses and forecasts working capital included in the discounted cash flow forecasts prepared in the prior year with the current year's performance to assess how accurate the prior year's cash flow forecasts were and making enquiries of management as to the reasons for any significant variations identified and whether there was any indication of management bias; and • Assessing the reasonableness of the disclosures in the consolidated financial statements of the assumptions in the impairment assessments of goodwill with reference to the requirements of the prevailing accounting standards.

INDEPENDENT AUDITOR'S REPORT

INFORMATION OTHER THAN THE CONSOLIDATED FINANCIAL STATEMENTS AND AUDITOR'S REPORT THEREON

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

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

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

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

RESPONSIBILITIES OF DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

The directors are assisted by the Audit Committee in discharging their responsibilities for overseeing the Group's financial reporting process.

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

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. This report is made solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with HKSA's will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

INDEPENDENT AUDITOR'S REPORT

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

As part of an audit in accordance with HKSA's, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

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

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

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

INDEPENDENT AUDITOR'S REPORT

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

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

The engagement partner on the audit resulting in this independent auditor's report is Chan Siu Tung.

KPMG

Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central, Hong Kong
23 March 2021

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

	Note	2020 RMB'000	2019 RMB'000
Revenue	3	6,019,855	5,721,416
Cost of sales		(3,716,620)	(3,594,411)
Gross profit		2,303,235	2,127,005
Other income	4	143,289	103,759
Impairment losses under expected credit loss model, net of reversal		(35,051)	(28,366)
Other gains and losses	5	15,956	(736)
Selling and marketing expenses		(472,786)	(461,997)
Administrative expenses		(321,442)	(292,586)
Research and development expenses		(840,225)	(862,419)
Share of results of associates		(1,567)	(3,983)
Impairment losses on associates	16	(6,410)	—
Finance costs	6	(20,672)	(39,907)
Profit before tax		764,327	540,770
Income tax expenses	7	(102,224)	(131,955)
Profit for the year	8	662,103	408,815
Other comprehensive income for the year		—	—
Total comprehensive income for the year		662,103	408,815
Profit for the year/total comprehensive income for the year attributable to:			
Equity holders of the Company		662,103	408,815
Earnings per Share			
—Basic (RMB)	10	0.85	0.56
—Diluted (RMB)	10	0.84	0.56

The notes on pages 125 to 218 form part of these financial statements. Details of dividends payable to equity holders of the Company attributable to the profit for the year are set out in note 9.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

	Note	31 December 2020 RMB'000	31 December 2019 RMB'000
Non-current assets			
Property, plant and equipment	12	293,224	288,261
Right-of-use assets	13	257,534	169,465
Intangible assets	14	3,818	7,708
Goodwill	15	1,932,246	1,932,246
Investments in associates	16	—	51,033
Deferred tax assets	26	133,111	135,766
Pledged bank deposits	22	8,737	28,612
Term deposits	22	240,000	170,000
Other non-current assets		17,088	39,641
		2,885,758	2,822,732
Current assets			
Inventories		392	304
Trade and notes receivables	17	941,957	841,182
Prepayments, deposits and other receivables	18	114,386	183,706
Contract assets	19	1,722,485	1,554,521
Financial assets at fair value through profit or loss ("FVTPL")	20	1,103,800	—
Amounts due from related parties	34	10,233	6,358
Pledged bank deposits	22	263,067	321,246
Term deposits	22	140,923	—
Bank balances and cash	22	1,690,151	1,810,591
		5,987,394	4,717,908
Current liabilities			
Trade and notes payables	23	149,454	358,048
Contract liabilities	19	393,371	296,945
Other payables, deposits received and accrued expenses	24	2,063,218	1,922,837
Amounts due to related parties	34	9,154	18,092
Income tax payable		278,420	244,573
Bank borrowings	25	137,023	594,372
Lease liabilities	13	46,201	36,213
		3,076,841	3,471,080
Net current assets		2,910,553	1,246,828

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

As at 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

	Note	31 December 2020 RMB'000	31 December 2019 RMB'000
Total assets less current liabilities		5,796,311	4,069,560
Non-current liabilities			
Deferred tax liabilities	26	123,205	122,983
Lease liabilities	13	117,658	39,374
		240,863	162,357
Net assets		5,555,448	3,907,203
Capital and reserves			
Share capital	28	—	—
Reserves		5,555,448	3,907,203
Total equity		5,555,448	3,907,203

The consolidated financial statements on pages 119 to 218 were approved and authorised for issue by the Board of Directors on 23 March 2021 and are signed on its behalf by:

Mr. Suning Tian
DIRECTOR

Mr. Nianshu Gao
DIRECTOR

The notes on pages 125 to 218 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

	Attributable to equity holders of the Company							
	Share capital RMB'000	Share premium RMB'000	Merger reserve RMB'000	Translation reserve RMB'000	Statutory surplus reserve RMB'000 (note i)	Other reserves RMB'000	Retained profits RMB'000	Total RMB'000
At 1 January 2019	—	897,214	285,200	(15,129)	174,425	1,390,128	503,792	3,235,630
Profit for the year and total comprehensive income for the year	—	—	—	—	—	—	408,815	408,815
Recognition of equity-settled share-based payments (Note 32)	—	—	—	—	—	233,648	—	233,648
Lapse of share options and restricted stock units	—	—	—	—	—	(6,298)	6,298	—
Issue of new shares upon exercise of the over-allotment option (Note 28)	—	27,162	—	—	—	—	—	27,162
Share issuance costs	—	(681)	—	—	—	—	—	(681)
Vesting of restricted stock units (Note 32)	—	69,362	—	—	—	(69,362)	—	—
Exercise of share options (Note 32)	—	4,897	—	—	—	(2,268)	—	2,629
Transfer to statutory surplus reserve	—	—	—	—	1,822	—	(1,822)	—
Changes in equity for the year	—	100,740	—	—	1,822	155,720	4,476	262,758
At 31 December 2019	—	997,954	285,200	(15,129)	176,247	1,545,848	917,083	3,907,203
Profit for the year and total comprehensive income for the year	—	—	—	—	—	—	662,103	662,103
Issue of new shares upon the contribution from shareholders (Note 28)	—	1,222,099	—	—	—	—	—	1,222,099
Recognition of equity-settled share-based payments (Note 32)	—	—	—	—	—	267,642	—	267,642
Lapse of share options and restricted stock units	—	—	—	—	—	(11,833)	11,833	—
Dividends approved in respect of the previous year (Note 9)	—	—	—	—	—	—	(168,936)	(168,936)
Purchase of Shares for share award scheme (Note 29)	—	(364,284)	—	—	—	—	—	(364,284)
Vesting of restricted stock units (Note 32)	—	215,886	—	—	—	(215,886)	—	—
Exercise of share options (Note 32)	—	43,972	—	—	—	(14,351)	—	29,621
Transfer to statutory surplus reserve	—	—	—	—	4,562	—	(4,562)	—
Changes in equity for the year	—	1,117,673	—	—	4,562	25,572	(161,665)	986,142
At 31 December 2020	—	2,115,627	285,200	(15,129)	180,809	1,571,420	1,417,521	5,555,448

Notes:

- (i) In accordance with the Articles of Association of all subsidiaries established in the People's Republic of China (the "PRC"), the PRC subsidiaries are required to set aside 10% of their profit after tax as per statutory financial statements determined under the PRC laws and regulations for the statutory surplus reserve fund until the reserve reaches 50% of their registered capital. Transfer to this reserve must be made before distributing dividends to equity owners of the subsidiaries. The statutory surplus reserve can be used to make up previous years' losses, expand the existing operations or convert into additional capital of the respective subsidiaries.

The notes on pages 125 to 218 form part of these financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2020
 (Expressed in thousands of Renminbi, unless otherwise stated)

	2020 RMB'000	2019 RMB'000
OPERATING ACTIVITIES		
Profit before tax	764,327	540,770
Adjustments for:		
Depreciation of property, plant and equipment	32,581	32,034
Depreciation of right-of-use assets	64,449	39,394
Amortisation of intangible assets	7,428	18,199
Gain on disposal of property, plant and equipment	(1,194)	(337)
Gain on disposal of investments in associates	(6,944)	—
Finance costs	20,672	39,907
Net foreign exchange loss	841	3,570
Interest income from term deposits	(5,612)	(4,625)
Bank interest income	(23,331)	(24,533)
Net gains on disposal of financial assets	(23,104)	(4,774)
Changes in fair value of financial assets at FVTPL	(7,400)	—
Impairment loss on associates	6,410	—
Allowance for trade receivables, net of reversal	29,621	8,841
Net reversal of allowance for other receivables	(432)	(4)
Allowance for contract assets, net of reversal	5,862	19,529
Share-based compensation expenses	267,642	233,648
Share of results of associates	1,567	3,983
Operating cash flows before movements in working capital	1,133,383	905,602
Increase in inventories	(88)	(304)
Increase in trade and notes receivables	(130,396)	(85,290)
Decrease/(increase) in prepayments, deposits and other receivables	118,024	(62,931)
Increase in contract assets	(173,826)	(238,831)
(Increase)/decrease in amounts due from related parties	(3,875)	12,576
Decrease/(increase) in other non-current assets	22,553	(4,616)
Decrease in amounts due to related parties	(8,938)	(29,236)
(Decrease)/increase in trade and notes payables	(208,594)	1,732
Increase/(decrease) in contract liabilities	96,426	(3,973)
(Decrease)/increase in other payables, deposits received and accrued expenses	(68,744)	142,270
Cash generated from operating activities	775,925	636,999
Income taxes paid	(65,500)	(90,694)
NET CASH GENERATED FROM OPERATING ACTIVITIES	710,425	546,305

The notes on pages 125 to 218 form part of these financial statements.

CONSOLIDATED STATEMENT OF CASH FLOWS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

	2020 RMB'000	2019 RMB'000
INVESTING ACTIVITIES		
Purchases of property, plant and equipment	(39,352)	(23,064)
Purchases of intangible assets	(3,538)	(1,886)
Payments for right-of-use assets	—	(7,499)
Purchases of financial assets at fair value through profit or loss	(2,292,156)	(84,000)
Net cash outflows on acquisition of a subsidiary	—	(584)
Proceeds on disposal of financial assets at fair value through profit or loss	1,417,585	298,774
Proceeds on disposal of property, plant and equipment	4,870	738
Proceeds on disposal of investment in associates	20,000	—
Placement of pledged bank deposits	(516,051)	(449,295)
Withdrawal of pledged bank deposits	594,105	1,216,801
Placement of term deposits	(533,488)	(170,000)
Withdrawal of term deposits	317,062	—
Interest received	19,106	42,482
NET CASH (USED IN)/GENERATED FROM INVESTING ACTIVITIES	(1,011,857)	822,467
FINANCING ACTIVITIES		
Repayment of bank borrowings	(1,360,914)	(1,310,122)
New bank borrowings raised	931,647	—
Capital element of lease rentals paid	(67,328)	(40,150)
Interest element of lease rentals paid	(7,038)	(2,514)
Proceeds from issue of shares	1,222,099	27,162
Share issuance costs	—	(3,010)
Proceeds from issue of ordinary shares under share option schemes	29,011	1,420
Purchase of Shares for share award scheme	(364,284)	—
Borrowing interest paid	(13,622)	(38,504)
Other cash flows arising from financial activities	(3,576)	—
Dividend paid	(167,455)	—
NET CASH GENERATED FROM/(USED IN) FINANCING ACTIVITIES	198,540	(1,365,718)
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(102,892)	3,054
CASH AND CASH EQUIVALENTS AT 1 JANUARY	1,810,591	1,821,182
Effect of exchange rate changes	(17,548)	(13,645)
CASH AND CASH EQUIVALENTS AT 31 DECEMBER, REPRESENTED BY BANK BALANCES AND CASH	1,690,151	1,810,591

The notes on pages 125 to 218 form part of these financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards (HKFRSs), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards (HKASs) and Interpretations issued by the Hong Kong Institute of Certified Public Accountants (HKICPA), accounting principles generally accepted in Hong Kong and the requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. Significant accounting policies adopted by the group are disclosed below.

The HKICPA has issued certain amendments to HKFRSs that are first effective or available for early adoption for the current accounting period of the group. Note 1(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the group for the current accounting period reflected in these financial statements.

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2020 comprise the Company and its subsidiaries (together referred to as the "group") and the group's interest in associates. The measurement basis used in the preparation of the financial statements is the historical cost basis except that assets and liabilities are stated at their fair value as explained in the accounting policies set out below:

- **Financial assets at fair value through profit or loss**

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

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

Judgements made by management in the application of HKFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in note 2.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(c) Changes in accounting policies

The HKICPA have issued the following amendments to HKFRSs and HKASs that are first effective for the current accounting period of the Group:

- Amendments to HKFRS 3, Definition of a Business
- Amendment to HKFRS 16, Covid-19-Related Rent Concessions
- Amendments to HKAS1 and HKAS 8, Definition of Material

None of these developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period except for the amendment to HKFRS 16, Covid-19-Related Rent Concession, which provides a practical expedient that allows lessees not to assess whether particular rent concessions occurring as a direct consequence of the COVID-19 pandemic are lease modifications and, instead, account for those rent concessions as if they were not lease modifications.

(d) Subsidiaries and non-controlling interests

Subsidiaries are entities controlled by the group. The group controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the group has power, only substantive rights (held by the group and other parties) are considered.

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the company, and in respect of which the group has not agreed any additional terms with the holders of those interests which would result in the group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the company. Non-controlling interests in the results of the group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the company. Loans from holders of non-controlling interests and other contractual obligations towards these holders are presented as financial liabilities in the consolidated statement of financial position in accordance with notes 1(q) or (r) depending on the nature of the liability.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

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

Changes in the group's interests in a subsidiary that do not result in a loss of control are accounted for as equity transactions, whereby adjustments are made to the amounts of controlling and non-controlling interests within consolidated equity to reflect the change in relative interests, but no adjustments are made to goodwill and no gain or loss is recognised.

When the group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 1(g)) or, when appropriate, the cost on initial recognition of an investment in an associate (see note 1(e)).

In the company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see note 1(l)), unless the investment is classified as held for sale (or included in a disposal group that is classified as held for sale).

(e) Associates

An associate is an entity in which the group or company has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

An investment in an associate is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale (or included in a disposal group that is classified as held for sale). Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate that forms part of the group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the group's share of the investee's net assets and any impairment loss relating to the investment (see notes 1(f) and (l)(ii)). At each reporting date, the group assesses whether there is any objective evidence that the investment is impaired. Any acquisition-date excess over cost, the group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the group's share of losses exceeds its interest in the associate, the group's interest is reduced to nil and recognition of further losses is discontinued except to the extent that the group has incurred legal or constructive obligations or made payments on behalf of the investee. For this purpose, the group's interest is the carrying amount of the investment under the equity method, together with any other long-term interests that in substance form part of the group's net investment in the associate (after applying the ECL model to such other long-term interests where applicable).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(e) Associates (Continued)

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

If an investment in an associate becomes an investment in a joint venture or vice versa, the retained interest is not remeasured. Instead, the investment continues to be accounted for under the equity method.

In all other cases, when the group ceases to have significant influence over an associate, it is accounted for as a disposal of the entire interest in that investee, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former investee at the date when significant influence is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset (see note 1(g)).

In the company's statement of financial position, investments in associates are stated at cost less impairment losses (see note 1(l)), unless classified as held for sale (or included in a disposal group that is classified as held for sale).

(f) Goodwill

Goodwill represents the excess of

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

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

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see note 1(l)).

On disposal of a cash generating unit during the year, any attributable amount of purchased goodwill is included in the calculation of the profit or loss on disposal.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(g) Other investments in debt

The group's policies for investments in debt, other than investments in subsidiaries, associates and joint ventures, are set out below.

Investments in debt are recognised/derecognised on the date the group commits to purchase/sell the investment. The investments are initially stated at fair value plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss (FVPL) for which transaction costs are recognised directly in profit or loss. For an explanation of how the group determines fair value of financial instruments, see Note 31. These investments are subsequently accounted for as follows, depending on their classification.

Non-equity investments held by the group are classified into one of the following measurement categories:

- amortised cost, if the investment is held for the collection of contractual cash flows which represent solely payments of principal and interest. Interest income from the investment is calculated using the effective interest method (see note 1(v)(iii)).
- fair value through other comprehensive income (FVOCI) — recycling, if the contractual cash flows of the investment comprise solely payments of principal and interest and the investment is held within a business model whose objective is achieved by both the collection of contractual cash flows and sale. Changes in fair value are recognised in other comprehensive income, except for the recognition in profit or loss of expected credit losses, interest income (calculated using the effective interest method) and foreign exchange gains and losses. When the investment is derecognised, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.
- fair value at profit or loss (FVPL) if the investment does not meet the criteria for being measured at amortised cost or FVOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in profit or loss.

(h) Derivative financial instruments

Derivative financial instruments are recognised at fair value. At the end of each reporting period the fair value is remeasured. The gain or loss on remeasurement to fair value is recognised immediately in profit or loss, except where the derivatives qualify for cash flow hedge accounting or hedges of net investment in a foreign operation, in which case recognition of any resultant gain or loss depends on the nature of the item being hedged.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(i) Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 1(l)).

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

Depreciation is calculated to write off the cost, less their estimated residual value, if any, using the straight line method over their estimated useful lives as disclosed in Note 12.

(j) Intangible assets (other than goodwill)

Intangible assets that are acquired by the group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see note 1(l)). Expenditure on internally generated goodwill and brands is recognised as an expense in the period in which it is incurred.

Amortisation of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. Intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives as disclosed in Note 14.

Intangible assets are not amortised while their useful lives are assessed to be indefinite. Any conclusion that the useful life of an intangible asset is indefinite is reviewed annually to determine whether events and circumstances continue to support the indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite is accounted for prospectively from the date of change and in accordance with the policy for amortisation of intangible assets with finite lives as set out in Note 14.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(k) Leased assets

At inception of a contract, the group assesses whether the contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Control is conveyed where the customer has both the right to direct the use of the identified asset and to obtain substantially all of the economic benefits from that use.

(i) As a lessee

Where the contract contains lease component(s) and non-lease component(s), the group has elected to separate non-lease components and accounts for each lease component as a single lease component for all leases.

At the lease commencement date, the group recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. Variable lease payments that do not depend on an index or rate are not included in the measurement of the lease liability and hence are charged to profit or loss in the accounting period in which they are incurred.

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see notes 1(i) and 1(l)(ii)).

The lease liability is remeasured when there is a change in future lease payments arising from a change in an index or rate, or there is a change in the group's estimate of the amount expected to be payable under a residual value guarantee, or there is a change arising from the reassessment of whether the group will be reasonably certain to exercise a purchase, extension or termination option. When the lease liability is remeasured in this way, a corresponding adjustment is made to the carrying amount of the right-of-use asset, or is recorded in profit or loss if the carrying amount of the right-of-use asset has been reduced to zero.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(k) Leased assets (Continued)

(i) As a lessee (Continued)

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("**lease modification**") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are any rent concessions which arose as a direct consequence of the COVID-19 pandemic and which satisfied the conditions set out in paragraph 46B of HKFRS 16 Leases. In such cases, the group took advantage of the practical expedient set out in paragraph 46A of HKFRS 16 and recognised the change in consideration as if it were not a lease modification.

In the consolidated statement of financial position, the current portion of long-term lease liabilities is determined as the present value of contractual payments that are due to be settled within twelve months after the reporting period.

(ii) As a lessor

When the group acts as a lessor, it determines at lease inception whether each lease is a finance lease or an operating lease. A lease is classified as a finance lease if it transfers substantially all the risks and rewards incidental to the ownership of an underlying assets to the lessee. If this is not the case, the lease is classified as an operating lease.

(l) Credit losses and impairment of assets

(i) Credit losses from financial instruments and contract assets and lease receivables

The group recognises a loss allowance for expected credit losses (ECLs) on the following items:

- financial assets measured at amortised cost (including cash and cash equivalents, trade receivables and other receivables;
- contract assets as defined in HKFRS 15 (see note 1(n)); and
- lease receivables;

Other financial assets measured at fair value are not subject to the ECL assessment.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Credit losses and impairment of assets (Continued)

(i) Credit losses from financial instruments and contract assets and lease receivables (Continued)

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the group in accordance with the contract and the cash flows that the group expects to receive).

The maximum period considered when estimating ECLs is the maximum contractual period over which the group is exposed to credit risk.

In measuring ECLs, the group takes into account reasonable and supportable information that is available without undue cost or effort. This includes information about past events, current conditions and forecasts of future economic conditions.

ECLs are measured on either of the following bases:

- 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and
- lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs. ECLs on these financial assets are estimated using a provision matrix based on the group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date.

For all other financial instruments, the group recognises a loss allowance equal to 12-month ECLs unless there has been a significant increase in credit risk of the financial instrument since initial recognition, in which case the loss allowance is measured at an amount equal to lifetime ECLs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Credit losses and impairment of assets (Continued)

(i) Credit losses from financial instruments and contract assets and lease receivables (Continued)

Significant increases in credit risk

In assessing whether the credit risk of a financial instrument has increased significantly since initial recognition, the group compares the risk of default occurring on the financial instrument assessed at the reporting date with that assessed at the date of initial recognition. In making this reassessment, the group considers that a default event occurs when (i) the borrower is unlikely to pay its credit obligations to the group in full, without recourse by the group to actions such as realising security (if any is held); or (ii) the financial asset is 30 days past due. The group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

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

- failure to make payments of principal or interest on their contractually due dates;
- an actual or expected significant deterioration in a financial instrument's external or internal credit rating (if available);
- an actual or expected significant deterioration in the operating results of the debtor; and
- existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the group.

Depending on the nature of the financial instruments, the assessment of a significant increase in credit risk is performed on either an individual basis or a collective basis. When the assessment is performed on a collective basis, the financial instruments are grouped based on shared credit risk characteristics, such as past due status and credit risk ratings.

ECLs are remeasured at each reporting date to reflect changes in the financial instrument's credit risk since initial recognition. Any change in the ECL amount is recognised as an impairment gain or loss in profit or loss. The group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Credit losses and impairment of assets (Continued)

(i) Credit losses from financial instruments and contract assets and lease receivables (Continued)

Basis of calculation of interest income

Interest income recognised in accordance with note 1(v)(iii) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

At each reporting date, the group assesses whether a financial asset is credit-impaired. A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of the financial asset have occurred.

Evidence that a financial asset is credit-impaired includes the following observable events:

- significant financial difficulties of the debtor;
- a breach of contract, such as a default or past due event;
- it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or
- the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

The gross carrying amount of a financial asset or contract asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

Subsequent recoveries of an asset that was previously written off are recognised as a reversal of impairment in profit or loss in the period in which the recovery occurs.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Credit losses and impairment of assets (Continued)

(ii) Impairment of other non-current assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that the following assets may be impaired or, except in the case of goodwill, an impairment loss previously recognised no longer exists or may have decreased:

- property, plant and equipment, including right-of-use assets (other than property carried at revalued amounts);
- intangible assets;
- goodwill; and
- investments in subsidiaries and associates in the company's statement of financial position.

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

— *Calculation of recoverable amount*

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

— *Recognition of impairment losses*

An impairment loss is recognised in profit or loss if the carrying amount of an asset, or the cash-generating unit to which it belongs, exceeds its recoverable amount. Impairment losses recognised in respect of cash-generating units ("CGU") are allocated first to reduce the carrying amount of any goodwill allocated to the cash-generating unit (or group of units) and then, to reduce the carrying amount of the other assets in the unit (or group of units) on a pro rata basis, except that the carrying value of an asset will not be reduced below its individual fair value less costs of disposal (if measurable) or value in use (if determinable).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(I) Credit losses and impairment of assets (Continued)

(ii) Impairment of other non-current assets (Continued)

— *Reversals of impairment losses*

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

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

(m) Inventories

Inventories are stated at the lower of cost and net realizable value. Cost of inventories are determined on a first-in, first-out basis. Net realizable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale.

(n) Contract assets and contract liabilities

A contract asset is recognised when the group recognises revenue (see note 1(v)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for expected credit losses (ECL) in accordance with the policy set out in note 1(l)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see note 1(o)).

A contract liability is recognised when the customer pays non-refundable consideration before the group recognises the related revenue (see note 1(v)). A contract liability would also be recognised if the group has an unconditional right to receive non-refundable consideration before the group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see note 1(o)).

For a single contract with the customer, either a net contract asset or a net contract liability is presented. For multiple contracts, contract assets and contract liabilities of unrelated contracts are not presented on a net basis.

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see note 1(x)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
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1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(o) Trade and other receivables

A receivable is recognised when the group has an unconditional right to receive consideration. A right to receive consideration is unconditional if only the passage of time is required before payment of that consideration is due. If revenue has been recognised before the group has an unconditional right to receive consideration, the amount is presented as a contract asset (see note 1(n)).

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses (see note 1(l)(i)).

(p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Bank overdrafts that are repayable on demand and form an integral part of the group's cash management are also included as a component of cash and cash equivalents for the purpose of the consolidated cash flow statement. Cash and cash equivalents are assessed for expected credit losses (ECL) in accordance with the policy set out in note 1(l)(i).

(q) Trade and other payables

Trade and other payables are initially recognised at fair value, trade and other payables are subsequently stated at amortised cost unless the effect of discounting would be immaterial, in which case they are stated at cost.

(r) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the group's accounting policy for borrowing costs (see note 1(x)).

(s) Employee benefits

(i) Short-term employee benefits

Salaries, annual bonuses and paid annual leave are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(s) Employee benefits (Continued)

(ii) Retirement benefits scheme

In accordance with the rules and regulations in the PRC, the PRC based employees of the Group participate in various defined contribution retirement benefit plans organised by the relevant municipal and provincial governments in the PRC under which the Group and the PRC based employees are required to make monthly contributions to these plans calculated as a percentage of the employees' salaries.

The municipal and provincial governments undertake to assume the retirement benefit obligations of all existing and future retired PRC based employees' payable under the plans described above. Other than the monthly contributions, the Group has no further obligation for the payment of retirement and other post-retirement benefits of its employees. The assets of these plans are held separately from those of the Group in independently administrated funds managed by the PRC government.

The Group's contributions to the defined contribution retirement schemes are expensed as incurred.

(iii) Share-based payments

The fair value of share options granted to employees is recognised as an employee cost with a corresponding increase in a capital reserve within equity. The fair value is measured at grant date using the binomial lattice model, taking into account the terms and conditions upon which the options were granted. Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to the profit or loss for the year of the review, unless the original employee expenses qualify for recognition as an asset, with a corresponding adjustment to the other reserve. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the other reserve). The equity amount is recognised in the other reserve until either the option is exercised (when it is included in the amount recognised in share capital for the shares issued) or the option expires (when it is released directly to retained profits).

Treasury shares which are held by the Company for 2020 Share Award Scheme are recognised directly in equity at cost. The amount will be transferred to the share premium account when the related awarded shares are vested on first-in-first-out basis.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(s) Employee benefits (Continued)

(iv) Termination benefits

Termination benefits are recognised at the earlier of when the group can no longer withdraw the offer of those benefits and when it recognises restructuring costs involving the payment of termination benefits.

(t) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities, which are recognised in profit or loss.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Apart from certain limited exceptions, all deferred tax liabilities, and all deferred tax assets to the extent that it is probable that future taxable profits will be available against which the asset can be utilised, are recognised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purposes, the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination), and temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(t) Income tax (Continued)

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Additional income taxes that arise from the distribution of dividends are recognised when the liability to pay the related dividends is recognised.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset.

(u) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

Provisions are recognised when the group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is probable that an outflow of economic benefits will be required, and the amount can be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

(ii) Onerous contracts

An onerous contract exists when the group has a contract under which the unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract. Provisions for onerous contracts are measured at the present value of the lower of the expected cost of terminating the contract and the net cost of continuing with the contract.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income

Income is classified by the group as revenue when it arises from the sale of goods, the provision of services or the use by others of the group's assets under leases in the ordinary course of the group's business.

Revenue is recognised when control over a product or service is transferred to the customer, or the lessee has the right to use the asset, at the amount of promised consideration to which the group is expected to be entitled, excluding those amounts collected on behalf of third parties. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

Control is transferred over time and revenue is recognised over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met:

- the customer simultaneously received and consumes the benefits provided by the Group's performance as the Group performs;
- the Group's performance creates or enhances an asset that the customer controls as the Group performs; or
- the Group's performance does not create an asset with an alternative use to the Group and the Group has an enforceable right to payment for performance completed to date.

Otherwise, revenue is recognised at a point in time when the customer obtains control of the distinct good or service.

Where the contract contains a financing component which provides a significant financing benefit to the customer for more than 12 months, revenue is measured at the present value of the amount receivable, discounted using the discount rate that would be reflected in a separate financing transaction with the customer, and interest income is accrued separately under the effective interest method. Where the contract contains a financing component which provides a significant financing benefit to the group, revenue recognised under that contract includes the interest expense accreted on the contract liability under the effective interest method. The group takes advantage of the practical expedient in paragraph 63 of HKFRS 15 and does not adjust the consideration for any effects of a significant financing component if the period of financing is 12 months or less.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income (Continued)

(i) Revenue from contracts with customer

Variable consideration

For contracts with performance bonus that contain variable consideration, the Group estimates the amount of consideration to which it will be entitled using either (a) the expected value method or (b) the most likely amount, depending on which method better predicts the amount of consideration to which the Group will be entitled.

The estimated amount of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

At the end of the reporting period, the Group updates the estimated transaction price (including updating its assessment of whether an estimate of variable consideration is constrained) to represent faithfully the circumstances present at the end of the reporting period and the changes in circumstances during the reporting period.

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation

Input method

The progress towards complete satisfaction of a performance obligation is measured based on input method, which is to recognise revenue on the basis of the Group's efforts or inputs to the satisfaction of a performance obligation relative to the total expected inputs to the satisfaction of that performance obligation, that best depict the Group's performance in transferring control of goods or services.

Revenue is measured based on the consideration specified in a contract with customer and excluded amounts collected on behalf of third parties. The Group principally earns revenue from provision of software products and related services as well as a variety of other services including:

- Software business
 - Software products and related services
 - Data-driven operation services
 - Others
- Network security business

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income (Continued)

(i) Revenue from contracts with customer (Continued)

Specifically, revenue is recognised in profit or loss as follows:

Software products and related services

The Group primarily is engaged in (i) the provision of software products and related deployment services, and (ii) the provision of ongoing operation and maintenance services ("**O&M services**").

(i) Software products and related deployment services

The software products and related deployment services include a comprehensive set of professional services, from demand analysis, project design and planning, software development and sourcing, system installation and launch to trial operation and acceptance, which are highly interrelated to and significantly affected by other goods and services in the contract. The directors of the Company have assessed that the Group's performance creates and enhances an asset that the customers control as the Group performs. Therefore, the directors of the Company have satisfied that there is only one single performance obligation and the services are satisfied over time.

Revenue from software products and related deployment services, which are generally under project based development contracts, is recognised based on the stage of completion of the contract which is determined as the proportion of the costs incurred for the works (i.e. subcontracting costs, material costs, rental expenses and direct staff costs incurred) performed to date relative to the estimated total costs to complete the satisfaction of these services and the margin of each project, to the extent that the amount can be measured reliably and its recovery is considered probable.

(ii) O&M services

Upon the launch of a system from the software products and related deployment services the Group provided, customers typically engage the Group to provide ongoing O&M services to ensure the stable functioning of the system.

Pursuant to the contracts of rendering related O&M services, the transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring O&M services to customers. Additionally, the O&M services typically meet the criterion where customers simultaneously receive and consume the benefits of the Group's performance as the Group performs. The fact that another entity would not need to re-perform maintenance services for the service that the Group has provided to date also demonstrates that customers simultaneously receive and consume the benefits of the Group's performance as the Group performs. Therefore, the directors of the Company have satisfied that the performance obligation of rendering O&M services are satisfied over time which is recognised over the service period.

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For the year ended 31 December 2020
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1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income (Continued)

(i) Revenue from contracts with customer (Continued)

Data-driven operation services

The Group provides data-driven operation services directly to telecom operators and/or in collaboration with telecom operators to the government and enterprise customers in relation to the rendering of comprehensive data operational analytics services to analyse customer behavior.

The directors of the Company have assessed that the data-driven operation service is one single performance obligation and the customers simultaneously receive and consume the benefits provided by the Group's performance as the Group performs. Therefore, the directors of the Company have satisfied that the services are satisfied over time.

Others

The Group generates other revenues from sales of third-party hardware and software, system integration service, business consulting services and corporate trainings.

i. Sales of third-party hardware and software

Revenue is recognised at a point in time when the customer obtains control of the third-party hardware and software.

ii. Provision of services — system integration services, business consulting services and corporate trainings

The Group enters into system integration service agreements, consulting service agreements with telecom operators and large enterprises, the term of which generally ranges from two months to one year with a fixed contract price.

The performance obligation of provision of such services is satisfied over time. Revenue from rendering business consulting services and corporate trainings is recognised based on the services provided as the customers simultaneously receive and consume the service provided by the Group over the period. Revenue from rendering system integration services is recognised over time based on the stage of completion of the contract which is determined as the proportion of the cost incurred for the work performed to date relative to the estimated total costs to complete the satisfaction of these services and the margin of each project as the Group's performance creates and enhances an asset that the customers control as the Group performs.

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For the year ended 31 December 2020
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1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income (Continued)

(i) Revenue from contracts with customer (Continued)

Network security related software products and services

The Group was engaged in providing network security related software products and services, which is similar to software products and related services, and transformed the business model to provide similar network security related products and services to customers through outsourcing the entire work to AsialInfo Technologies (Chengdu), Inc. ("**AsialInfo Chengdu**"), a related party of the Group (Note 34).

The directors of the Company have assessed that the Group's services creates and enhances an asset that the customers control as the Group performs. Therefore, the directors of the Company have satisfied that the services are satisfied over time. Accordingly, revenue is recognised based on the stage of completion of the contract.

Some of the service contracts contain variable consideration in the form of cash payment based on final service evaluation result (usually in the form of a service evaluation score provided by the customer based on which cash payment is calculated). The Group estimates the amount of consideration to which it will be entitled using the most likely amount. The estimation of variable consideration is included in the transaction price only to the extent that it is highly probable that such an inclusion will not result in a significant revenue reversal in the future when the uncertainty associated with the variable consideration is subsequently resolved.

(ii) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Variable lease payments that do not depend on an index or a rate are recognised as income in the accounting period in which they are earned.

(iii) Interest income

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset. For financial assets measured at amortised cost that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e. gross carrying amount net of loss allowance) of the asset (see note 1(l)(i)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
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1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(v) Revenue and other income (Continued)

(iv) Government grants

Government grants are recognised in the statement of financial position initially when there is reasonable assurance that they will be received and that the group will comply with the conditions attaching to them. Grants that compensate the group for expenses incurred are recognised as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred.

(w) Research and development costs

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

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

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

The amount initially recognised for internally-generated intangible asset is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. When no internally-generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

The Group did not meet the criteria to recognise any internally-generated intangible asset from development activities or from the development phase of an internal project.

(x) Borrowing costs

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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1. SIGNIFICANT ACCOUNTING POLICIES (Continued)

(y) Translation of foreign currencies

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss, except those arising from foreign currency borrowings used to hedge a net investment in a foreign operation which are recognised in other comprehensive income.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. The transaction date is the date on which the company initially recognises such non-monetary assets or liabilities. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

(z) Related parties

(a) A person, or a close member of that person's family, is related to the group if that person:

- (i) has control or joint control over the group;
- (ii) has significant influence over the group; or
- (iii) is a member of the key management personnel of the group or the group's parent.

(b) An entity is related to the group if any of the following conditions applies:

- (i) The entity and the group are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to the others).
- (ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
- (iii) Both entities are joint ventures of the same third party.
- (iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.
- (v) The entity is a post-employment benefit plan for the benefit of employees of either the group or an entity related to the group.
- (vi) The entity is controlled or jointly controlled by a person identified in (a).
- (vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).
- (viii) The entity, or any member of a group of which it is a part, provides key management personnel services to the group or to the group's parent.

Close members of the family of a person are those family members who may be expected to influence, or be influenced by, that person in their dealings with the entity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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2. ACCOUNTING JUDGEMENT AND ESTIMATES

(a) Critical accounting judgements in applying the group's accounting policies

In the process of applying the group's accounting policies, management has made the following accounting judgement:

Judgments in determining the timing of satisfaction of performance obligations

Note 1 describes the revenue recognition basis to each of the Group's revenue stream. The recognition of each of the Group's revenue stream requires judgment by the directors of the Company in determining the timing of satisfaction of performance obligations.

In making their judgment, the directors of the Company considered the detailed criteria for recognition of revenue set out in HKFRS 15 and in particular, whether the Group has satisfied all the performance obligations over time or at a point in time with reference to the detailed terms of transactions as stipulated in the contracts entered into with its customers.

For the Group's software business and network security business, the directors of the Company have assessed that the Group's performance creates and enhances an asset that the customer controls as the Group performs. Therefore, the directors of the Company have satisfied that the performance obligation is satisfied over time and recognised the revenue over the service period.

For O&M services included in the software business, the directors of the Company have determined that the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs. Therefore, the directors of the Company have satisfied that the performance obligation is satisfied over time and recognised the revenue over the service period.

(b) Sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(i) Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the recoverable amount of the CGU to which goodwill has been allocated. The recoverable amount determination of the CGU as at 31 December 2020 and 2019 is based on the present value calculation which requires the Group to estimate the future cash flows expected to arise from the CGU and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than expected, or change in facts and circumstances which results in downward revision of future cash flows, an impairment loss may arise. As at 31 December 2020, the carrying amount of goodwill was RMB1,932,246,000 (2019: RMB1,932,246,000). Details of the recoverable amount calculation are disclosed in Note 15.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

2. ACCOUNTING JUDGEMENT AND ESTIMATES (Continued)

(b) Sources of estimation uncertainty (Continued)

(ii) Revenue recognition regarding variable consideration of performance bonus

The Group recognises upfront payments and milestone payments based on specified contract terms, allocated to one performance obligation over the estimated service period based on a pattern that reflects the transfer of the goods and services. As included in certain contracts, the Group earns performance bonus up to a specified certain percentage of the total contract amounts, however, to what extent the Group would recognise performance bonus will depend on the final performance satisfaction reports the Group receives from its customers upon their inspections months after the completion of the project-based development projects.

For contracts with performance bonus that contain variable consideration, the Group estimates the amount of consideration to which it will be entitled using the most likely amount and recognises revenue relating to performance bonus when it is highly probable that such revenue will not reverse.

According to the historical experience, the directors of the Company consider it is reasonable to estimate possible outcomes before receipt of the performance satisfaction reports and therefore, revenue was reasonably recognised by the completion method for the years ended 31 December 2020 with the contracts related to performance satisfaction reports.

(iii) Project-based development contracts

Revenue from project-based development contracts is recognised under the stage of completion method which requires estimation made by management. The directors of the Company estimate the contract costs, outcome and expected cost to complete the contracts based on the budgets prepared for the contracts. Due to the nature of the activities, the directors of the Company review and revise the estimates of both contract outcome and expected costs to complete in the budget prepared for each contract as the contract progresses. Any revisions to estimates of contract outcomes and expected costs to completion would affect contract revenue recognition. Should expected costs to complete exceed contract revenue, a provision for contract loss would be recognised.

(iv) Provision of ECL for trade receivables and contract assets

Trade receivables and contract assets which are credit-impaired are assessed for ECL individually. In addition, the Group uses provision matrix to calculate ECL for the trade receivables and contract assets. The provision matrix is based on the Group's historical default rates taking into consideration forward-looking information that is reasonable and supportable available without undue costs or effort. At every reporting date, the historical observed default rates are reassessed and changes in the forward-looking information are considered.

The provision of ECL is sensitive to changes in estimates. The information about the ECL and the Group's trade receivables and contract assets are disclosed in Note 21.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

3. REVENUE AND SEGMENT INFORMATION

The Group's revenue is primarily generated from project-based software development contracts, under which the Group develops software products and provides services at fixed prices and/or variable prices. Revenue is recognised net of sales related taxes.

The Group's operating segments are determined based on information reported to the chief executive officer ("CEO") of the Company, being the chief operating decision maker ("CODM") of the Group for the purpose of resource allocation and assessment of segment performance focuses on types of goods and services provided. No operating segments have been aggregated in arriving at the reportable segments of the Group.

Specifically, the Group's reportable segments under HKFRS 8 are as follows:

Software business: Representing (1) software products and related services; (2) data-driven operation services; and (3) others, including sale of third-party hardware and software, system integration services, business consulting services and corporate trainings.

Network security business: Representing provision of network security related software products and services.

The performance obligation of rendering software products and related services is mainly derived from the project-based software development contracts and is satisfied over time which usually range from six months to eighteen months.

The rendering of data-driven operation services is mainly derived from telecom operators' government and enterprise customers to perform data analysis services to analyse customer behavior and operational efficiency. The performance obligation of rendering of data-driven operation services is satisfied over time, ranging from fifteen days to six months.

The performance obligation of sale of third-party hardware and software is satisfied at a point in time when the control of hardware and software is transferred to the customer.

The performance obligation of rendering the network security related software products and services is satisfied over time generally ranging from six months to eighteen months.

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3. REVENUE AND SEGMENT INFORMATION (Continued)

Disaggregation of revenue

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
<i>Timing of revenue recognition</i>		
At a point in time	241,914	127,306
Over time	5,777,941	5,594,110
	6,019,855	5,721,416
<i>Types of goods and services</i>		
Provision of services ⁽ⁱ⁾	5,779,166	5,599,429
Sales of goods	240,689	121,987
	6,019,855	5,721,416
<i>Nature of goods and services</i>		
Software business:		
Software products and related services	5,319,011	5,329,715
Data-driven operation services	351,600	151,737
Others ⁽ⁱⁱ⁾	348,867	237,212
Network security business	377	2,752
	6,019,855	5,721,416

Notes:

- (i) The Group records contract liabilities when receiving consideration from customers prior to its provision of services or the amount is due. The transaction price allocated to performance obligations in relation to the non-refundable advance payments that were unsatisfied amounted to RMB393,371,000 as at 31 December 2020 (2019: RMB296,945,000), representing the contract liabilities included in Note 19.

The services provided and recognised overtime are mainly derived from fixed-price contracts. Respective transaction price allocated to the unsatisfied contracts, representing the contract liabilities, as at 31 December 2019 in the amount of RMB296,945,000 had been recognised as revenue over the contract periods for the year ended 31 December 2020. The management expects such amount allocated to the unsatisfied contracts as at 31 December 2020 of RMB393,371,000 will all be recognised as revenue during the year ending 31 December 2021.

- (ii) Others represent revenue primarily generated from the sale of third-party hardware and software, the provision of system integration services, business consulting services and the provision of corporate trainings.

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3. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information

The following is an analysis of the Group's revenue and results by reportable operating segments:

Year ended 31 December 2020

	Software business	Network security business	Total
	RMB'000	RMB'000	RMB'000
Revenue	6,019,478	377	6,019,855
Cost of sales	(3,716,250)	(370)	(3,716,620)
Gross profit	2,303,228	7	2,303,235
Other income	143,289	—	143,289
Impairment losses under expected credit loss model, net of reversal	(35,051)	—	(35,051)
Other gains and losses	15,956	—	15,956
Selling and marketing expenses	(472,786)	—	(472,786)
Administrative expenses	(321,442)	—	(321,442)
R&D expenses	(840,225)	—	(840,225)
Share of results of associates	(1,567)	—	(1,567)
Impairment losses on associates	(6,410)	—	(6,410)
Finance costs	(20,672)	—	(20,672)
Profit before tax	764,320	7	764,327

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3. REVENUE AND SEGMENT INFORMATION (Continued)

Segment information (Continued)

Year ended 31 December 2019

	Software business RMB'000	Network security business RMB'000	Total RMB'000
Revenue	5,718,664	2,752	5,721,416
Cost of sales	(3,591,714)	(2,697)	(3,594,411)
Gross profit	2,126,950	55	2,127,005
Other income	103,759	—	103,759
Net reversal of impairment losses under expected loss model	(28,366)	—	(28,366)
Other gains and losses	(736)	—	(736)
Selling and marketing expenses	(461,997)	—	(461,997)
Administrative expenses	(292,573)	(13)	(292,586)
R&D expenses	(862,419)	—	(862,419)
Share of results of associates	(3,983)	—	(3,983)
Finance costs	(39,907)	—	(39,907)
Profit before tax	540,728	42	540,770

The accounting policies of the reportable segments are the same as the Group's significant accounting policies described in Note 1.

Segment revenue reported above represents revenue generated from external customers. There were no inter-segment sales for the year.

No segment assets and liabilities are presented as the CODM does not regularly review segment assets and liabilities.

Geographical information

The Group's operations are in the PRC. Substantially all revenue of the Group and non-current assets of the Group are generated from and located in the PRC.

Information about the Group's revenue from external customers is presented based on the location of the signing parties of the sales or service contracts. During the years ended 31 December 2020 and 2019, substantially all the sales and service contracts were with a signing party located in the PRC.

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3. REVENUE AND SEGMENT INFORMATION (Continued)

Information about major customers

Revenue from customers of the corresponding years contributing over 10% of the total revenue of the Group during the reporting periods are as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Telecom operator A	3,841,488	3,353,138
Telecom operator B	1,043,724	1,136,023
Telecom operator C	831,183	1,002,837

Note: The customers as shown above are at their group level which aggregates the customer's headquarters, provincial, municipal and specialised subsidiaries which enter into contracts with the Group individually.

4. OTHER INCOME

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Government grants ⁽ⁱ⁾	50,398	44,254
Bank interest income	23,331	24,533
Net gains on disposal of financial assets ⁽ⁱⁱ⁾	23,104	4,774
Changes in fair value of financial assets at FVTPL ⁽ⁱⁱⁱ⁾	7,400	—
Gain from additional input VAT credit ⁽ⁱⁱⁱ⁾	14,988	9,052
Income from management support services ^(iv)	9,647	12,521
Interest income from term deposits	5,612	4,625
Others	8,809	4,000
	143,289	103,759

Notes:

- i. Government grants amounted to RMB43,508,000 (2019: RMB41,373,000) are related to high-tech industrial development. Government grants amounted to RMB6,890,000 (2019: RMB2,881,000) are related to environment protection and human resources related subsidies for the year ended 31 December 2020. The amounts have been recognised as other income, and there was no unfulfilled condition attached to these government grants in the year in which they were recognised.
- ii. The financial assets represent the financial products bought from bank, with no principal or return guaranteed.
- iii. On 20 March 2019, the Ministry of Finance of the PRC, the State Administration of Taxation and the General Administration of Customs promulgated and implemented VAT Reformation Article 39 over deductible input VAT, pursuant to which the Group is allowed to have a 10% additional deduction of input VAT credit from 1 April 2019 to 31 December 2021 upon meeting all applicable criteria.
- iv. Income from management support services represents income generated primarily from the provision of management services such as legal support, human resources and administration, etc. to the Group's related parties, amounting to RMB9,408,000 (2019: RMB11,225,000) (Note 34), and other companies who were no longer satisfied as related parties.

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5. OTHER GAINS AND LOSSES

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Gain on disposal of investment in associates (Note 16)	6,944	—
Gain from extinguishment of liabilities ⁽ⁱ⁾	3,914	2,807
Gain on disposal of property, plant and equipment	1,194	337
Net foreign exchange loss	(841)	(3,570)
Others	4,745	(310)
	15,956	(736)

Note:

- The amount mainly represents certain outstanding trade payables, other payables and accrued expenses, relating to project-based software development contracts, aged over years which has exceeded the maximum recourse period and is no longer payable by the Group.

6. FINANCE COSTS

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Interest on bank borrowings	12,581	37,217
Interest on lease liabilities	7,038	2,514
Others	1,053	176
	20,672	39,907

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7. INCOME TAX EXPENSES

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Current tax:		
PRC enterprise income tax ("EIT") — Current year	99,347	90,898
Deferred tax (Note 26)	2,877	42,956
	<u>102,224</u>	<u>133,854</u>
Over provision in prior year:		
PRC EIT	—	(1,899)
	<u>102,224</u>	<u>131,955</u>

Under the Law of the PRC on enterprise income tax (the "EIT Law") and implementation regulation of the EIT Law, the tax rate of the PRC subsidiaries is 25% during the year ended 31 December 2020 (2019: 25%).

The Group's subsidiaries operating in the PRC are eligible for tax credits of 175% (2019:175%) deduction rates on certain R&D expenses for the year ended 31 December 2020.

On 9 August 2012, the Ministry of Industry and Information Technology of the PRC, the Ministry of Finance of the PRC and the State Taxation Administration promulgated and implemented Trial Measures for the Administration over the Certification of Key Software Enterprises and Integrated Circuit Design Enterprises under the State Planning ("Cai Shui 2012 NO. 2413"), pursuant to which key software enterprises under the State Planning layout could go through tax reduction procedures with the relevant tax authorities to enjoy preferential tax policies.

During the years ended 31 December 2020 and 2019, two of the Company's subsidiaries, including AsialInfo Technologies (China), Inc. ("AsialInfo China") and AsialInfo Technologies (Nanjing), Inc. ("AsialInfo Nanjing"), were identified as the key software enterprises with tax privileges and entitled to a preferential EIT rate of 10%, pursuant to the designation as a key software enterprise under the State Planning. Such tax preference was applied and entitled by performing the record filling to the tax authorities on a yearly basis. The Directors considers that AsialInfo China and AsialInfo Nanjing will re-apply for such tax preference provided that its business operations will continue to be qualified as key software enterprises.

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7. INCOME TAX EXPENSES (Continued)

The Ministry of Finance of the PRC and the State Taxation Administration promulgated and implemented Income Tax Policies for Integrated Circuit Design and Software Enterprises (the “Policies”) in 2011, pursuant to which, all eligible software enterprises that were profit-making up to the year ended 31 December 2017 were to be entitled to two-year EIT exemptions followed by three years’ 50% EIT reduction of the statutory EIT rates, starting from their first profit making year. In May 2019, the relevant taxation authority renewed this Policies for the first time to make eligible software enterprises that were profit-making for the year ended 31 December 2018 to be entitled for such preferential EIT rates. Nanjing AsiaInfo Software Co., Ltd (“Nanjing Software”) had met all the requirements to be eligible under the Policies and therefore, Nanjing Software has EIT exemptions for two year starting from the year ended 31 December 2019 and be entitled to a preferential EIT rate of 12.5% from 2021 to 2023. Meanwhile, pursuant to the Policies, effective from its profit-making year, Hunan AsiaInfo Software Co., Ltd. enjoys EIT exemptions for the next first two years of profit-making, starting 2018 (retrospectively applied in 2018 as it was the first year the relevant taxation authority renewed the Policies) and was entitled to a preferential EIT rate of 12.5% from 2020 to 2022.

Hangzhou AsiaInfo Cloud Information Technologies Limited (“Hangzhou Cloud”) was designated as “High and New Technology Enterprise” in 2019 for a period up to 31 December 2021. Guangzhou AsiaInfo Technology Co. Ltd. and Beijing AsiaInfo Smart Big Data Co., Ltd. were designated as “High and New Technology Enterprise” in 2020 for a period up to 31 December 2022. As a result, the three companies above were entitled to a preferential income tax rate of 15% for the year ended 31 December 2020 (2019: Hangzhou Cloud 15%, the other two 25%).

According to the relevant tax law in the PRC, dividend distributed to foreign investors out of the profit generated from 1 January 2008 onwards shall be subject to withholding tax at 10% and withheld by the PRC entity, pursuant to Articles 3 and 37 of the EIT Law and Article 91 of its Detailed Rules for the Implementation of the Regulation.

On 21 March 2018, the Hong Kong Legislative Council passed The Inland Revenue (Amendment) (No.7) Bill 2017 (the “Bill”) which introduces the two-tiered profits tax rates regime. The Bill was signed into law on 28 March 2018 and was gazetted on the following day. Under the two-tiered profits tax rates regime, the first HK\$2 million of profits of the qualifying group entity will be taxed at 8.25% and profits above HK\$2 million will be taxed at 16.5%. The profits of group entities not qualifying for the two-tiered profits tax rates regime will continue to be taxed at a flat rate of 16.5% (2019: 16.5%). The Directors considered the amount involved upon implementation of the two-tiered profits tax rates regime as insignificant to the consolidated financial statements. Hong Kong Profits Tax is calculated at 16.5% of the estimated assessable profit for 2020 (2019: 16.5%).

Pursuant to the rules and regulations of the BVI, the Company is not subject to any income tax in the BVI.

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7. INCOME TAX EXPENSES (Continued)

The income tax expenses for the years ended 31 December 2020 and 2019 can be reconciled to the profit before tax per the consolidated statement of profit or loss and other comprehensive income as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Profit before tax	764,327	540,770
Notional tax at applicable income tax rate of 10%	76,433	54,077
Tax effect of share of results of associates	157	398
Tax credits on eligible R&D expenses	(44,842)	(25,353)
Tax effect of expenses not deductible for tax purpose	60,921	47,475
Effect of using the deductible losses for which no deferred tax asset was recognised in previous periods	(6,671)	—
Tax effect of income not taxable for tax purpose	(2,933)	(3,534)
Tax effect of tax losses not recognised	22,895	51,463
Over provision in respect of prior years	—	(1,899)
Tax effect of withholding tax on dividend distribution(i)	—	16,955
Tax effect of opening deferred tax assets from changes in applicable tax rates	—	3,507
Tax effect of different tax rates of subsidiaries not applicable of 10% (2019: 10%)	(3,736)	(11,134)
Income tax expenses for the year	102,224	131,955

Note:

- i. In 2019, the Group adopted a non-binding general dividend policy with a dividend payout ratio of no less than 40% of its distributable profit for the year, and therefore, the Group considered the tax effect of withholding tax on dividend distribution with respect to profit for the year of the Group for the year ended 31 December 2019. In 2020, according to the financing arrangement of the Company, it has been determined that subsidiaries on-shore would not declare dividend to the subsidiaries off-shore in the near future to support the general dividend policy of the Group, and therefore, no withholding tax was recognised for the year ended 31 December 2020.

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8. PROFIT FOR THE YEAR

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Profit for the year has been arrived at after charging:		
Staff costs, including Directors' and chief executive's remuneration set out in Note 11		
Directors' remuneration	101,375	25,439
Employee benefit expenses		
Other staff costs (salaries, wages, allowance, bonus and others)	3,074,613	3,089,651
Contribution to retirement benefits scheme	219,705	285,661
Share-based compensation expenses	172,600	214,612
Total staff costs	3,568,293	3,615,363
Cost of inventories recognised as expenses (transferred into cost of sales)	230,580	118,040
Depreciation of property, plant and equipment	32,581	32,034
Depreciation of right-of-use assets	64,449	39,394
Amortisation of intangible assets	7,428	18,199
Expense of short-term and low value lease	68,112	83,351
Auditor's remuneration ⁽ⁱ⁾	5,178	5,508

Note:

- i. The amount included statutory audit fee of RMB4,380,000 (2019: RMB4,650,000) and RMB798,000 (2019: RMB858,000) for the Company and the subsidiaries in the Group, respectively.

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9. DIVIDENDS

(i) Dividends payable to equity holders of the Company attributable to the year

	2020 RMB'000	2019 RMB'000
Final dividend proposed after the end of the Reporting Period of HK\$0.345 (equivalent to RMB0.290) per ordinary share (2019: HK\$0.252 (equivalent to RMB0.226) per ordinary share)	264,841	168,936

The final dividend proposed after the end of the Reporting Period has not been recognised as a liability at the end of the Reporting Period.

(ii) Dividends payable to equity holders of the Company attributable to the previous financial year, approved and paid during the year

	2020 RMB'000	2019 RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of HK\$0.252 (equivalent to RMB0.226) per ordinary share (2019: N/A)	168,936	N/A

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10. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share attributable to the ordinary equity holders of the Company is based on the following data:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Earnings:		
Earnings for the purpose of calculating basic and diluted earnings per Share	662,103	408,815
Number of shares:		
Issued ordinary shares at 1 January	726,044,916	713,776,184
Effect of over-allotment to the underwriters in the global offering	—	2,860,698
Effect of shares issued to China Mobile International Holdings Limited ("CMI")	60,255,320	—
Effect of shares repurchased	(10,577,531)	—
Effect of share options exercised and restricted stock units ("RSUs") vested	4,685,691	7,613,444
Weighted average number of ordinary shares for the purpose of calculating basic earnings per share	780,408,396	724,250,326
Effect of dilutive potential ordinary shares:		
Share options and RSUs	6,276,616	3,292,366
Weighted average number of ordinary shares for the purpose of calculating diluted earnings per share	786,685,012	727,542,692

The calculation of basic earnings per share for the years ended 31 December 2020 and 2019 was based on the profit for the year attributable to the equity holders of the Company.

The calculation of the number of shares for the purpose of basic earnings per share for the year ended 31 December 2019 has taken into account the over-allotment to the Company's underwriters in the Company's global offering on 15 January 2019 and the allotment and issuance of ordinary shares with regard to the exercise and vesting of share options and RSUs in 2019.

The calculation of the number of shares for the purpose of basic earnings per share for the year ended 31 December 2020 has taken into account the issuance of shares with regard to the exercise and vesting of share options and RSUs, purchase of shares in 2020, and the issuance of shares to CMI.

The computation of diluted earnings per share for the year ended 31 December 2019 did not assume the exercise of the share options under the 2014 plan and the share options with exercise prices of US\$1.9225 and US\$1.2725 under the Pre-IPO share option scheme since such share options have an anti-dilutive effect.

The computation of diluted earnings per share for the year ended 31 December 2020 did not assume the exercise of the share options under the 2014 plan, the share options that exercised with exercise prices of US\$1.9225 and partly of US\$1.2725 under the Pre-IPO share option scheme, the exercise of share options granted under the 2019 share option scheme and the vesting of share awards granted under the 2020 share award scheme since such share options and share awards had an anti-dilutive effect.

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11. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS AND EMPLOYEES' EMOLUMENTS

Directors and chief executive

Details of the emoluments paid or payable to the directors and chief executive of the Company by entities comprising the Group during the years ended 31 December 2020 and 2019 are as follows:

Year ended 31 December 2020

	Directors' fees RMB'000	Salaries allowances and benefits in kind RMB'000	Discretionary bonus RMB'000	Contribution to retirement benefit scheme RMB'000	Total RMB'000
Directors and chief executive:					
Mr. Nianshu Gao	—	2,001	2,900	39	4,940
Mr. Jian Ding	—	—	—	—	—
Mr. Suning Tian	—	—	—	—	—
Sub-total	—	2,001	2,900	39	4,940
Non-executive directors:					
Mr. Yuesheng Xin	—	—	—	—	—
Mr. Yichen Zhang	—	—	—	—	—
Mr. Liyang Zhang	—	—	—	—	—
Mr. Lin Yang*	—	—	—	—	—
Ms. Hong Liu**	—	—	—	—	—
Sub-total	—	—	—	—	—
Independent non-executive directors:					
Mr. Ming Ge	419	—	—	—	419
Mr. Jack Qunyao Gao	419	—	—	—	419
Mr. Ya-Qin Zhang	419	—	—	—	419
Ms. Ping Tao***	136	—	—	—	136
Sub-total	1,393	—	—	—	1,393
Total	1,393	2,001	2,900	39	6,333

* Mr. Lin Yang was appointed as a non-executive director of the Company since 2 September 2020.

** Ms. Hong Liu was appointed as a non-executive director of the Company since 2 September 2020.

*** Ms. Ping Tao was appointed as an independent non-executive director of the Company since 2 September 2020.

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11. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS AND EMPLOYEES' EMOLUMENTS (Continued)

Directors and chief executive (Continued)

Year ended 31 December 2019

	Directors' fees RMB'000	Salaries allowances and benefits in kind RMB'000	Discretionary bonus RMB'000	Contribution to retirement benefit scheme RMB'000	Total RMB'000
Directors and chief executive:					
Mr. Nianshu Gao	—	2,450	2,640	56	5,146
Mr. Jian Ding	—	—	—	—	—
Mr. Suning Tian	—	—	—	—	—
Sub-total	—	2,450	2,640	56	5,146
Non-executive directors:					
Mr. Yuesheng Xin	—	—	—	—	—
Mr. Yichen Zhang	—	—	—	—	—
Mr. Liyang Zhang	—	—	—	—	—
Sub-total	—	—	—	—	—
Independent non-executive directors:					
Mr. Ming Ge	419	—	—	—	419
Mr. Jack Qunyao Gao	419	—	—	—	419
Mr. Ya-Qin Zhang	419	—	—	—	419
Sub-total	1,257	—	—	—	1,257
Total	1,257	2,450	2,640	56	6,403

The emoluments disclosed above didn't contain the amount recognised as expense in relation to share-based payments during the years ended 31 December 2020 and 2019. For details of directors' share-based compensation, please refer to Note 32.

No emoluments were paid or payable to Mr. Jian Ding, Mr. Suning Tian, Mr. Yuesheng Xin, Mr. Yichen Zhang, Mr. Liyang Zhang, the directors of the Company during the years ended 31 December 2020 and 2019. Additionally, no emoluments were paid or payable to Mr. Lin Yang and Ms. Hong Liu, the directors of the Company during the year ended 31 December 2020.

The emoluments of the directors and chief executive shown above were for their management services rendered to the Group. The emoluments of the non-executive directors and independent non-executive directors were for their services as directors of the Company.

As at 31 December 2020, there are no loans, quasi-loans and other dealing arrangements in favour of the directors, controlled bodies corporate and controlled entities with such directors.

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11. DIRECTORS' AND CHIEF EXECUTIVE'S EMOLUMENTS AND EMPLOYEES' EMOLUMENTS (Continued)

Employees

The five highest paid individuals of the Group included one director for the year ended 31 December 2020 (2019: one director), details of whose emoluments were included in the disclosures above. Details of the remuneration for the year of the remaining four (2019: four) highest paid individuals who are neither a director nor chief executive of the Company for the year ended 31 December 2020 are as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Employees		
Salaries, allowances and benefits in kind	4,626	4,135
Discretionary bonus	5,840	6,163
Share-based compensation expenses	71,012	21,951
Contribution to retirement benefit scheme	83	210
	81,561	32,459

Their top five emoluments fell within the following bands:

	Number of employees Year ended 31 December	
	2020	2019
HK\$7,000,001 to HK\$7,500,000	—	1
HK\$8,000,001 to HK\$8,500,000	—	1
HK\$9,500,001 to HK\$10,000,000	—	1
HK\$10,000,001 to HK\$10,500,000	—	1
HK\$11,500,001 to HK\$12,000,000	1	—
HK\$12,000,001 to HK\$12,500,000	1	—
HK\$14,000,001 to HK\$14,500,000	1	—
HK\$26,500,001 to HK\$27,000,000	—	1
HK\$58,500,001 to HK\$59,000,000	1	—
HK\$118,000,001 to HK\$118,500,000	1	—
	5	5

Saved as disclosed above, during the year ended 31 December 2020, no emoluments were paid by the Group to the directors or chief executive of the Company or the five highest paid individuals of the Group as an inducement to join or upon joining the Group or as compensation for loss of office (2019: nil).

None of the directors of the Company and the five highest paid individuals of the Group waived or agreed to waive any emoluments during the year ended 31 December 2020 (2019: nil).

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12. PROPERTY, PLANT AND EQUIPMENT

	Buildings RMB'000	Leasehold improvements RMB'000	Motor vehicles RMB'000	Furniture, fixtures and equipment RMB'000	Total RMB'000
COST					
At 1 January 2019	230,625	99,823	5,374	146,974	482,796
Additions	—	11,826	—	8,001	19,827
Disposals	—	(877)	(89)	(55,617)	(56,583)
At 31 December 2019	230,625	110,772	5,285	99,358	446,040
Additions	—	32,474	2,451	14,952	49,877
Disposals	(3,324)	(11,427)	(1,450)	(1,720)	(17,921)
At 31 December 2020	227,301	131,819	6,286	112,590	477,996
ACCUMULATED DEPRECIATION					
At 1 January 2019	(20,845)	(44,119)	(3,644)	(113,319)	(181,927)
Charged for the year	(5,007)	(14,274)	(486)	(12,267)	(32,034)
Eliminated on disposals	—	481	84	55,617	56,182
At 31 December 2019	(25,852)	(57,912)	(4,046)	(69,969)	(157,779)
Charged for the year	(4,981)	(15,827)	(650)	(11,123)	(32,581)
Eliminated on disposals	444	2,011	1,450	1,683	5,588
At 31 December 2020	(30,389)	(71,728)	(3,246)	(79,409)	(184,772)
CARRYING VALUES					
At 31 December 2020	196,912	60,091	3,040	33,181	293,224
At 31 December 2019	204,773	52,860	1,239	29,389	288,261

The above items of property, plant and equipment, taking into account their residual values of the cost, are depreciated on a straight-line basis over their useful lives shown as follows:

Buildings	40 to 47 years
Leasehold improvements	Shorter of the lease term or 5 to 10 years
Motor vehicles	5 years
Furniture, fixtures and equipment	5 to 10 years

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13. LEASES

The Group as a lessee

The Group has lease contracts for various properties and buildings used in its operations. Lump sum payments were made upfront to acquire the leased land from the owners with lease periods of 50 years, and no ongoing payments will be made under the terms of these land leases. Leases of properties generally have fixed lease terms between 6 months and 5 years.

There are several lease contracts that include extension and termination options, but do not impose any covenants in the leased assets or include any variable lease payments. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

As at 31 December 2020, there were no lease agreements that were entered into but not yet commenced.

i. Right-of-use assets

The carrying amounts of the Group's right-of-use assets and the movements during the year are as follows:

	Buildings	Land use right	Total
	RMB'000	RMB'000	RMB'000
Carrying amount			
At 1 January 2019	64,516	85,489	150,005
Addition	61,769	—	61,769
Decrease due to termination	(2,915)	—	(2,915)
Depreciation charge	(37,375)	(2,019)	(39,394)
At 31 December 2019	<u>85,995</u>	<u>83,470</u>	<u>169,465</u>
Addition	163,872	—	163,872
Decrease due to termination	(11,354)	—	(11,354)
Depreciation charge	(62,430)	(2,019)	(64,449)
At 31 December 2020	<u>176,083</u>	<u>81,451</u>	<u>257,534</u>

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13. LEASES (Continued)

The Group as a lessee (Continued)

ii. Lease liabilities

The carrying amounts of the Group's lease liabilities and the movements during the year are as follows:

	Total
	RMB'000
Carrying amount	
At 1 January 2019	64,393
Addition	54,270
Decrease due to termination	(2,926)
Interest on lease liabilities	2,514
Payment	(42,664)
At 31 December 2019	<u>75,587</u>
Addition	163,872
Decrease due to termination	(8,272)
Interest on lease liabilities	7,038
Payment	(74,366)
At 31 December 2020	<u>163,859</u>

Lease liabilities payable:

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Within one year	46,201	36,213
Within a period of more than one year but not more than two years	41,848	26,119
Within a period of more than two years but not more than five years	37,766	13,255
Within a period of more than five years	38,044	—
At end of the year	<u>163,859</u>	<u>75,587</u>
Less: Amount due for settlement with 12 months shown under current liabilities	46,201	36,213
Amount due for settlement after 12 months shown under non-current liabilities	<u>117,658</u>	<u>39,374</u>

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13. LEASES (Continued)

The Group as a lessee (Continued)

iii. The amounts recognised in profit or loss in relation to leases are as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Interest on lease liabilities	7,038	2,514
Depreciation charge of right-of-use assets	64,449	39,394
Expense relating to short-term leases and other leases with remaining lease term ending on or before 31 December 2019	68,112	83,351

iv. The total cash outflow for leases are as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Within operating activities	68,112	83,351
Within investing activities	—	7,499
Within financing activities	74,366	42,664

v. Extension options and termination options:

During the year ended 31 December 2020, the Group terminated contracts amounted to RMB8,272,000 (2019: RMB2,926,000), resulting in decreases in lease liabilities due to early termination from contracts with no termination options.

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14. INTANGIBLE ASSETS

	Customer relationships	Core technologies	Non-compete agreements	Software	Memberships	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
COST						
At 1 January 2019	779,585	295,512	6,729	11,206	3,400	1,096,432
Additions	—	—	—	1,886	—	1,886
At 31 December 2019	779,585	295,512	6,729	13,092	3,400	1,098,318
Additions	—	—	—	3,538	—	3,538
Disposals	—	—	—	—	(2,200)	(2,200)
At 31 December 2020	779,585	295,512	6,729	16,630	1,200	1,099,656
AMORTIZATION AND IMPAIRMENT						
At 1 January 2019	(759,269)	(295,512)	(6,729)	(8,701)	(2,200)	(1,072,411)
Charged for the year	(15,131)	—	—	(3,068)	—	(18,199)
At 31 December 2019	(774,400)	(295,512)	(6,729)	(11,769)	(2,200)	(1,090,610)
Charged for the year	(5,185)	—	—	(2,243)	—	(7,428)
Eliminated on disposals	—	—	—	—	2,200	2,200
At 31 December 2020	(779,585)	(295,512)	(6,729)	(14,012)	—	(1,095,838)
CARRYING VALUES						
At 31 December 2020	—	—	—	2,618	1,200	3,818
At 31 December 2019	5,185	—	—	1,323	1,200	7,708

All intangible assets have finite useful lives and are amortised on a straight-line basis based on their estimated useful lives, except for the customer relationships having finite useful lives and being amortised on an accelerated basis based on their estimated useful lives and the memberships having infinite lives, as follows:

Customer relationships	2 to 10 years
Core technologies	5 to 6 years
Non-compete agreements	2 to 10 years
Software	1 to 6 years

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15. GOODWILL

The goodwill was primarily arisen from the acquisition of Linkage Technologies International Holdings Limited on 1 July 2010. The carrying value was RMB1,932,246,000 as at 31 December 2020 (2019: RMB1,932,246,000), which is related to the Group's software business.

Impairment testing on goodwill

For the impairment testing, goodwill has been allocated to the Group's cash-generating units ("CGU") which are operating in the software business.

The basis of the recoverable amount of the above CGU and the methodology used for the year are summarised below:

The recoverable amount of the group of CGU has been determined based on a value in use calculation and is assessed by the management with reference to valuations carried out by an independent professional valuer, which has appropriate qualifications and experience in valuation of similar testing.

The calculation uses cash flow projections based on financial budgets approved by management covering a five-year period, and at a pre-tax discount rate of 19.5% for the year ended 31 December 2020 (2019: 19.5%). The cash flows of the CGU beyond the five-year period are extrapolated using a 3.0% growth rate considering the relevant industry growth rate forecast and the economic condition of the market and period which does not exceed the long-term average growth rate for the industry. The Directors believe that the projected growth rates are reasonable. Other key assumptions for the value in use calculations relate to the estimation of cash inflows and/or outflows which include budgeted sales and gross profit margin, with expected gross profit margin for 5-year-period floating up and down within 1% compared with that of the year. Such estimation is based on the past performance of the CGU, industry information and management's expectations for the market development, including the fluctuation in the software products and related services business in the current economic environment.

The recoverable amount of the CGU of software business was RMB9,270,000,000 as at 31 December 2020 (2019: RMB6,780,000,000), which was higher than the carrying amount of the CGU, including the goodwill. Therefore for the year ended 31 December 2020, no impairment loss was recognised (2019: nil).

The table below sets forth a sensitivity analysis of the impact of variations in key assumptions, namely the discount rate and the revenue growth rate, on the recoverable amount of the CGU of software business, where the headroom represents the excess of the recoverable amount over the carrying amount of the CGU of software business. The headroom amounts to RMB3,715,000,000 as at 31 December 2020 (2019: RMB2,873,000,000). The management believe that any reasonably possible change in assumptions would not cause the aggregate carrying amount of the CGU to exceed the recoverable amount.

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15. GOODWILL (Continued)

Impairment testing on goodwill (Continued)

	Headroom At 31 December	
	2020 RMB'000	2019 RMB'000
Reasonably possible change in discount rate		
+0.5%	3,465,000	2,653,000
+1%	3,225,000	2,453,000
Reasonably possible change in revenue growth rate		
-0.5%	3,555,000	2,733,000
-1%	3,405,000	2,623,000

16. INVESTMENTS IN ASSOCIATES

Details of the Group's investments in associates are aggregately presented as follows:

	At 31 December	
	2020 RMB'000	2019 RMB'000
Cost of unlisted investments in associates	6,000	56,000
Share of results and other comprehensive income	410	(4,967)
Impairment losses on associates	(6,410)	—
	—	51,033

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16. INVESTMENTS IN ASSOCIATES (Continued)

Details of the Group's associates at the end of the years ended 31 December 2020 and 2019 are as follows, all of which are unlisted corporate entities whose quoted market price is not available:

Name of entity ⁽ⁱ⁾	Place of incorporation/ Registration	Principal place of operation	Proportion of ownership interest and voting rights held by the Group At 31 December				Principal activity
			2020		2019		
			Directly	Voting	Directly	Voting	
Dalian Xikang Yunshe Development Co., Ltd. ⁽ⁱⁱ⁾ (大連熙康雲舍發展有限公司)	PRC	PRC	N/A	N/A	10.0%	20.0%	Provision of hospitality management, travel planning management and other management services
Beijing Yangguang Tiannv Information Technology Co., Ltd. ⁽ⁱⁱⁱ⁾ (北京陽光天女信息科技有限公司)	PRC	PRC	9.0%	14.3%	9.0%	14.3%	Provision of information technology development services

All of the above associates are accounted for using the equity method in the consolidated financial statements.

Notes:

- The English names of the companies are translated from their registered Chinese names for identification purpose only.
- In 2017, the Group invested RMB50,000,000 into Dalian Xikang Yunshe Development Co., Ltd. ("**Dalian Xikang Yunshe**") for 10% equity interests. Pursuant to the articles of associations, the Group has the ability to exercise significant influence over the investee through the power to appoint one out of five seats in the board of directors.

On 27 July 2020, Asialnfo Nanjing entered into a share transfer agreement with Dalian East Soft Thinking Technology Limited ("**Dalian East Soft Thinking**"), pursuant to which Asialnfo Nanjing agreed to sell and Dalian East Soft Thinking agreed to purchase, 10% equity interest in Dalian Xikang Yunshe. The consideration for the transfer was RMB50,000,000 in cash. As at 15 August 2020, the share transfer was completed and the Group ceased to have significant influence over Dalian Xikang, with a resulting disposal gain recognised in the consolidated statement of profit or loss, amounted to RMB6,944,000. As at 31 December 2020, RMB30,000,000 of the consideration was yet to collect and included in prepayments, deposits and other receivables.

- On 23 February 2017, the Group invested RMB6,000,000 into Beijing Yangguang Tiannv Information Technology Co., Ltd. ("**Yangguang Tiannv**") for 10% equity interests. The Group's interest was diluted by an independent third-party non-controlling shareholder with capital injections to 9% in 2018. The Group has the ability to exercise significant influence over the investee through the power to appoint one out of seven seats in the board of directors and has the rights to exercise its voting power throughout any decision-making process of the investee.

Yangguang Tiannv incurred continuous operating losses in the recent years. In 2020, Yangguang Tiannv nearly ceased all its business. At the end of the reporting period, the Group performed an impairment assessment using expected cash flow discounting method, noting that the recoverable amount of investment was below zero. Therefore the investment was fully impaired and an impairment loss of RMB6,410,000 was recognised in profit or loss during 2020.

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17. TRADE AND NOTES RECEIVABLES

	At 31 December	
	2020 RMB'000	2019 RMB'000
Notes receivables	76,562	101,442
Trade receivables	913,583	762,456
Amounts due from third parties	320,740	762,456
Amounts due from related parties	592,843	—
Less: allowance for credit losses	(48,188)	(22,716)
	941,957	841,182

For the purpose of data comparison, the amounts above included the trade and notes receivables from the China Mobile Group.

The Group generally grants credit period of 30 days from the dates of acceptance reports when the Group had the right to consideration becoming unconditional. The extension of credit period to the customers may be granted on a discretionary basis by considering customer type, the current creditworthiness and the customer's financial condition and payment history with the Group.

Trade receivables relate to a number of independent customers that have a good track record with the Group. The allowance for doubtful debts of the Group is based on the evaluation of collectability and aging analysis of individual trade debts performed by the management. A considerable amount of judgment is required in assessing the ultimate realisation of these receivables, including the current creditworthiness and the past collection history of each customer.

Notes receivables are bank acceptance notes and commercial acceptance notes issued by large enterprise customers, which management believes that all the counterparties are of high credit quality and the expected credit loss isn't significant.

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17. TRADE AND NOTES RECEIVABLES (Continued)

Aging of trade and notes receivables, net of allowance for credit losses, based on the dates when the Group has the right to bill, at the end of the years ended 31 December 2020 and 2019 is as follows:

	At 31 December	
	2020 RMB'000	2019 RMB'000
1–30 Days	689,984	517,754
31–90 Days	82,109	164,928
91–180 Days	111,407	109,482
181–365 Days	45,677	37,482
Over 365 Days	12,780	11,536
	941,957	841,182

Movement in lifetime ECL that has been recognised for trade receivables in accordance with HKFRS 9 for the years ended 31 December 2020 and 2019 is as follows:

	Total RMB'000
At 1 January 2019	13,875
Allowance for trade receivables	8,841
At 31 December 2019	22,716
Allowance for trade receivables, net of reversal	29,621
Written-off as uncollectible	(4,149)
At 31 December 2020	48,188

Details of impairment assessment on trade receivables are set out in Note 21.

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18. PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	At 31 December	
	2020 RMB'000	2019 RMB'000
Receivables from disposal of associates (Note 16)	30,000	—
Project bidding and other deposits	28,611	14,676
Prepayment of value added tax	20,395	11,752
Prepayment for outsourcing system supporting service	14,356	18,257
Prepaid rental expenses ⁽ⁱ⁾	8,471	15,447
Interest receivable	4,176	1,490
Prepayment for purchase of shares	3,576	—
Advances to suppliers	2,085	107,141
Staff advances	1,815	2,302
Prepayment for technical service and telecommunication service	50	13,132
Others	1,428	849
	114,963	185,046
Less: allowance for credit losses	(577)	(1,340)
	114,386	183,706

Note:

- (i) Prepaid rental expenses mainly represent prepayments for short-term leases and leases of low value assets that were exempted from HKFRS 16.

Movements in lifetime ECL that has been recognised for receivables from disposal of associates, project bidding and other deposits and interest receivable in accordance with the simplified approach set out in HKFRS 9 for the year ended 31 December 2020 and 2019 is as follows:

	At 31 December	
	2020 RMB'000	2019 RMB'000
At the beginning of the year	1,340	1,344
Net reversal of allowance for credit losses	(432)	(4)
Written-off as uncollectible	(331)	—
At the end of the year	577	1,340

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19. CONTRACT ASSETS AND CONTRACT LIABILITIES

The Group has rights to considerations from customers for the provision of software business and network security business. Contract assets arise when the Group has rights to considerations for completion of such services and not yet billed under the relevant contracts, and their rights are conditioned on factors other than passage of time. Any amount previously recognised as contract assets are transferred to trade receivables when the rights become unconditional. Remaining rights and performance obligations in a particular contract are accounted for and presented on a net basis, as either a contract asset or a contract liability.

	At 31 December	
	2020 RMB'000	2019 RMB'000
Analysed for reporting purposes as follows:		
Contract assets	1,722,485	1,554,521
Contract liabilities	(393,371)	(296,945)

For the contract liabilities as at 31 December 2020 and 2019, the entire balances were expected to be recognised as revenue during the year ending 31 December 2021 and the year ended 31 December 2020, respectively.

Contract assets and contract liabilities are analysed and classified as current assets and current liabilities due to the contract assets and contract liabilities are expected to be recognised in normal operation cycle.

Movement in lifetime ECL that has been recognised for contract assets in accordance with HKFRS 9 for the year ended 31 December 2020 is as follows:

	RMB'000
At 31 December 2018	10,177
Reversal of allowance on contract assets	19,529
At 31 December 2019	29,706
Allowance on contract assets, net of reversal	5,862
At 31 December 2020	35,568

Details of impairment assessment on contract assets are set out in Note 21.

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20. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS

Financial assets measured at FVPL include the following:

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Wealth management products (Note)	1,103,800	—

Note:

Wealth management products represented the Group's investments in various wealth management products issued by commercial banks, insurance companies and state-owned financial institutions. These products have no specified maturity and are repayable on demand, or have a term ranging from 3 months to 8 months with variable return rates indexed to the performance of underlying assets. As at 31 December 2020, they were measured at fair values (level 3: RMB1,103,800). They have an expected annual return rate ranging from 1.65% to 4.75%.

The gains were recognised in profits or loss are as follows:

	Year ended 31 December	
	2020	2019
	RMB'000	RMB'000
Changes in fair value of financial assets at FVTPL (Note 4)	7,400	—
Net gains on disposal of financial assets (Note 4)	23,104	4,774
	30,504	4,774

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21. OVERVIEW OF THE GROUP'S EXPOSURE TO CREDIT RISK

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. At the end of the reporting period, the Group's maximum exposure to credit risk which causes a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position.

In order to minimise credit risk, the finance team of the group has developed and maintained a credit risk grading system to categorise exposures according to their degree of risk of default. Management uses publicly available financial information and the Group's own historical repayment records to rate its major customers and other debtors. The Group's exposure and the credit ratings of its counterparties are continuously monitored and the aggregate value of transactions concluded is spread amongst approved counterparties.

For trade receivables and contract assets, the Group has applied the HKFRS 9 to measure the loss allowance at lifetime ECL. The Group determines the ECL on these items by using a provision matrix, estimated based on the historical credit loss experience based on the past default experience of the debtor, general economic conditions of the industry in which the debtors operate and an assessment of both the current as well as the forecast direction of conditions at the reporting date.

The Group writes off trade receivables and contract assets when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, e.g. when the debtor has been placed under liquidation or has entered into bankruptcy proceedings.

Based on Group's historical credit loss experience, different customer types (including strategic and normal risk type) have significant different loss patterns.

Strategic customers	Represent the three largest telecom operators and China Tower Corporation Limited in the PRC (including their headquarters, provincial, municipal and specialised subsidiaries/branches)
Normal risk customers	Represent other enterprises in the PRC except for strategic customers

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21. OVERVIEW OF THE GROUP'S EXPOSURE TO CREDIT RISK (Continued)

As at 31 December 2020

Strategic customers:

For strategic customers, the directors of the Company determines that the ECL rate is relatively low based on the size and operations of the strategic customers. Such customers have good credit rating, limited past default payment history with minimal amount.

The following table provides information about the Group's exposure to credit risk and ECLs for strategic customers as at 31 December 2020:

Strategic customers	Average loss rate %	Gross carrying amount RMB'000	Impairment loss allowance RMB'000
Trade receivables	0.86%	820,233	7,058
Contract assets	1.37%	1,581,204	21,670

Normal risk customers:

The following table provides information about the Group's exposure to credit risk and ECLs for normal risk customers as at 31 December 2020:

Normal risk customers	Average loss rate %	Gross carrying amount RMB'000	Impairment loss allowance RMB'000
Trade receivables	44.06%	93,350	41,130
Contract assets	7.86%	176,849	13,898

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21. OVERVIEW OF THE GROUP'S EXPOSURE TO CREDIT RISK (Continued)

As at 31 December 2019

Strategic customers:

For the strategic customers, the directors of the Company have adopted the average loss rates of 0.40% and 0.44% on the gross carrying amounts of the trade receivables and the contract assets as at 31 December 2019, respectively. Included in the trade receivables of strategic customers as at 31 December 2019, the gross amount of trade receivables and the contract assets identified as credit-impaired are RMB8,454,000 and RMB12,350,000, respectively. Impairment losses are fully provided as at 31 December 2019.

Strategic customers	Average loss rate %	Gross carrying amount RMB'000	Impairment loss allowance RMB'000
Trade receivables	0.40%	727,400	2,916
Contract assets	0.44%	1,538,334	6,745

Normal risk customers:

For the normal risk customers, a provision matrix is used by the directors of the Company to calculate ECLs. The following table provides information about average loss rate and ECLs for trade receivables and contract assets as at 31 December 2019. The gross amount of trade receivables and contract assets identified as credit-impaired as at 31 December 2019 are RMB5,342,000 and RMB2,624,000, respectively. Impairment losses are fully provided as at 31 December 2019.

Normal risk customers	Average loss rate %	Gross carrying amount RMB'000	Impairment loss allowance RMB'000
Trade receivables	17.13%	35,056	6,004
Contract assets	17.40%	45,893	7,987

In determining the ECL for other receivables, amounts due from related parties, and other non-current assets, the directors of the Company have taken into account the historical default experience and the future prospects of the industries and/or considering various external sources of actual and forecast economic information, as appropriate, in estimating the probability of default of each of the other receivables, amounts due from related parties, and other non-current assets occurring within their respective loss assessment time horizon, as well as the loss upon default in each case. For the purposes of impairment assessment, other receivables, amounts due from related parties, and other non-current assets are considered to have low credit risk as the counterparties to these financial assets have a high credit rating. Accordingly, the loss allowance is measured at an amount equal to 12-month ECL.

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21. OVERVIEW OF THE GROUP'S EXPOSURE TO CREDIT RISK (Continued)

No allowance has been provided for notes receivables, pledged bank deposits, term deposits and bank balances since the balances are all with the banks which have low credit risks at 31 December 2020.

22. PLEDGED BANK DEPOSITS, TERM DEPOSITS AND BANK BALANCES AND CASH

Pledged bank deposits

Pledged bank deposits represent deposits pledged to banks to secure banking facilities granted to the Group, obtain letters of credits or guarantees. Deposits amounting to RMB263,067,000 had been pledged to secure facilities and short-term bank borrowings, letters of credits or guarantees as at 31 December 2020 (2019: RMB321,246,000), and therefore, were classified as current assets. The deposits amounting to RMB8,737,000 as at 31 December 2020 had been pledged for a period longer than one year for letters of credits and guarantees and therefore, were classified as non-current assets as at 31 December 2020 (2019: RMB28,612,000).

Pledged bank deposits of the Group carried interests at market rates which range from 0.01% to 2.75% as at 31 December 2020 (2019: 1.3% to 2.1%).

Term deposits

Term deposits represent multiple certificates of deposits with a commercial bank in the PRC that bear fixed interest rates, per annum, ranging from 0.98% to 3.30% (2019: from 3.78% to 3.84%), as at 31 December 2020.

Bank balances and cash

Bank balances and cash of the Group comprised cash and bank balances that bear interest at prevailing market rates, per annum, ranging from 0% to 3.25% as at 31 December 2020 (2019: 0% to 3.8%).

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23. TRADE AND NOTES PAYABLES

	At 31 December	
	2020 RMB'000	2019 RMB'000
Trade payables	149,454	198,188
Notes payables	—	159,860
	149,454	358,048

The table below sets forth, as at the end of the reporting period, the aging analysis of the trade and notes payables presented based on the invoice date:

	At 31 December	
	2020 RMB'000	2019 RMB'000
1-90 days	79,538	199,152
91-180 days	13,922	90,751
181-365 days	12,171	13,463
1-2 years	15,338	21,001
Over 2 years	28,485	33,681
	149,454	358,048

The average credit period on purchases of goods and services is 90 days. The Group has financial risk management policies in place to ensure that sufficient working capital is maintained to meet its obligations when they fall due.

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24. OTHER PAYABLES, DEPOSITS RECEIVED AND ACCRUED EXPENSES

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Accrued payroll and welfare	1,866,996	1,621,850
Accrued liabilities	73,968	13,881
Other tax payables	40,390	27,646
Accrued expenses	45,727	54,808
Employee reimbursement payable	9,924	12,528
Other payables	5,630	4,116
Advance from customers	16,083	183,282
Others	4,500	4,726
	2,063,218	1,922,837

25. BANK BORROWINGS

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Analysed as:		
Secured bank borrowings carrying interest at variable rates	137,023	594,372
Analysis of borrowings by currency:		
Denominated in US\$	137,023	594,372

The Group had bank borrowings denominated in US\$ as at 31 December 2020 and 2019. The Group's bank borrowings are secured by the respective pledged bank deposits as at 31 December 2020 and 2019.

	At 31 December	
	2020	2019
	RMB'000	RMB'000
The carrying amounts of the above borrowings contain a repayment on demand clause (shown under current liabilities)	137,023	594,372

The above bank borrowings denominated in US\$ was at variable interest rates based on three-month London Interbank Offered Rate plus 1.11% as at 31 December 2020 (2019: three-month London Interbank Offered Rate plus 1.2% to one-month London Interbank Offered Rate plus 1%).

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26. DEFERRED TAXATION

The following is the analysis of the deferred tax balances for financial reporting purposes:

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Deferred tax assets	133,111	135,766
Deferred tax liabilities	(123,205)	(122,983)
	9,906	12,783

The following are the major deferred tax assets (liabilities) recognised and movement thereon during the years reported:

	Impairment loss	Accrued payroll and welfare	Accrued expense	Right-of-use assets and lease liabilities	Withholding tax on undistributable profits of the PRC subsidiaries (Note 7)	Intangible assets	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	6,643	150,555	6,094	(12)	(125,509)	(2,032)	35,739
(Charged) credited to profit or loss	(1,317)	(31,615)	5,456	(38)	(16,955)	1,513	(42,956)
Transfer to income tax payable ⁽ⁱ⁾	—	—	—	—	20,000	—	20,000
At 31 December 2019	5,326	118,940	11,550	(50)	(122,464)	(519)	12,783
Credited (charged) to profit or loss	3,145	(5,530)	(320)	(691)	—	519	(2,877)
At 31 December 2020	8,471	113,410	11,230	(741)	(122,464)	—	9,906

Note:

- (i) In 2019, AsialInfo Nanjing distributed RMB200,000,000 dividend to its Hong Kong parent shareholder, Hong Kong AsialInfo Technologies Limited, of which respective withholding tax amounted to RMB20,000,000 transferred to income tax payable.

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26. DEFERRED TAXATION (Continued)

Deferred tax assets not recognised

Deferred tax assets are recognised if it is probable that all of the deferred tax assets will be realised through the recovery of taxes previously paid and/or future taxable income. The directors of the Company have reviewed the deferred tax assets of the Group at the end of the reporting period and considered that it is probable that the deferred tax assets of the Group will be realised through future taxable income based on directors' assessment of the probability that taxable profits will be available over the years which the deferred tax assets can be realised or utilised.

As at 31 December 2020, the Group had unused tax losses arising in Mainland China of RMB314,693,000 (2019: RMB278,298,000) available for offset against future profits. No deferred tax asset had been recognised as at 31 December 2020 and 2019 of such tax losses due to the unpredictability of future profit streams.

Unused tax loss arising in Mainland China expiring in:

	At 31 December	
	2020	2019
	RMB'000	RMB'000
2021	62,056	62,056
2022	32,936	32,936
2023	58,756	58,756
2024	57,840	124,550
2025	103,105	—
	314,693	278,298

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27. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

The table below details changes in the Group's liabilities arising from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are those for which cash flows were, or further cash flows will be, classified in the Group's consolidated statement of cash flows from financing activities.

	Dividend payables	Accrued issue cost	Bank borrowings	Lease liabilities	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At January 1, 2019	—	2,329	1,915,484	64,393	1,982,206
Financing cash flows					
Repayment of bank borrowings	—	—	(1,310,122)	—	(1,310,122)
Bank borrowing Interest paid	—	—	(38,504)	—	(38,504)
Capital element of lease rental paid	—	—	—	(40,150)	(40,150)
Interest element of lease rental paid	—	—	—	(2,514)	(2,514)
Payment of issue costs	—	(3,010)	—	—	(3,010)
Share issuance costs	—	681	—	—	681
Effect of exchange differences	—	—	(10,990)	—	(10,990)
Interest expense	—	—	37,217	2,514	39,731
Interest payable included in other payables, deposits received and accrued expenses	—	—	1,287	—	1,287
New additions to leases	—	—	—	54,270	54,270
Decrease due to termination of lease contacts	—	—	—	(2,926)	(2,926)
At December 31, 2019	—	—	594,372	75,587	669,959
Financing cash flows					
New bank borrowings raised	—	—	931,647	—	931,647
Repayment of bank borrowings	—	—	(1,360,914)	—	(1,360,914)
Bank borrowing Interest paid	—	—	(13,622)	—	(13,622)
Capital element of lease rental paid	—	—	—	(67,328)	(67,328)
Interest element of lease rental paid	—	—	—	(7,038)	(7,038)
Dividend paid	(167,455)	—	—	—	(167,455)
Dividend declared	168,936	—	—	—	168,936
Effect of exchange differences	(1,481)	—	(28,082)	—	(29,563)
Interest expense	—	—	12,581	7,038	19,619
Interest payable included in other payables, deposits received and accrued expenses	—	—	1,041	—	1,041
New additions to leases	—	—	—	163,872	163,872
Decrease due to termination of lease contacts	—	—	—	(8,272)	(8,272)
At December 31, 2020	—	—	137,023	163,859	300,882

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28. SHARE CAPITAL

Details of the movement of share capital of the Company are as follows:

	Number of shares	Nominal value per share	Share capital
Authorised			
At 1 January 2019, December 2019 and 2020	800,000,000,000	HK\$0.0000000125	HK\$10,000.00
Issued			
At 1 January 2019	713,776,184	HK\$0.0000000125	HK\$8.92
Issue of shares upon exercise of the over- allotment option ⁽ⁱ⁾	2,974,800	HK\$0.0000000125	HK\$0.04
Exercise of share options ⁽ⁱⁱ⁾	553,496	HK\$0.0000000125	HK\$0.01
Vesting of restricted stock units ⁽ⁱⁱⁱ⁾	8,740,436	HK\$0.0000000125	HK\$0.11
At 31 December 2019	726,044,916	HK\$0.0000000125	HK\$9.08
Issue of shares upon the contribution from share holders ^(iv)	182,259,893	HK\$0.0000000125	HK\$2.28
Exercise of share options ⁽ⁱⁱ⁾	3,696,480	HK\$0.0000000125	HK\$0.04
Vesting of restricted stock units ⁽ⁱⁱⁱ⁾	3,766,144	HK\$0.0000000125	HK\$0.05
At 31 December 2020	915,767,433	HK\$0.0000000125	HK\$11.45

	At 31 December	
	2020 RMB'000	2019 RMB'000
Presented as	—	—

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28. SHARE CAPITAL (Continued)

Notes:

- (i) On 15 January 2019, the Company issued and allotted 2,974,800 ordinary shares, representing approximately 3.47% of the total number of ordinary shares initially offered as at 19 December 2018 at HK\$10.50 pursuant to the partial exercise of the over-allotment option granted to the Company's underwriters in the Company's global offering.
- (ii) During the year ended 31 December 2020, the Company issued an aggregate of 2,803,880 ordinary shares (2019:13,296 shares), respectively, resulting from the exercising of share option awards to certain employees and a director pursuant to the Pre-IPO share option scheme, and issued an aggregate of 892,600 ordinary shares (2019: 540,200 shares) upon exercising of share option under the 2011 plan (Note 32).
- (iii) On 18 January 2020 and 2019, the Company issued and allotted 2,515,776 and 6,492,612 ordinary shares, respectively, resulting from the vesting of restricted share awards to certain employees and a director pursuant to the Pre-IPO Share Award Scheme approved and adopted on 26 June 2018, granted on 1 August 2018, respectively (Note 32).

On 1 July 2020 and 2019, the Company issued and allotted 1,250,368 and 1,329,120 ordinary shares, respectively, resulting from the vesting of restricted share awards to certain employees and a director pursuant to the Pre-IPO Share Award Scheme approved and adopted on 26 June 2018, granted on 11 July 2018, respectively (Note 32).

On 3 June 2019, the remaining RSUs were vested under 2014 plan with a total of 918,704 ordinary shares (Note 32).
- (iv) On 14 April 2020, the Company and CMI entered into the subscription agreement under which the Company had conditionally agreed to allot and issue, and CMI had conditionally agreed to subscribe for 182,259,893 new shares at the subscription price for HK\$7.6 per subscription share. On 2 September 2020, all conditions as set out in the subscription agreement had been fulfilled and Completion took place in accordance with the terms and conditions of the subscription arrangement, whereby 182,259,893 new shares were allotted and issued to CMI as paid at the subscription price with the total amount of consideration of HK\$1,385,175,000 (equivalent to RMB1,222,099,000).

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29. PURCHASE OF ORDINARY SHARES

The following table presents the movement in shares that held by the Company for the purpose of issuing shares under the 2020 Share Award Scheme.

Details	Number of shares	HK\$'000	RMB'000
Opening balance 1 January 2020	—	—	—
Purchase of shares for 2020 Scheme	36,302,000	415,141	364,284
Employee share scheme issue (Note 32)	<u>(19,870,897)</u>	<u>(224,840)</u>	<u>(200,658)</u>
Balance 31 December 2020	<u>16,431,103</u>	<u>190,301</u>	<u>163,626</u>

During the year 2020, the Company purchased its ordinary shares on The Stock Exchange of Hong Kong Limited as follows:

Month	Number of shares purchased	Highest price paid per share HK\$	Lowest price paid per share HK\$	Aggregate price paid HK\$'000
May	860,000	9.9454	9.7101	8,470
Jun	2,613,600	10.4431	9.5400	26,590
Jul	3,866,400	10.7686	10.4429	41,006
Aug	4,700,000	11.6615	10.8294	52,846
Sep	7,706,000	12.9962	11.6103	94,410
Oct	9,524,000	12.2906	10.7851	111,428
Nov	7,032,000	12.1400	10.9665	<u>80,391</u>
				<u>415,141</u>

The Company purchased ordinary shares by the China International Capital Corporation (“CICC”) in 2020. By 31 December 2020, the Company has placed a deposit of HK\$420,000,000 (equivalent to RMB367,860,000) to CICC and has purchased 36,302,000 shares by a total consideration of HK\$415,141,000 (equivalent to RMB364,284,000).

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30. CAPITAL RISK MANAGEMENT

The group's primary objectives when managing capital are to safeguard the group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group manages its capital to ensure entities in the Group will be able to continue as a going concern with maximizing the return to shareholders through the optimization of the debt and equity balance. The Group's overall strategy remains unchanged over the year ended 31 December 2020.

The capital structure of the Group consists of net debt, which includes bank borrowings disclosed in Note 25, net of cash and cash equivalents, and total equity of the Group, comprising share capital and reserves. The Group monitors capital on the basis of the debt-to-capitalisation ratio. This ratio is calculated as interest-bearing debts over interest-bearing debts plus total equity. Interest-bearing debts represent bank borrowings and lease liabilities, as shown in the consolidated statement of financial position.

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Interest-bearing debts:		
Bank borrowings	137,023	594,372
Lease liabilities (non-current portion)	117,658	39,374
Lease liabilities (current portion)	46,201	36,213
	300,882	669,959
Total equity	5,555,448	3,907,203
	5,856,330	4,577,162
Interest-bearing debts plus total equity		
	5.1%	14.6%
Debt-to-capitalisation ratio		

The directors of the Company review the capital structure on a regular basis. As part of this review, the management considers the cost of capital and the risks associated with the capital. Based on recommendations of the directors of the Company, the Group will balance its overall capital structure through raising of new capital, issue of new debt or the redemption of the existing debts.

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31. FINANCIAL INSTRUMENTS (Continued)

Sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to variable interest rates for pledged bank deposits, bank balances and bank borrowings at the end of the reporting period and assumed that the amount of such balances outstanding at the end of the reporting period was outstanding for the whole year. A 50 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 50 basis points higher/lower and all other variables were held constant, the Group's post-tax profit for the year ended 31 December 2020 would increase/decrease by RMB10,062,000 (2019: increase/decrease by RMB6,710,000). This is mainly attributable to the Group's exposure on interest rates on its pledged bank deposits, bank balances and bank borrowings.

Currency risk

The Group has bank balances and term deposits which are denominated in foreign currencies, mainly US\$ and HK\$, as at 31 December 2020 (2019: US\$) and bank borrowing balances which are denominated in US\$ as at 31 December 2020 (2019: US\$), that are exposed to currency risk.

The carrying amounts of the Group's foreign currency denominated monetary assets and liabilities, excluded related party borrowings, at the end of the reporting period are set forth as follows:

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Assets		
US\$	267,442	143,834
HK\$	252,201	6,442
	519,643	150,276
Liabilities		
US\$	137,023	594,372

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31. FINANCIAL INSTRUMENTS (Continued)

Foreign currency sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to foreign currency rates and includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 5% change in foreign currency rates. The sensitivity analysis includes external bank borrowings from the PRC banks' overseas branches. A 5% increase or decrease is used when reporting foreign currency rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign currency rates.

If RMB were appreciated/depreciated 5% against the foreign currency and all other variable were held constant, the Group's post-tax profit for the year ended 31 December 2020 would decrease/increase by RMB19,005,000 (2019: increase/decrease by RMB18,148,000). This is mainly attributable to the Group's exposure to foreign currency rates of US\$ (2019: US\$) on its bank borrowings and the foreign currency bank balances and term deposits.

Credit risk

The Group's maximum exposure to credit risk which causes a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position.

The Group's credit risk is primarily attributable to its trade and notes receivables, other receivables, other non-current assets, amounts due from related parties and contract assets.

With respect to the credit risk of the Group's treasury operations, management has established internal procedures to monitor the Group's bank balances and cash, term deposits, investments to be placed and entered into with financial institution of good reputation. These internal procedures help to minimise the Group's credit risk exposure.

The credit risk on pledged bank deposits, bank balances and term deposits is limited because the counterparties are banks with high credit rating.

Due to the nature of business of the Group, the Group has significant concentration of credit risk on a number of customers. During the year ended 31 December 2020, the aggregate amount of the Group's revenue amount to the top three customers was RMB5,716,395,000 (2019: RMB5,491,998,000), representing 95.0% (2019: 96.0%) of total revenue of the Group for the year. The aggregated balance of the Group's trade and notes receivables from the top three customers was RMB817,990,000 (2019: RMB781,534,000), representing 86.8% (2019: 92.9%) of the total trade and notes receivables as at 31 December 2020. In addition, the Group's concentration of credit risk by geographical locations is solely in the PRC. In the opinion of directors of the Company, those customers are mainly large telecommunication companies owned by the PRC government with good financial backgrounds.

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31. FINANCIAL INSTRUMENTS (Continued)

Foreign currency sensitivity analysis (Continued)

Liquidity risk

Ultimate responsibility for liquidity risk management rests with the directors of the Company, who have established an appropriate liquidity risk management framework for the management of the Group's short-, medium- and long-term funding and liquidity management requirements. The Group manages liquidity risk by maintaining adequate reserves and banking facilities, by continuously monitoring forecast and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

The directors of the Company are of the opinion that taken into account the above plans and measures, the Group will have sufficient working capital to meet its financial liabilities and obligations as and when they fall due and to sustain its operations for the next twelve months from the end of the reporting period. The consolidated financial statements have been prepared on the going concern basis.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities. The table has been drawn up based on the undiscounted cash flows of the liabilities based on the earliest date on which the Group can be required to pay.

	Weighted average effective interest rate/ borrowing rate %	On demand or within 3 months RMB'000	3 months to 1 year RMB'000	1-5 years RMB'000	Over 5 years RMB'000	Total undiscounted cash flow RMB'000	Carrying value RMB'000
At 31 December 2020							
Trade and notes payables		149,454	—	—	—	149,454	149,454
Other payables		5,630	—	—	—	5,630	5,630
Amounts due to related parties		9,154	—	—	—	9,154	9,154
Bank borrowings	2.2925%	—	137,787	—	—	137,787	137,023
Lease liabilities	5.45%	639	11,770	118,899	86,670	217,978	163,859
		164,877	149,557	118,899	86,670	520,003	465,120
At 31 December 2019							
Trade and notes payables		358,048	—	—	—	358,048	358,048
Other payables		4,116	—	—	—	4,116	4,116
Amounts due to related parties		18,092	—	—	—	18,092	18,092
Bank borrowings	3.6556%	349,264	254,711	—	—	603,975	594,372
Lease liabilities	4.27%	3,889	40,558	61,014	—	105,461	75,587
		733,409	295,269	61,014	—	1,089,692	1,050,215

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31. FINANCIAL INSTRUMENTS (Continued)

Fair value measurement

Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

This note provides information about how the Group determines fair values of the following financial assets.

	Fair value as at 31 December		Fair value hierarchy	Valuation technique and key input
	2020 RMB'000	2019 RMB'000		
Wealth management products	1,103,800	—	Level 3	Estimated return rate is key input.

During the years ended 31 December 2019 and 2020, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3.

Fair value of the Group's financial assets and financial liabilities that are not measured at fair value on a recurring basis

The directors of the Company consider that the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the consolidated financial statements approximate their fair values due to short maturity, initially recognised close to each reporting date, or with floating interest rates.

32. SHARE-BASED PAYMENTS

Before the year ended 31 December 2017, the Group did not issue its own stock option scheme. The employees of the Company and its subsidiaries are eligible for the 2011 stock incentive plan (the "2011 Plan") and the 2014 stock incentive plan (the "2014 Plan") adopted by the then immediate holding company, AsialInfo Holdings, and the then intermediate holding company, Skipper Holdings, respectively. Accordingly, the Group accounted for such plans by measuring the services received from the grantee in accordance with the requirement applicable to equity-settled share-based payment transactions, and recognised a corresponding increase in equity as a contribution from the parent companies in accordance with HKFRS 2 *Share-based Payment*.

2011 Plan

On 21 April 2011, AsialInfo Holdings approved a stock incentive plan with the purpose of enhancing the long-term stockholder value by offering employees and directors to participate in the Group's growth and success and to encourage them to remain the service in the Group. The 2011 Plan is valid and effective for 10 years from the approval date. Under the 2011 Plan, AsialInfo Holdings is authorised to grant participants restricted stock awards, stock options, or other types of equity incentives with a total number of 7,501,752 ordinary shares of AsialInfo Holdings.

Furthermore, in connection with the privatisation and delisting from the National Association of Securities Dealers Automated Quotations Global Market of the United States of America ("NASDAQ") of AsialInfo Holdings, the share incentives granted under the 2011 Plan were converted into the share incentive issued by Skipper Holdings with granting the equivalent numbers of ordinary shares of Skipper Holdings without any change of terms as stated under the 2011 Plan in 2014.

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32. SHARE-BASED PAYMENTS (Continued)

2011 Plan (Continued)

Stock Options under the 2011 Plan

In December 2011, pursuant to the 2011 Plan, the compensation committee of the board of directors of AsialInfo Holdings approved to grant options to certain employees and executive officers. The stock options are valid and effective for 10 years from the approval date and have graded vesting terms of four years and vest in different schedules from the grant date, on condition that employees remain in service without any performance requirements. For the stock options granted to employees of the Group, they will be vested on annual basis equally over four years, 25% on each anniversary of the grant date. For the stock options granted to the then chief executive officer, 17.5%, 17.5%, 32.5% and 32.5% are vested at each anniversary of the grant date over four years. For the stock options granted to the vice president of AsialInfo Holdings, 20%, 20%, 30% and 30% are vested at each anniversary of the grant date over four years. For the stock options granted in 2017, 0%, 50%, 25% and 25% are vested at each anniversary of the grant date over four years.

The fair value of each stock option was calculated using the binomial option-pricing model. Option valuation models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying share, and changes in the subjective input assumptions can materially affect the fair value estimate of employee stock options.

The movements of stock options held by the Group's directors and employees under the 2011 Plan are summarised as follows:

	Number of stock options	Weighted average exercise price per option (US\$)
Outstanding as at 31 December 2018	2,187,736	0.55
Exercised ⁽ⁱ⁾	(540,200)	0.78
Outstanding as at 31 December 2019	1,647,536	0.47
Exercised ⁽ⁱ⁾	(892,600)	0.41
Outstanding as at 31 December 2020	754,936	0.55

Note:

- (i) The Company issued an aggregated of 892,600 (2019: 540,200) ordinary shares upon exercising of share options under the 2011 plan in 2020 with the market prices at exercise dates being in a range of HK\$9.10 to HK\$13.74 (2019: HK\$6.65 to HK\$10.78).

RSUs under the 2011 Plan

Under the 2011 Plan, AsialInfo Holdings granted certain RSUs to the directors of the Company and employees of the Group.

The RSUs vest in two equal installments on the 6-month and 12-month anniversaries of the grant date, or vest 25% on each anniversary or vest 0%, 50%, 25% and 25% on each anniversary of the grant date over four years. The fair value of each RSU is measured based on the market price of the stock on the grant date as AsialInfo Holdings was still listed on NASDAQ. All RSUs had been vested before 2019.

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32. SHARE-BASED PAYMENTS (Continued)

2014 Plan

On 1 June 2015, the board of directors of Skipper Holdings, the then intermediate holding company of the Company, approved the 2014 Plan with the purpose of enhancing the long-term stockholder value by offering employees and directors to participate in the Group's growth and success and to encourage them to remain in the service in the Group. The 2014 Plan is valid and effective for 10 years from the approval date. Under the 2014 Plan, Skipper Holdings is authorised to grant participants restricted stock awards, stock options, or other types of equity incentives with a total number of 14,733,653 ordinary shares of Skipper Holdings.

Under the 2014 Plan, Skipper Holdings granted certain options to the directors of the Company and the employees of the Group on 1 July 2015. The stock options are valid and effective for 10 years from the approval date and have graded vesting terms of four years. The stock options are vested at 0%, 50%, 25% and 25% on each anniversary of the grant date over four years.

Stock Options under the 2014 Plan

The movements of stock options under the 2014 Plan are summarised as follows:

	Number of stock options	Weighted average exercise price per option (US\$)
Outstanding as at 31 December 2018	23,273,208	1.92
Forfeited	(1,296,936)	1.92
Outstanding as at 31 December 2019	21,976,272	1.92
Forfeited	(1,303,224)	1.92
Outstanding as at 31 December 2020	20,673,048	1.92

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32. SHARE-BASED PAYMENTS (Continued)

2014 Plan (Continued)

RSUs under the 2014 Plan

Under the 2014 Plan, Skipper Holdings granted certain RSUs to the employees and executive officers. The RSUs are valid and effective for 10 years from the approval date and are vested at 0%, 50%, 25% and 25% on each anniversary of the grant date over four years.

The movements of RSUs issued under the 2014 Plan are summarised as follows:

	Number of RSUs	Weighted average grant date fair value per RSU of the original awards (US\$)
Outstanding as at 31 December 2018	942,664	0.85
Forfeited	(23,960)	0.85
Vested (Note 28(iii))	(918,704)	0.85
Outstanding as at 31 December 2019 and 2020	—	—

Fair Value of Stock Options and RSUs under the 2014 Plan

The Group has used the discounted cash flow method to determine the underlying ordinary share fair value of Skipper Holdings. Based on the fair value of the underlying ordinary shares, the Group has used binomial option-pricing model to determine the fair value of the stock option as of the grant date. Option valuation models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying share, and changes in the subjective input assumptions can materially affect the fair value estimate of employee stock options.

The Group recognised a total share-based compensation expenses of nil in profit or loss during the year ended 31 December 2020 (2019: RMB1,984,000), in relation to the stock options and RSUs issued under the 2014 Plan.

Pre-IPO Share Option Scheme

On 26 June 2018, the Company adopted the Pre-IPO Share Option Scheme. On 11 July 2018 and 1 August 2018, pursuant to the Pre-IPO Share Option Scheme, the Company granted an aggregate of 15,055,107 share options (being 120,440,856 share options after taking into account the share subdivision), representing rights to subscribe for 15,055,107 Shares (being 120,440,856 shares after taking into account the share subdivision) to certain grantees who are a director, employees and a consultant.

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32. SHARE-BASED PAYMENTS (Continued)

Pre-IPO Share Option Scheme (Continued)

On 11 July 2018, a total of 5,875 shares (being 47,000 shares after taking into account of share subdivision) were issued to certain grantees of the share options as a result of the exercise of certain share options granted under the Pre-IPO Share Option Scheme.

The maximum number of shares in respect of which options may be granted (including shares in respect of which options, whether exercised or still outstanding, have already been granted and shares which shall have been issued under options which have been canceled) under the Pre-IPO Share Option Scheme shall be 15,055,107 shares (being 120,440,856 shares after taking into account the share subdivision), within which an aggregate of 11,781,558 shares (being 94,252,464 shares after taking into account the share subdivision) were granted on 11 July and 1 August 2018 under the Pre-IPO Share Option Scheme.

Details of the outstanding share options as at 31 December 2020 under the Pre-IPO Share Option Scheme held by grantees are set out below:

Exercise Price (US\$)	Number of shares underlying the share options	Grant date	Vesting date	Option period
1.9225	7,708,496	11 July 2018	11 July 2018, 1 July 2019 and 1 July 2020	10 years from the grant date
0.84	25,600	1 August 2018	50% vested on the 30th day after the listing date ("First Vesting Date") 20% vested on the first anniversary of the First Vesting Date 30% vested on the second anniversary of the First Vesting Date	10 years from the grant date
0.5525	12,000	1 August 2018	50% vested on the First Vesting Date 20% vested on the first anniversary of the First Vesting Date 30% vested on the second anniversary of the First Vesting Date	10 years from the grant date
1.9225	49,829,696	1 August 2018	50% vested on the First Vesting Date 20% vested on the first anniversary of the First Vesting Date 30% vested on the second anniversary of the First Vesting Date	10 years from the grant date
1.2725	24,125,368	1 August 2018	50% vested on the First Vesting Date 20% vested on the first anniversary of the First Vesting Date 30% vested on the second anniversary of the First Vesting Date	10 years from the grant date

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32. SHARE-BASED PAYMENTS (Continued)

Pre-IPO Share Option Scheme (Continued)

The movements of stock options under the Pre-IPO Share Option Scheme are summarised as follows:

	Number of stock options	Weighted average exercise price per option (US\$)
Outstanding as at 31 December 2018	93,427,328	1.72
Forfeited	(2,925,928)	1.72
Exercised	(13,296)	0.83
Outstanding as at 31 December 2019	90,488,104	1.72
Forfeited	(5,983,064)	1.77
Exercised ⁽ⁱ⁾	(2,803,880)	1.27
Outstanding as at 31 December 2020	81,701,160	1.73

Note:

- (i) The Company issued an aggregated of 2,803,880 ordinary shares upon exercising of share options under the Pre-IPO plan in 2020 with the market prices at exercise dates being in a range of HK\$9.43 to HK\$13.74.

Pre-IPO Share Award Scheme

Pursuant to the Pre-IPO Share Award Scheme, on 11 July 2018 and 1 August 2018, the Company granted an aggregate of 2,322,074 RSUs, representing rights to receive 2,322,074 shares (being 18,576,592 shares after completion of the share subdivision), within which a total of 345,819 shares (being 2,766,552 shares after completion of the share subdivision) were issued on the grant date of 11 July 2018 to certain RSU grantees as a result of the vesting of certain RSUs granted under the Pre-IPO Share Award Scheme.

Details of the outstanding RSUs as at 31 December 2020 under the Pre-IPO Share Award Scheme held by the grantees are set out below:

Number of shares underlying the RSUs	Grant date	Vesting date
—	11 July 2018	1 July 2019 and 1 July 2020
3,570,140	1 August 2018	50% vested on the First Vesting Date 20% vested on the first anniversary of the First Vesting Date 30% vested on the second anniversary of the First Vesting Date

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32. SHARE-BASED PAYMENTS (Continued)

Pre-IPO Share Award Scheme (Continued)

The movements of RSUs issued under the Pre-IPO Share Award Scheme are summarised as follows:

	Number of RSUs	Weighted average grant date fair value per RSU of the original awards (US\$)
Outstanding as at 31 December 2018	15,698,560	1.21
Forfeited	(260,632)	1.21
Vested ⁽ⁱ⁾	<u>(7,821,732)</u>	<u>1.21</u>
Outstanding as at 31 December 2019	7,616,196	1.21
Forfeited	(279,912)	1.21
Vested ⁽ⁱ⁾	<u>(3,766,144)</u>	<u>1.21</u>
Outstanding as at 31 December 2020	<u>3,570,140</u>	<u>1.21</u>

Note:

- (i) The grantees vested at the vesting dates with the market prices being in a range of HK\$9.87 to HK\$10.20 in 2020 (2019: HK\$6.65 to HK\$10.78).

Fair Value of Stock Options and RSUs under the Pre-IPO Share Option Scheme and the Pre-IPO Share Award Scheme

The Group has used the discounted cash flow method to determine the underlying ordinary share fair value of the Company. Based on the fair value of the underlying ordinary shares, the Group has used binomial option-pricing model to determine the fair value of the stock option as of the grant dates. Option valuation models require the input of highly subjective assumptions, including the option's expected life and the price volatility of the underlying share, and changes in the subjective input assumptions can materially affect the fair value estimate of employee stock options.

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32. SHARE-BASED PAYMENTS (Continued)

Pre-IPO Share Award Scheme (Continued)

Fair Value of Stock Options and RSUs under the Pre-IPO Share Option Scheme and the Pre-IPO Share Award Scheme (Continued)

	11 July 2018 and 1 August 2018 Pre-IPO Scheme
Weighted average grant date fair value per option/RSU (US\$)	9.64
Grant date share price (US\$)	9.64
Weighted average exercise price (US\$)	13.75
Expected volatility	51.0%
Contractual life	10 years
Risk-free rate	3.57%
Expected dividend yield	0%

The Company recognised a total share-based compensation expenses of RMB68,811,000 in profit or loss during the year ended 31 December 2020 (2019: RMB231,664,000), among which the amount of share-based compensation expense for Mr. Nianshu Gao was RMB4,611,000 during the year 2020 (2019: RMB19,036,000) in relation to the stock options and RSUs issued under the Pre-IPO Share Option Scheme and the Pre-IPO Share Award Scheme.

2019 Share Option Scheme

On 25 November 2019, the Company adopted the 2019 Share Option Scheme. The participants of the Scheme are directors, employees and consultants. The maximum number of shares in respect of which options may be granted (including shares in respect of which options, whether exercised or still outstanding, have already been granted and shares which shall have been issued under options which have been canceled) under the 2019 Option Scheme shall be 72,579,891 shares, within which an aggregate of 14,516,000 shares were granted on 16 June 2020 under the 2019 Share Option Scheme.

Details of the outstanding share options as at 31 December 2020 under the 2019 Share Option Scheme held by grantees are set out below:

Exercise Price (HK\$)	Number of shares underlying the share options	Grant date	Vesting date	Option period
9.56	13,716,000	16 June 2020	50% vested on the first anniversary of the Granting Date 20% vested on the second anniversary of the Granting Date 30% vested on the third anniversary of the Granting Date	10 years from the grant date

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32. SHARE-BASED PAYMENTS (Continued)

2019 Share Option Scheme (Continued)

The movements of stock options under the 2019 Share Option Scheme are summarised as follows:

	Number of stock options	Weighted average exercise price per option (HK\$)
Grant on 16 June 2020	14,516,000	9.56
Forfeited	(800,000)	9.56
Outstanding as at 31 December 2020	13,716,000	9.56

Fair Value of Stock Options under the 2019 Share Option Scheme

The Group has used the closing price of the Company's share to determine the underlying ordinary share fair value on the vesting date. Based on the fair value of the underlying ordinary shares, the Group has used binomial option-pricing model to determine the fair value of the stock option as of the grant dates. Option valuation models require the input of highly subjective assumptions, including the option's exercise price, expected life and the price volatility of the underlying share.

	16 June 2020 2019 Scheme
Fair market value per share as at valuation date (HK\$)	9.05
Exercise price (HK\$ per share)	9.56
Expected volatility	49.0%
Contractual life	10 years
Risk-free rate	0.53%
Forfeiture rate	7.5%
Expected dividend yield	2.5%

The expected volatility is based on the historical share price movement of comparable companies for the period of time close to the expected time to exercise. The Risk-free rate is based on the market yield rates of Hong Kong Sovereign bond with maturity date close to the life of options as of the Valuation Date. Forfeiture rate is based on the historical ratio of resigning from the Company, whose title is similar with the grantees. Expected dividends are based on the dividend distribution policy of the Company. Changes in the subjective input assumptions could materially affect the fair value estimate.

Share options were granted under a service condition. This condition has not been taken into account in the grant date fair value measurement of the services received. There were no market conditions associated with the share option grants.

The Company recognised a total share-based compensation expenses of RMB14,051,000 in profit or loss during the year ended 31 December 2020, among which the amount of share-based compensation expense for Mr. Ming Ge, Mr. Jack Qun Yao Gao and Mr. Ya-qin Zhang was RMB145,000, respectively (2019: nil), in relation to the stock options issued under the 2019 Share Option Scheme.

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32. SHARE-BASED PAYMENTS (Continued)

2020 Share Award Scheme

On 7 January 2020, the Company adopted the 2020 Share Award Scheme. Pursuant to the 2020 Share Award Scheme, the maximum number of shares in respect of which RSUs may be granted shall be 36,302,245 shares, within which an aggregate of 21,270,897 shares were granted on certain grantees who as a director or certain employees on 30 December 2020. And on the date of grant, a total of 19,870,897 treasury shares were delivered to certain RSU grantees as a result of the vesting of certain RSUs granted under the 2020 Share Award Scheme (Note 28). The fair value of 2020 Share Award Scheme was the market closing price on the grant date, amounting to HKD 11.00 (equivalent to RMB9.26) per share.

Details of the outstanding RSUs as at 31 December 2020 under the 2020 Share Award Scheme held by the grantees are set out below:

Number of shares underlying the RSUs	Grant date	Vesting date
1,400,000	30 December 2020	30 December 2021, 2022 and 2023

The movements of RSUs issued under the 2020 Share Award Scheme are summarised as follows:

	Number of RSUs	Weighted average grant date fair value per RSU of the original awards (HK\$)
Grant on 30 December 2020	21,270,897	11.00
Vested	(19,870,897)	11.00
Outstanding as at 31 December 2020	1,400,000	11.00

The Company recognised a total share-based compensation expenses of RMB184,780,000 in profit or loss during the year ended 31 December 2020, among which the amount of share-based compensation expense for Mr. Nianshu Gao was RMB89,996,000 during the year 2020 (2019: nil) in relation to the 2020 Share Award Scheme.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

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33. RETIREMENT BENEFIT SCHEME

As stipulated by the rules and regulations in the PRC, the Group contributes to state-managed retirement plans for its employees in the PRC. The Group is required to contribute a certain percentage of the basic salaries of its employees to the retirement plans, and has no further obligation for the actual payment of the previous or post-retirement benefits. The relevant state-managed retirement plans are responsible for the entire present obligation to retired employees.

In accordance with the relevant mandatory provident fund laws and regulations of HK, the Group operates a Mandatory Provident Fund (“MPF”) scheme (“MPF Scheme”) for all qualifying HK employees. The assets of the scheme are held separately from those of the Group and under the control of an independent MPF service provider. Under the rules of the MPF Scheme, the employer and its employees are each required to make contributions to the scheme at rates specified in the rules. The only obligation of the Group in respect of the MPF Scheme is to make the required contributions under the scheme.

The amounts of contributions made by the Group in respect of the retirement benefit scheme to employees and directors during the years ended 31 December 2020 and 2019 are disclosed in Note 8 and Note 11.

34. RELATED PARTY BALANCES AND TRANSACTIONS

(a) Related parties of the Group

The directors of the Company consider that the following entities are related parties of the Group:

Name ⁽ⁱ⁾	Relationship
China Mobile Group ⁽ⁱⁱ⁾	Significant influence to the Company
AsialInfo Chengdu ⁽ⁱⁱⁱ⁾	Controlled by Mr. Suning Tian
Nanjing AsialInfo Network Technology Co., Ltd. ⁽ⁱⁱⁱ⁾	Controlled by Mr. Suning Tian
AsialInfo Long Voyage Software (Beijing) Co., Ltd.	Controlled by Mr. Suning Tian
Guangzhou AsialInfo Zhihang Technologies Limited (“Guangzhou AsialInfo Zhihang”)	Controlled by Mr. Suning Tian
AsialInfo Innovation Technologies (Nanjing) Co., Ltd.	Controlled by Mr. Suning Tian
AsialInfo (Guangzhou) Software Service (“AsialInfo Guangzhou Software”)	Entity controlled by Skipper Holdings

Notes:

- (i) The English name is for identification purpose only and the official names of the companies are in Chinese.
- (ii) In order to simplify the disclosure, China Mobile Group represents China Mobile Limited and its subsidiaries.
- (iii) AsialInfo Chengdu was under the common control of Skipper Holdings through AsialInfo Cayman until September 2018 when Mr. Suning Tian obtained indirect control over AsialInfo Chengdu through a transfer agreement. The control of other related companies relating to the network security business were also obtained by Mr. Suning Tian through the transfer agreement.

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34. RELATED PARTY BALANCES AND TRANSACTIONS (Continued)

(b) Balances with related parties

The outstanding balances related to transactions with related parties are included in the following accounts captions summarised as follows:

(i) Balances due from related parties

	At 31 December	
	2020	2019
	RMB'000	RMB'000
Trade and notes receivables:		
— China Mobile Group (note)	588,620	N/A
Contract assets:		
— China Mobile Group (note)	863,108	N/A
Amounts due from related parties:		
— AsialInfo Chengdu	6,654	5,435
— China Mobile Group (note)	2,784	N/A
— AsialInfo Guangzhou Software	378	—
— AsialInfo Long Voyage Software (Beijing) Co., Ltd.	321	649
— AsialInfo Innovation Technologies (Nanjing) Co., Ltd.	96	250
— Nanjing AsialInfo Network Technology Co., Ltd.	—	24
Total:	1,461,961	6,358

Note: In September 2020, China Mobile Group becomes a related party of the Group. The outstanding balances related to transactions with China Mobile Group as at 31 December 2020 are disclosed above.

The carrying amounts of trade receivables from China Mobile Group as at 31 December 2020 included the original value and the loss allowance amounting to RMB592,843,000 and RMB4,223,000, respectively.

The carrying amounts of contract assets from China Mobile Group as at 31 December 2020 included the original value and the loss allowance amounting to RMB875,327,000 and RMB12,219,000 respectively.

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34. RELATED PARTY BALANCES AND TRANSACTIONS (Continued)

(b) Balances with related parties (Continued)

(i) Balances due from related parties (Continued)

The Group generally grants a credit period of 30 days to its related parties. Aging of amounts due from related parties — trade nature, based on the dates when the Group has the rights to bill is set forth as follows:

	At 31 December	
	2020 RMB'000	2019 RMB'000
1–90 days	1,058,788	3,882
91–180 days	282,081	434
181–365 days	96,470	1,441
Over 365 days	24,622	601
Total:	1,461,961	6,358

The balances, except for certain related party borrowings, are unsecured, interest-free and repayable on demand.

The balance of non-trade nature related parties was nil as at 31 December 2020 (2019: nil).

(ii) Balances due to related parties

	At 31 December	
	2020 RMB'000	2019 RMB'000
Amounts due to related parties:		
— AsialInfo Chengdu	7,638	18,092
— China Mobile Group (note)	1,516	N/A
Contract liabilities:		
— China Mobile Group (note)	295,309	N/A
Total:	304,463	18,092

Note: In September 2020, China Mobile Group becomes a related party of the Group. The balances related to transactions with China Mobile Group as at 31 December 2020 are disclosed above.

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34. RELATED PARTY BALANCES AND TRANSACTIONS (Continued)

(b) Balances with related parties (Continued)

(ii) Balances due to related parties (Continued)

The average credit period granted by the related parties is 90 days. Aging of amounts due to related parties — trade nature are as follows:

	At 31 December	
	2020 RMB'000	2019 RMB'000
1–90 days	218,758	4,099
91–180 days	48,143	39
181–365 days	25,275	1,153
Over 365 days	12,287	12,801
	304,463	18,092

(c) The significant transactions with related parties during the years ended 31 December 2020 and 2019 are listed out below

During the years, the Group had the following major transactions with related companies, other than those disclosed elsewhere in the consolidated financial statement:

	For the period from 2 September 2020 to 31 December 2020 RMB'000
Broadband network services charged by: China Mobile Group	2,700
Office rental services charged by: China Mobile Group	1,579
Software business services provided to: China Mobile Group	1,775,532

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34. RELATED PARTY BALANCES AND TRANSACTIONS (Continued)

(c) The significant transactions with related parties during the years ended 31 December 2020 and 2019 are listed out below (Continued)

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Technological support services charged by: AsialInfo Chengdu	1,418	1,264
Network security outsourcing services charged by: AsialInfo Chengdu	370	2,697
Technological support services provided to: AsialInfo Long Voyage Software (Beijing) Co., Ltd.	369	552
Office rental provided to: AsialInfo Chengdu	9,494	4,226
AsialInfo Long Voyage Software (Beijing) Co., Ltd.	482	422
	9,976	4,648
Management support services provided to: AsialInfo Chengdu	7,027	8,421
AsialInfo Long Voyage Software (Beijing) Co., Ltd.	1,385	1,654
AsialInfo Innovation Technologies (Nanjing) Co., Ltd.	996	1,150
	9,408	11,225

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34. RELATED PARTY BALANCES AND TRANSACTIONS (Continued)

(d) Compensation of key management personnel

The remuneration of key management personnel which represents the directors of the Company and key executives of the Group during the years are as follows:

	Year ended 31 December	
	2020 RMB'000	2019 RMB'000
Salaries, allowances and benefits in kind	8,625	8,240
Discretionary bonus	8,747	9,146
Contributions to retirement benefits scheme	145	270
Share-based compensation expenses	159,168	42,860
Total emoluments	176,685	60,516

The remuneration of the directors of the Company and key executives of the Group is determined having regard to the performance of individuals and market trends.

Saved as disclosed above, there were no other significant transactions with related parties during the year or other significant balances with them at the end of the reporting period.

35. COMMITMENTS

(a) Capital commitments

The group had the following capital commitments at the end of the reporting period:

	At 31 December	
	2020 RMB'000	2019 RMB'000
Capital expenditure contracted for but not provided in the consolidated financial statements in respect of acquisition of property, plant and equipment and intangible assets	9,471	3,440

(b) Lease commitments as at 31 December 2020

At 31 December 2020, the Group had commitments of RMB20,798,000 (2019: RMB27,366,000) for short-term leases which are exempted from recognition of lease liabilities and fall due within one year.

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36. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY

As at 31 December 2020, the Company has direct and indirect shareholders/equity interest in the following subsidiaries:

Name of subsidiary ^(a)	Place and date of establishment or acquisition/ nature of legal entity	Issued and fully paid ordinary share capital/registered capital	Proportion of interest attributable to the Company				Principal activities
			2020		2019		
			Directly	Indirectly	Directly	Indirectly	
AsialInfo China 亞信科技(中國)有限公司 (Previously known as AsialInfo-Linkage Technologies (China), Inc. 亞信聯創科技(中國)有限公司)	The PRC 2 May 1995 limited liability company	US\$26,040,570	—	100%	—	100%	Provision of software solutions
AsialInfo Nanjing 亞信科技(南京)有限公司 (Previously known as Linkage AsialInfo Technologies (Nanjing), Inc. 聯創亞信科技(南京)有限公司)	The PRC 16 February 2004 limited liability company	RMB100,000,000	—	100%	—	100%	Provision of software solutions
Shanghai AsialInfo Online Technology Limited 上海亞信在線科技有限公司 (Previously known as Shanghai Xinjia Information Technology Co., Ltd. 上海信迦信息科技有限公司)	The PRC 25 September 2008 limited liability company	RMB20,000,000	—	100%	—	100%	Provision of software solutions
Hangzhou AsialInfo Cloud Information Technologies Limited 杭州亞信雲信息科技有限公司 (Previously known as Hangzhou Zhongbo Software Technology Co., Ltd. 杭州中博軟件技術有限公司)	The PRC 25 February 2007 limited liability company	RMB10,000,000	—	100%	—	100%	Provision of software solutions

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36. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

Name of subsidiary ⁽ⁱ⁾	Place and date of establishment or acquisition/ nature of legal entity	Issued and fully paid ordinary share capital/registered capital	Proportion of interest attributable to the Company				Principal activities
			2020		2019		
			Directly	Indirectly	Directly	Indirectly	
Nanjing AsialInfo Software Co., Ltd. 南京亞信軟件有限公司	The PRC 6 February 2015 limited liability company	RMB30,000,000	—	100%	—	100%	Provision of software solutions
Hunan AsialInfo Software Co., Ltd. 湖南亞信軟件有限公司	The PRC 16 April 2015 limited liability company	RMB30,000,000	—	100%	—	100%	Provision of software solutions
Hangzhou AsialInfo Software Co., Ltd. 杭州亞信軟件有限公司	The PRC 15 May 2015 limited liability company	RMB50,000,000	—	100%	—	100%	Provision of software solutions
Guangzhou AsialInfo Technology Co., Ltd. 廣州亞信技術有限公司	The PRC 11 August 2017 limited liability company	RMB200,000,000	—	100%	—	100%	Provision of software solutions
Beijing AsialInfo Smart Big Data Co., Ltd. 北京亞信智慧數據科技有限 公司	The PRC 21 August 2014 limited liability company	RMB285,200,000	—	100%	—	100%	Provision of software services
Guangzhou Zhihui Online Technology Co., Ltd. 廣州智匯在線科技有限 公司 (Previously known as Guangzhou AsialInfo Big Data Co., Ltd. 廣州亞信數據有限公司)	The PRC 19 October 2016 limited liability company	RMB10,000,000	—	100%	—	100%	Provision of software services

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36. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

Name of subsidiary ⁽ⁱ⁾	Place and date of establishment or acquisition/ nature of legal entity	Issued and fully paid ordinary share capital/registered capital	Proportion of interest attributable to the Company				Principal activities
			2020		2019		
			Directly	Indirectly	Directly	Indirectly	
Beijing Shangxin Yitong Information Technology Limited ("Shangxin Yitong") 北京尚信易通信息技術有限公司	The PRC 1 June 2018 limited liability company	RMB10,000,000	—	100%	—	100%	Provision of software solutions
Beijing AsialInfo XingYuan Technology Limited 北京亞信興源科技有限公司	The PRC 11 November 2019 limited liability company	RMB25,000,000	—	100%	—	100%	Provision of software solutions
Beijing AsialInfo Xinan Technology Limited 北京信安數科科技有限公司 ("Xinan Technology")	The PRC 4 September 2019 limited liability company	RMB16,000,000	—	100%	—	100%	Provision of software solutions
Hunan AsialInfo Anhui Technology Limited 湖南亞信安慧科技有限公司 ("Hunan Anhui")	The PRC 25 September 2019 limited liability company	RMB20,000,000	—	100%	—	100%	Provision of software solutions
AsialInfo (H.K.) Development Limited (Previously known as Linkage-AsialInfo (H.K.) Limited) 香港亞信發展有限公司	HK 20 January 2011 limited liability company	US\$90,000,000	—	100%	—	100%	Investment holding
AsialInfo (H.K.) Limited (Previously known as AsialInfo-Linkage (H.K.) Limited) 香港亞信有限公司	HK 8 November 2010 limited liability company	US\$9,500,000	—	100%	—	100%	Investment holding

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36. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

Name of subsidiary ⁽ⁱ⁾	Place and date of establishment or acquisition/ nature of legal entity	Issued and fully paid ordinary share capital/registered capital	Proportion of interest attributable to the Company				Principal activities
			2020		2019		
			Directly	Indirectly	Directly	Indirectly	
AsialInfo Big Data (H.K.) Limited 亞信大數據(香港)有限公司	HK 20 June 2014 limited liability company	US\$44,440,417	—	100%	—	100%	Investment holding
Hong Kong AsialInfo Technologies Limited (Previously known as Hong Kong AsialInfo-Linkage Technologies Limited) 香港亞信技術有限公司	HK 25 November 1998 limited liability company	HK\$20,000	100%	—	100%	—	Investment holding
AsialInfo Technologies (H.K.) Limited 香港亞信科技有限公司	HK 20 January 1997 limited liability company	HK\$12.75	100%	—	100%	—	Investment holding
AsialInfo Technologies Holding (H.K.) Limited 亞信科技控股香港有限公司	HK 6 August 2019 limited liability company	HK\$1	—	100%	—	100%	Investment holding
AsialInfo Big Data Limited	The BVI 6 June 2014 limited liability company	US\$44,440,417	—	100%	—	100%	Investment holding
AsialInfo Technologies Development Limited. 亞信科技發展有限公司	The BVI 22 May 2020 limited liability company	US\$1	—	100%	N/A	N/A	Investment holding

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36. PARTICULARS OF PRINCIPAL SUBSIDIARIES OF THE COMPANY (Continued)

Name of subsidiary ⁽ⁱ⁾	Place and date of establishment or acquisition/ nature of legal entity	Issued and fully paid ordinary share capital/registered capital	Proportion of interest attributable to the Company				Principal activities
			2020		2019		
			Directly	Indirectly	Directly	Indirectly	
Asialinfo Xincheng (Guangzhou) Management Consulting Partnership (Limited Partnership) 亞信信成 (廣州) 企業管理諮詢合夥企業 (有限合夥)	The PRC 20 July 2020 limited liability company	RMB10,000,000	—	100%	N/A	N/A	Provision of software solutions
Asialinfo Zhixiang Cloud Beijing Technology Limited 亞信智享雲 (北京) 科技有限公司	The PRC 28 July 2020 limited liability company	RMB6,000,000	—	100%	N/A	N/A	Provision of software solutions
Wanxin Technology Shenzhen Limited 灣信科技(深圳)有限公司	The PRC 3 September 2020 limited liability company	RMB10,000,000	—	51%	N/A	N/A	Provision of software solutions
Chongqing Shuzhiluoji Technology Limited 重慶數智邏輯科技有限公司	The PRC 30 November 2020 limited liability company	RMB30,000,000	—	100%	N/A	N/A	Provision of software solutions

Notes:

- (i) The English name for PRC legal entities is for identification purpose only and the official names of the companies are in Chinese except Asialinfo Big Data Limited.
- (ii) Due to the implementation of 2020 Share Award Schemes of the Group mentioned in Note 32, the Company has set up a structured entity ("Asialinfo SAS Management Trust") to administrate and hold the Company's shares acquired for share award schemes which are set up for the benefits of eligible persons of the schemes.

As the Company has the power to govern the financial and operating policies of the Asialinfo SAS Management Trust and can derive benefits from the contributions of the eligible persons who are awarded with the shares by the schemes, the directors of the Company consider that it is appropriate to consolidate the Asialinfo SAS Management Trust.

None of the subsidiaries had issued any debt securities at the end of the year.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

37. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY

	2020 RMB'000	2019 RMB'000
<i>Non-current assets</i>		
Unlisted investments in subsidiaries	713,429	446,217
Right-of-use assets	536	1,607
Property, plant and equipment	538	907
Total non-current assets	714,503	448,731
<i>Current assets</i>		
Amounts due from subsidiaries	1,261,978	813,667
Prepayments, deposits and other receivables	5,400	1,433
Bank balances and cash	267,117	537
Total current assets	1,534,495	815,637
<i>Current liabilities</i>		
Lease liabilities	106	711
Other payables, deposits received and accrued expenses	68,399	1,864
Total current liabilities	68,505	2,575
Net current assets	1,465,990	813,062
<i>Non-current liabilities</i>		
Lease liabilities	—	467
Net assets	2,180,493	1,261,326
<i>Capital and reserves</i>		
Share capital	—	—
Reserves	2,180,493	1,261,326
Total equity	2,180,493	1,261,326

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

For the year ended 31 December 2020
(Expressed in thousands of Renminbi, unless otherwise stated)

37. STATEMENT OF FINANCIAL POSITION AND RESERVES OF THE COMPANY (Continued)

The movement in the reserves of the Company is shown as follows:

	Share premium reserve	Other reserves	Accumulated losses	Total
	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	897,214	118,310	(34,217)	981,307
Profit and total comprehensive income for the year	—	—	17,261	17,261
Recognition of equity-settled share-based payments	—	233,648	—	233,648
Issue of new shares upon exercise of the over-allotment option	27,162	—	—	27,162
Share issuance cost	(681)	—	—	(681)
Vesting of restricted stock units	69,362	(69,362)	—	—
Exercise of share options	4,897	(2,268)	—	2,629
At 31 December 2019	997,954	280,328	(16,956)	1,261,326
Loss and total comprehensive income for the year	—	—	(66,975)	(66,975)
Recognition of equity-settled share-based payments	—	267,642	—	267,642
Purchase of Shares for share award scheme	(364,284)	—	—	(364,284)
Issue of new shares upon the contribution from shareholders	1,222,099	—	—	1,222,099
Vesting of restricted stock units	215,886	(215,886)	—	—
Exercise of share options	43,972	(14,351)	—	29,621
Dividends approved in respect of the previous year	—	—	(168,936)	(168,936)
At 31 December 2020	2,115,627	317,733	(252,867)	2,180,493

38. SUBSEQUENT EVENTS

Proposed dividend

After the statement of financial position date, the Board of Directors proposed a final dividend for 2020. For detail, please refer to Note 9(i).

FINANCIAL SUMMARY

For the year ended 31 December 2020

RESULTS

	At 31 December				2020 RMB'000
	2016 RMB'000	2017 RMB'000	2018 RMB'000	2019 RMB'000	
Continuing operations					
Revenue	4,855,953	4,948,324	5,210,977	5,721,416	6,019,855
Cost of sales	(3,183,328)	(3,277,896)	(3,328,353)	(3,594,411)	(3,716,620)
Gross profit	1,672,625	1,670,428	1,882,624	2,127,005	2,303,235
Other income	141,791	114,712	82,172	103,759	143,289
Reversal of impairment losses under the ECL model/(impairment losses, net of reversal under the ECL model)	—	—	2,880	(28,366)	(35,051)
Other gains and losses	(45,228)	68,828	(102,706)	(736)	15,956
Selling and marketing expenses	(614,572)	(481,831)	(508,402)	(461,997)	(472,786)
Administrative expenses	(273,079)	(403,800)	(332,825)	(292,586)	(321,442)
R&D expenses	(636,614)	(430,246)	(584,681)	(862,419)	(840,225)
Share of results of associates	—	258	(1,242)	(3,983)	(1,567)
Share of results of joint ventures	(10,000)	—	—	—	—
Impairment losses on associates	—	—	—	—	(6,410)
Finance costs	(93,905)	(83,986)	(70,594)	(39,907)	(20,672)
Listing expenses	—	(30,603)	(54,096)	—	—
Profit before tax	141,018	423,760	313,130	540,770	764,327
Income tax expenses	(66,998)	(88,584)	(108,896)	(131,955)	(102,224)
Profit for the year from continuing operations	<u>74,020</u>	<u>335,176</u>	<u>204,234</u>	<u>408,815</u>	<u>662,103</u>
Discontinued operations					
Loss for the year from discontinued operations	<u>(294,873)</u>	<u>(17,233)</u>	<u>(1,279)</u>	<u>—</u>	<u>—</u>
(Loss) profit for the year	<u>(220,853)</u>	<u>317,943</u>	<u>202,955</u>	<u>408,815</u>	<u>662,103</u>

FINANCIAL SUMMARY

For the year ended 31 December 2020

ASSETS AND LIABILITIES

	At 31 December				2020 RMB'000
	2016 RMB'000	2017 RMB'000	2018 RMB'000	2019 RMB'000	
Property, plant and equipment	303,979	262,629	300,869	288,261	293,224
Right-of-use assets	—	—	—	169,465	257,534
Prepaid lease payments	87,508	85,489	83,470	—	—
Goodwill	1,932,246	1,932,246	1,932,246	1,932,246	1,932,246
Term deposits	—	—	—	170,000	240,000
Total non-current assets	3,418,575	3,314,868	3,229,675	2,822,732	2,885,758
Trade and notes receivables	775,888	888,445	764,909	841,182	941,957
Prepayments, deposits and other receivables	204,335	176,501	135,704	183,706	114,386
Contract assets	1,683,234	1,632,039	1,335,219	1,554,521	1,722,485
Financial assets at fair value through profit or loss	—	—	210,000	—	1,103,800
Amount due from related parties	193,785	246,244	18,934	6,358	10,233
Pledged bank deposits	523,770	537,089	481,755	321,246	263,067
Term deposits	—	—	—	—	140,923
Bank balances and cash	1,583,120	1,450,588	1,821,182	1,810,591	1,690,151
Total current assets	4,999,632	4,947,316	4,767,703	4,717,908	5,987,394
Trade and notes payables	792,246	612,500	356,316	358,048	149,454
Contract liabilities	533,536	387,913	300,918	296,945	393,371
Other payables, deposits received and accrued expenses	1,611,040	1,890,500	1,788,004	1,922,837	2,063,218
Bank borrowings	1,237,502	1,154,593	1,915,484	594,372	137,023
Total current liabilities	4,674,422	4,484,998	4,634,318	3,471,080	3,076,841
Deferred tax liabilities	109,343	130,971	127,541	122,983	123,205
Bank borrowings	1,039,485	592,744	—	—	—
Lease liabilities	—	—	—	39,374	117,658
Total non-current liabilities	1,157,554	738,410	127,541	162,357	240,863
Total equity	2,586,231	3,038,776	3,235,519	3,907,203	5,555,448

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