RISECOMM
瑞斯康

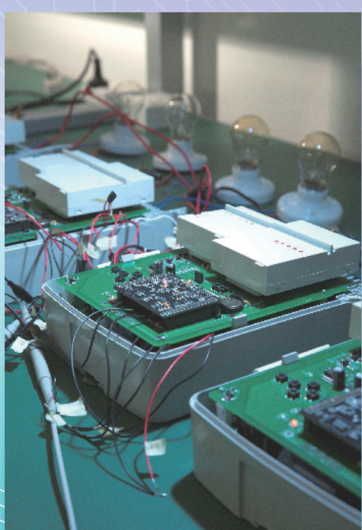
Risecomm Group Holdings Limited
瑞斯康集團控股有限公司

(Incorporated in the Cayman Islands with limited liability)
Stock Code: 1679

2020
Annual Report

Risecomm Group Product Assembly Hub

Product Assembly Hub located in Changsha, Hunan, the PRC



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Corporate Information

EXECUTIVE DIRECTORS

Mr. Yue Jingxing
Mr. Lau Wai Leung, Alfred
(resigned as executive director on June 24, 2020 and appointed as executive director on January 19, 2021)
Mr. Jiang Feng
(appointed on April 19, 2021)
Mr. Tang Andong
(resigned on April 7, 2021)

NON-EXECUTIVE DIRECTORS

Mr. Cheung Fan *(Chairman)*
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong
(resigned on January 19, 2021)
Ms. Pan Hong
(appointed on June 24, 2020)

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Ong King Keung
Ms. Lo Wan Man
Mr. Zou Heqiang

COMPANY SECRETARY

Mr. Leung Ka Lok *(HKICPA, FCCA, MBA)*
(resigned on July 3, 2020)
Mr. Lau Wai Leung, Alfred
(appointed on July 3, 2020)

AUTHORIZED REPRESENTATIVES

(for the purpose of the Listing Rules)

Mr. Yue Jingxing
Mr. Leung Ka Lok *(HKICPA, FCCA, MBA)*
(resigned on July 3, 2020)
Mr. Lau Wai Leung, Alfred
(appointed on July 3, 2020)

AUDIT COMMITTEE

Mr. Ong King Keung *(Chairman)*
Ms. Lo Wan Man
Mr. Zou Heqiang

NOMINATION COMMITTEE

Mr. Cheung Fan *(Chairman)*
Mr. Ong King Keung
Ms. Lo Wan Man

REMUNERATION COMMITTEE

Mr. Ong King Keung *(Chairman)*
Mr. Yue Jingxing
Ms. Lo Wan Man

PRINCIPAL BANKERS

In Hong Kong:
Bank of China (Hong Kong) Limited
The Hongkong and Shanghai Banking Corporation Limited

*In the People's Republic of China (the "**PRC**"):*
Bank of China Limited
China Merchants Bank

COMPANY'S LEGAL ADVISER AS TO HONG KONG LAW

Chiu & Partners
40/F, Jardine House
1 Connaught Place
Central, Hong Kong

AUDITOR

RSM Hong Kong
Certified Public Accountants
29th Floor
Lee Garden Two
28 Yun Ping Road
Causeway Bay
Hong Kong

Corporate Information *(continued)*

REGISTERED OFFICE

Cricket Square
Hutchins Drive
PO Box 2681
Grand Cayman KY1-1111
Cayman Islands

HEADQUARTERS AND PRINCIPAL PLACE OF BUSINESS IN THE PRC

41/F, Block A, Building 8
Shenzhen International Innovation Valley
Xili Street, Nanshan District
Shenzhen
China

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

7/F., The Wellington
198 Wellington Street
Central
Hong Kong

PRINCIPAL SHARE REGISTRAR AND TRANSFER OFFICE

Conyers Trust Company (Cayman) Limited
Cricket Square
Hutchins Drive
PO Box 2681
Grand Cayman KY1-1111
Cayman Islands

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Tricor Investor Services Limited
Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong

COMPANY WEBSITE

www.risecomm.com.cn

STOCK CODE

1679

Chairman's Statement

TO THE SHAREHOLDERS

On behalf of the board (the "**Board**") of directors (the "**Directors**") of Risecomm Group Holdings Limited (the "**Company**" together with its subsidiaries, the "**Group**"), I hereby present the annual report of the Company for the year ended December 31, 2020 ("**year under review**").

The Group had been facing extremely challenging year under the ongoing economic conflict between the world's two largest national economies, China and the United States (the "**U.S.**") and the global coronavirus (COVID-19) pandemic (the "**Pandemic**") in 2020. All these major incidents tremendously affected the strategic development and expansion planning on the State-owned enterprises, particularly in the State Grid as well as in the petroleum industry which resulted in the reconsideration on the prioritization of resources deployment. It brought headwinds and difficulties in generating both power line communication ("**PLC**") and the smart manufacturing & industrial automation ("**SMIA**") revenue.

In 2020, the PLC broadband chips developed by the Group has passed the interconnection and intercommunication inspection and testing of low-voltage power line communication broadband chips by the State Grid Metering Center and has obtained the inspection report. Broadband communication chip has passed the performance inspection and testing of long distance and local communication unit (Electric Energy Data Acquisition System) by the State Grid Metering Center and has obtained the registration certificate and inspection report. Broadband automated meter reading ("**AMR**") products have complied with the State Grid standard and are qualified for supplying to the State Grid, and a series of market promotion is being launched.

The PLC products of the Group are mainly used in the Electric Energy Data Acquisition System of the State Smart Grid, the system is an important support for power big data. Given the extensive market application of the broadband communication products, the State Grid will continue to develop the market application of low-voltage PLC AMR products to further enhance the effectiveness and reliability of the local channel of the Electric Energy Data Acquisition System and meet the requirements of "Informatization, Automation and Interaction" of the smart grid. In 2019, the State Grid began to promote broadband and broadband wireless dual-mode technology, and completed the drafting of the "Dual-mode Interconnection and Intercommunication Technical Specification" by the end of 2020.

With the development of broadband and dual-mode technology (broadband & wireless), the State Grid will continue to invest in the development of Electric Energy Data Acquisition System. By utilizing its R&D and application in broadband technology and integrating the experience gained in the field applications of dual-mode (broadband & wireless), the Group develops dual-mode (broadband & wireless) communication technology solutions. The dual-mode communication technology of the Group has passed the first round of interconnection and intercommunication testing of "Dual-mode Interconnection and Intercommunication Technical Specification " by the State Grid for manufacturers FPGA in November 2020, and now becomes the first group of manufacturers of PLC chip designers.

Furthermore, the SMIA business segment of the Group contributed part of the non-AMR revenue to the inherent risks arising from the reliance on the China Grid ecosystem, thereby achieving a more balanced revenue composition. The Group is confident that its operations in oil and petroleum industry can foster a steady growth in its revenue stream and further diversify its customer base with persistent marketing efforts.

However, facing further hamper and uncertainties on Chinese economy caused by the pandemic, the economic conflict between U.S. and China, the Group has to maintain a lean-cost strategy to reduce operating expenses in order to cope with the pressure arising from the decrease in revenue. In addition, the Group is persistently enhancing its corporate governance in all aspects of the Group's operations by continuously leveraging its competitive advantages in a bid to preserve values for the shareholders of the Company ("**Shareholders**").

Lastly, on behalf of the Board and the management, I wish to extend my sincere appreciation to all the staff of the Group for their tireless dedication and tremendous contribution during the year, and to also express my thanks to all Shareholders, investors, customers, suppliers and business partners for their ongoing support to the Group.

Cheung Fan
Chairman and Non-executive Director

Hong Kong, March 29, 2021

Management Discussion and Analysis

MARKET REVIEW

Under current Sino-U.S. trade tension, more state-owned enterprises ("**SOE**") and sizeable technology-based companies tapped into the chipsets market as a result of the supportive direction conducted by the Chinese government for the promotion of national self-developed chipsets with an aim to protect the national interests and to compete internationally. Therefore, the competition landscape has been changing since a significant portion of the PLC market shares is taken up by SOE, in general. Hence, the competition among domestic PLC market participants is even more intense although the overall market demand in PLC remains promising. In the Group's AMR and other business segment, the increase in market competition will potentially reduce the market share of the Group's PLC product in the State Grid Corporation of China ("**State Grid**") and adversely affect financial performance of the Group's AMR and other business segment.

In 2020, the products of the State Grid using PLC broadband technology has entered into the mass application stage, currently the market is highly competitive as there are a large number of manufacturers entering the broadband PLC IC market. In 2020, the State Grid conducted two centralized biddings for energy meters and Electric Energy Data Acquisition System, with 53 million energy meters tendered (28 million in the first half of the year and 25 million in the second half of the year). The tenders of broadband communication modules independently conducted by each network and provincial company, and the number is equal to the sum of the number of energy meters allocated by the State Grid after bidding, the provincial grid expansion and the replacement for operation and maintenance, which is about 74 million, representing a year-on-year decrease of 30% as compared to the demand in 2019 demand (106.7 million).

As of 2020, the number of users installed with smart meters in the State Grid is approximately 470 million, and the number of broadband communication modules is approximately 227 million (42 million in 2018, 106.7 million in 2019, and 74 million in 2020). In 2021, the State Grid will conduct two centralized biddings for energy meters and Electric Energy Data Acquisition System (one in the first half of the year and one in the second half of the year), and the demand for broadband communication modules is estimated to be similar as in 2020.

On the other hand, during the year under review, the Group's SMIA business segment has been continuing in exploring the field of industrial automation systems by leveraging its core technology competency, particularly in the area of maintenance and safety integrity system ("**MSI**") for the petroleum and petrochemicals industry. According to the market report "2018 China Intelligent Manufacturing Development Annual Report" (2018 中國智慧製造發展年度報告) released by China Center for Information Industry Development (中國電子資訊產業發展研究院), the market size of China intelligent manufacturing system solutions is expected to exceed RMB238 billion by 2020 and this huge market allows market participants to explore various aspects of the smart manufacturing sector.

BUSINESS REVIEW

During the year under review, the Group operated in two major business segments. Firstly, the Group operated in AMR and other business, where the Group sold PLC products such as PLC integrated circuits ("**IC**"), modules and devices such as connectors and concentrators, which have been mainly used in the deployment and upgrade of AMR systems for smart meters by power grid companies in China as a key part of the smart grid infrastructure. The Group had been developing PLC IC with proprietary IC designs and advanced PLC technologies for the deployment of AMR systems by the State Grid. In addition, the Group also provided maintenance services on AMR systems on a project-by-project basis. Furthermore, the Group's PLC products also apply to several smart energy business in China, mainly in the area of streetlight controls, building energy management and photovoltaic power management.

Secondly, the Group expanded its business in late 2018 and engages in SMIA business where the Group offered software licenses, production safety products as well as the provision of software post-contract customer support services applied in the area of MSI for the petroleum and petrochemicals industry.

During the year under review, the Group recorded revenue of approximately RMB212.7 million (2019: approximately RMB218.6 million), representing a decrease of 2.7%.

The Group's AMR and other business segment recorded a revenue of approximately RMB54.7 million (2019: approximately RMB139.8 million), representing a decrease of approximately 60.9%. Revenue from AMR and other business segment for the year under review accounted for approximately 25.7% (2019: 64.0%) of the Group's total revenue. A significant decrease in revenue from AMR and other business segment for the year under review was mainly due to (a) a decrease in demand for the Group's PLC based narrowband AMR products by the State Grid and (b) a delay in debut of the Group's PLC based broadband AMR products given the testing and processing time for the final approval run by the State Grid had taken longer than expected due to the outbreak of the Pandemic in the PRC in early 2020. Fortunately, the High-speed Power Line Communication ("**HPLC**") chips, being one of the high data rate PLC products for AMR and smart energy management ("**SEM**") business of the Group, developed by the Group have satisfied the requirements of Electric Energy Data Acquisition Standards (電力用電資訊採集系列標準) of the State Grid and have passed the inspection and testing thereof by the State Grid Measurement Center (國家電網計量中心). Such accreditation indicates that the HPLC chips of the Group meet the market entry requirements promulgated by the State Grid Measurement Center and therefore are eligible for participation in the centralized biddings conducted by the State Grid. The HPLC chips developed by the Group will better meet the application needs of the State Grid and accelerate the Group's development in smart energy applications market. Please refer to the announcement of the Company dated October 23, 2020 for further details.

The outbreak of the Pandemic in early 2020 has affected the business and economic activities around the world and has brought about additional uncertainties to the Group's operating environment and has to a certain extent impacted the Group's operations and financial position.

The Group has been closely monitoring the impact from the Pandemic on the Group's business. Faced with further hamper and uncertainties on Chinese economy caused by, among others, ad hoc Pandemic, the Group has maintained a lean-cost strategy in so as to reduce the operating cost to respond to the pressure in less revenue generated. The Group will continue to review the measures adopted as the Pandemic evolves.

During the year under review, the Group's SMIA business segment recorded a revenue of approximately RMB158.0 million (2019: approximately RMB78.7 million), representing an increase of approximately 100.8%. Revenue from SMIA business segment for the year under review accounted for approximately 74.3% (2019: 36.0%) of the Group's total revenue.

There was significant increase in the Group's revenue from SMIA business segment for the year ended December 31, 2020 as compared to that of the corresponding period in 2019 which was primarily attributable to the recognition of revenue in several significant projects during the year under review, while there was an unexpected delay in delivery/implementation of certain major contracts held as of December 31, 2019 for the corresponding period in 2019.

The Group recorded a decrease in loss attributable to the equity shareholders of the Company from approximately RMB236.8 million in the corresponding period in 2019 to approximately RMB126.0 million for the year under review.

The decrease in loss attributable to the equity shareholders of the Company was mainly attributable to a significant decrease in the recognition of impairment losses of goodwill during the year under review as compared to that of the corresponding period in 2019.

RESEARCH AND DEVELOPMENT

The Group has been committed to PLC IC design and its applications tailored to China's market environment since the inception in the industry in 2006 by establishing its core competency in designing advanced application-specific IC, or application-specific integrated circuits ("**ASICs**"), and using these proprietary ASICs to develop the PLC products. As a high-tech company driven by research and development, the Group's research and development efforts focus on enhancing the functionality of its products and addressing the technical needs of its customers, as well as expanding the Group's product portfolio for different PLC applications.

As at December 31, 2020, the research and development team of the Group consisted of 49 employees (as at December 31, 2019: 67 employees), representing approximately 28% (as at December 31, 2019: approximately 30%) of the Group's total workforce, specializing in PLC IC design and product development for AMR and other applications as well as software development and application for the MSI for the petroleum and petrochemicals industry.

As at December 31, 2020, the Group held a significant intellectual property portfolio, comprising 19 patents, 108 computer software copyrights and 9 IC layout designs registered, with 9 patents pending registration in the relevant jurisdictions, signifying the Group's achievements in research and development in PLC technology and MSI for the petroleum and petrochemicals industry.

FINANCIAL REVIEW

Revenue

Revenue decreased from approximately RMB218.6 million for the corresponding period in 2019 to approximately RMB212.7 million for the year under review, or by approximately 2.7%. This decrease was mainly attributable to (a) a decrease in demand for the Group's PLC based narrowband AMR products by the State Grid; and (b) a delay in debut of the Group's PLC based broadband AMR products. Such delay in debut of the Group's PLC based broadband AMR products led to a decrease in revenue generated from the Group's AMR products under the centralized biddings conducted by the State Grid and customers under the State Grid local biddings and trading sales for the year under review as compared to that of the corresponding period in 2019.

Gross profit

Gross profit decreased by approximately 48.3% to approximately RMB33.5 million for the year under review from approximately RMB64.8 million for the corresponding period in 2019.

Gross profit margin was approximately 15.8% for the year under review and decreased by approximately 13.8 percentage points as compared with approximately 29.6% for the corresponding period in 2019. The decrease in gross profit margin of the Group was mainly attributable to an increase in revenue from construction projects in SMIA business segment (which have a relatively lower gross profit margin) for the year under review.

Other income, gains/(losses)

Other income, gains/(losses) decreased by approximately 28.9% to approximately RMB8.1 million for the year under review from approximately RMB11.4 million for the corresponding period in 2019. The decrease was mainly attributable to a decrease in government grants for the year under review to approximately RMB4.8 million as compared to approximately RMB10.1 million for the corresponding period in 2019.

Sales and marketing expenses

Sales and marketing expenses decreased by approximately 38.6% to approximately RMB19.1 million for the year under review from approximately RMB31.1 million for the corresponding period in 2019. This decrease was mainly attributable to an implementation of tightened cost control measures adopted by the Group on sales and marketing expenses.

General and administrative expenses

General and administrative expenses increased by approximately 4.7% to approximately RMB77.2 million for the year under review from approximately RMB73.7 million for the corresponding period in 2019. Despite an implementation of tightened cost control measures adopted by the Group on general and administrative expenses, the increase was mainly attributable to the recognition of impairment losses of intangible assets during the year under review.

Research and development expenses

Research and development expenses decreased by approximately 31.3% to approximately RMB21.7 million for the year under review from approximately RMB31.6 million for the corresponding period in 2019. The decrease was mainly attributable to an implementation of tightened cost control measures adopted by the Group on research and development expenses.

Fair value (losses)/gains on financial instruments at fair value

During the year under review, the Group recorded fair value losses on financial instruments at fair value of approximately RMB15.4 million (2019: fair value gains on financial instruments at fair value of approximately RMB5.6 million) which was attributable to changes in fair value of financial instruments of the Convertible Bonds (as defined below).

Income tax credit

Income tax credit increased by approximately 94.9% to approximately RMB26.9 million for the year under review from approximately RMB13.8 million for the corresponding period in 2019. The increase was mainly attributable to (a) the recognition of deferred tax asset arising from tax losses; and (b) decrease of deferred tax liability due to amortisation of intangible assets, which are identified in business acquisitions.

Impairment of Goodwill

In accordance with the relevant requirements under "Hong Kong Accounting Standard 36 — Impairment of Assets", the Group performed impairment test with assistance of an external valuation firm for the goodwill arising from the acquisitions of North Mountain Information Technology Company Limited ("**NM Technology**") and Green Harmony. After conducting impairment tests, the Group recognized impairment loss of goodwill arising from the Group's acquisitions of NM Technology and Green Harmony of approximately RMB23.3 million for the year under review (2019: approximately RMB14.7 million) and nil for the year under review (2019: approximately RMB156.5 million) respectively, after which, carrying amount of two cash-generating units have been reduced to recoverable amount. Please refer to note 21 to the consolidated financial statements as set out in this annual report for further details.

Loss Attributable to Equity Shareholders of the Company

As a result of the above factors, the Company recorded a loss attributable to equity shareholders of the Company for the year under review of approximately RMB126.0 million (2019: loss attributable to equity shareholders of the Company of approximately RMB236.8 million).

Liquidity and Financial Resources

During the year under review, the Group's operations were mainly financed by internal resources, including but not limited to existing cash and cash equivalents, cash flow generated from operating activities and the net proceeds generated from the listing of shares of the Company (the "**Listing**") on the Main Board of The Stock Exchange of Hong Kong Limited ("**Stock Exchange**") on June 9, 2017. The Board believes that the Group's liquidity needs will be satisfied.

As of December 31, 2020, the Group's current assets amounted to approximately RMB281.6 million (as of December 31, 2019: approximately RMB326.5 million), with cash and cash equivalents totaling approximately RMB121.7 million (as of December 31, 2019: approximately RMB145.1 million). The cash and cash equivalents of the Group are principally held in RMB and USD.

As of December 31, 2020, the Group's total interest-bearing liabilities amounted to RMB254.3 million (as of December 31, 2019: RMB253.2 million), representing lease liabilities, issued Convertible Bonds (as defined below) and promissory notes issued to the vendor in relation to acquisition of Green Harmony. The Group had interest-bearing liabilities of RMB244.1 million (as of December 31, 2019: RMB7.8 million) and RMB10.2 million (as of December 31, 2019: RMB245.4 million) which will be due repayable within one year and after one year respectively with coupon rates range from 4% to 4.75% per annum. The net debt-to-equity ratio (referred as to the gearing ratio: interest-bearing liabilities less cash and cash equivalents divided by total equity) was approximately 116.0% as of December 31, 2020 (as of December 31, 2019: 48.0%).

Issue of convertible bonds

Pursuant to subscription agreements entered into by the Company on July 31, 2018, the Company issued convertible bonds (the "**Convertible Bonds**") with aggregate principal amount of HKD150,000,000 at coupon interest rate of 4% per annum to Software Research Associates, Inc., ("**SRA**") an independent investor, on August 13, 2018 (the "**Issue Date**"). The aggregated net proceeds from the issue of the Convertible Bonds was approximately HKD146.0 million, and all such proceeds have been fully utilized by the Group. The reason for the issue of the Convertible Bonds was to raise fund to settle the consideration for the acquisition of Green Harmony. The Convertible Bonds will mature on the date falling 24 months from the Issue Date and may be extended to 36 months from the Issue Date at the request of the Company. On December 18, 2019, the Company delivered an extension notice to SRA in accordance with the terms and conditions of the Convertible Bonds as set out in the instrument constituting the Convertible Bonds ("**Instrument**") to extend the maturity date from August 13, 2020 to a date falling on 36 months from the Issue Date. Based on the extension notice and the Instrument, the Convertible Bonds will mature on August 13, 2021 and the maturity date shall not be extended further without written approval of the majority holders of the Convertible Bonds and the Company. At any time after the Issue Date prior to maturity, the holder of the Convertible Bonds shall have the right to convert in whole or in part the outstanding principal amount of the Convertible Bonds into such number of fully paid ordinary shares of the Company (the "**Conversion Shares**") with an initial conversion price of HKD2.50 per Conversion Share (the "**Initial Conversion Price**") which is subject to anti-dilutive adjustments arising from such events.

On August 13, 2020, following the fulfillment of all the conditions precedent set out in the amendment agreement dated June 24, 2020, including the grant of approval by the Stock Exchange in relation to the proposed amendment to the terms and conditions of the Convertible Bonds ("**Proposed Amendment**") as set out in the Instrument, the Company executed the supplemental deed of Instrument to amend the conversion price under the Convertible Bonds from the Initial Conversion Price of HK$2.50 per Conversion Share to the adjusted conversion price of HK$0.80 per Conversion Share ("**Adjusted Conversion Price**").

Based on the Adjusted Conversion Price and assuming full conversion of the Convertible Bonds at the Adjusted Conversion Price, the Convertible Bonds will be convertible into 187,500,000 Conversion Shares (with an aggregate nominal value of HKD18,750), representing approximately 19.00% of the issued share capital of the Company as at December 31, 2020 and approximately 15.97% of the issued share capital of the Company as enlarged by the issue of the Conversion Shares, respectively. Assuming full conversion of the Convertible Bonds at the Adjusted Conversion Price and on the basis that the existing number of shares of the Company in issue as at December 31, 2020 remains unchanged as at the date of the conversion, the shareholding of the substantial shareholders of the Company (has the meaning ascribed to it under the Rules Governing the Listing of Securities on the Stock Exchange ("**Listing Rules**")) as at December 31, 2020 will be as follows, as to: (i) 16.81% by SB Asia Investment Fund II L.P.; and (ii) 10.54% by Spitzer Fund VI L.P..

The Adjusted Conversion Price represents (i) a discount of approximately 68.0% over the Initial Conversion Price of HK$2.50 per Conversion Shares; (ii) a premium of approximately 6.67% over the closing price of HK$0.75 per share of the Company as quoted on the Stock Exchange on June 24, 2020 (the "**Last Trading Day**"); (iii) a premium of approximately 8.11% over the average closing price of HK$0.74 per share of the Company as quoted on the Stock Exchange for the last five consecutive trading days up to and including the Last Trading Day; and (iv) a premium of approximately 11.11% over the average closing price of HK$0.72 per share of the Company as quoted on the Stock Exchange for the last ten consecutive trading days up to and including the Last Trading Day.

As the Adjusted Conversion Price represents a less premium to the prevailing market price of the shares of the Company when compared to the Initial Conversion Price of HK$2.50, the chance of conversion of the Convertible Bonds is less remote and if the Convertible Bonds are converted into shares of the Company, the financial position of the Group will be strengthened with the conversion of debt into equity capital and the pressure on the Company's liquidity and cash flow can be reduced.

Please refer to the announcements of the Company dated July 31, 2018 and August 13, 2018 for further details of the Convertible Bonds and the announcement of the Company dated June 24, 2020 and August 13, 2020 for further details in relation to the Proposed Amendment.

Exchange Rate Risk

Most of the businesses of the Group are settled in Renminbi while businesses in foreign currencies are mainly settled in USD. The fluctuation of exchange rate of both currencies will have certain impact on the Group's business which are settled in foreign currencies. During the year under review and the corresponding period in 2019, the Group did not enter into any foreign exchange forward contracts or other hedging instruments to hedge against fluctuations. The foreign currency risk is managed and monitored on an on-going basis by senior management of the Group.

Capital Commitments

As at December 31, 2020, the Group had no capital commitments in respect of the acquisition of property, plant and equipment contracted for but not provided in the consolidated financial statements (as at December 31, 2019: Nil).

Contingent Liabilities

As at December 31, 2020, the Group had no contingent liabilities (as at December 31, 2019: Nil).

Charge on assets

As at December 31, 2020, the Group had no charge on assets (as at December 31, 2019: Nil).

Significant investments

During the year under review, the Group did not hold any material investments.

Material Acquisition and Disposal of Subsidiaries and Associated Companies

During the year under review, there was no material acquisition or disposal of subsidiaries or associated companies.

PROSPECTS

PLC technology is the main data collection method of the smart grid Electric Energy Data Acquisition System. In 2021, the State Grid will continue to apply broadband technology in the Electric Energy Data Acquisition System. Broadband and broadband dual-mode communication technology solutions will be one of the main solutions adopted in the Electric Energy Data Acquisition System of the State Grid.

In 2021, the Group will increase the market promotion of broadband products (PLC IC and communication modules) and develop provincial network markets and applications to further enhance the competitiveness of the Group's PLC products in the domestic market. Through putting efforts in the research and development and application of broadband dual-mode technology PLC IC design and range of products, and the optimization and upgrading of broadband and broadband dual-mode technology, the Group establishes a solid foundation for the development of PLC IC and products that used in the Electric Energy Data Acquisition System.

For the Group's SMIA business, the Group believes that the growth of China industrial automation market would continue to be healthy given its current relatively low penetration rate and the rising cost of labor. As petrochemical enterprises are the pioneers of the manufacturing sector in China, major market participants have started to build smart oil fields, smart pipelines and smart factories. The Group will continue to capture opportunities in the design and implementation of industrial automation systems, particularly in the area of MSI for the petroleum and petrochemicals industry, other manufacturing and construction businesses by leveraging the Group's own technologies and intellectual property rights.

In the coming future, the Group plans to expand its SMIA business segment through formation of strategic alliances and collaborations with internationally renowned system integrators to provide existing and potential customers with its value-added solutions for its engineering process design and digital engineering design as well as software solutions for Industrial Control System (ICS) network security. Through in-depth strategic cooperation and technology exchange, the Group aims to enhance the expertise in smart factory integrated solutions for petroleum refining and pipeline construction. At the same time, the Group will utilize its own research and development resources to cooperate with external companies to further develop its own intellectual property rights on the smart factory application interface and visual integrated management platform as well as the integration of the online and core applications on the big data collaboration platform. Such intellectual property will strengthen the Group's core competitiveness while leveraging the Group's PLC technology. By exploring these new profit-driven business opportunities, the Group believes that it will persist a more diversified growth in the market in the long run.

Biographical Details of Directors and Senior Management

EXECUTIVE DIRECTORS

Yue Jingxing (岳京興) ("Mr. Yue"), aged 63, was appointed as a Director in February 2016, and was designated as an executive Director and the chief executive officer of the Company in May 2017, who responsible for overall strategic planning, research and development directions and business development of the Group. Due to work allocation, Mr. Yue has ceased to act as the chief executive officer of the Company with effect from June 24, 2020 but remains to be an executive Director and a member of the remuneration committee of the Company.

Mr. Yue has been a director of Risecomm (HK) Holding Co. Limited ("**Risecomm HK**"), Risecomm Microelectronics (Shenzhen) Co., Ltd. ("**Risecomm WFOE**"), Wuxi Risecomm Communication Technology Company Limited ("**Risecomm Wuxi**"), Risecomm (HK) Technology Co. Limited ("**Risecomm HK Technology**"), Risecomm Co. Ltd. ("**Old Cayman**") and NM Technology since December 2015, January 2007, October 2010, December 2015, September 2006 and April 2018, respectively. He has also been the president of Risecomm WFOE since May 2006.

Mr. Yue is one of the co-founders of the Group. He has more than 25 years of experience in IC design. Prior to founding the Group in May 2006, Mr. Yue worked in Hughes Network Systems (now known as Hughes), a company in U.S. engaged in delivering innovative network technologies, managed services, and solutions, as a senior technical manager responsible for hardware and ASIC design for telecommunication equipment from 1994 to 2005.

Mr. Yue obtained a bachelor's degree in Engineering from Beijing University of Technology (北京工業大學) in the PRC in July 1982. He then obtained a master's degree in Science from the Institute of Semiconductors, Chinese Academy of Science (中國科學院半導體研究所) in the PRC in August 1986. Mr. Yue further obtained a master's degree in Electrical Engineering from Bradley University in U.S. in May 1991.

As of December 31, 2020, Mr. Yue was interested in certain Shares. Please refer to the section headed "Directors' and Chief Executives' Interests and Short Positions in the Shares, Underlying Shares and Debentures of the Company or any Associated Corporation" in this report for further details.

Lau Wai Leung, Alfred (劉偉樑) ("Mr. Lau"), aged 40, has been appointed as an executive Director with effect from January 19, 2021. Mr. Lau is also the company secretary of the Company and the finance director of Risecomm HK. He has been appointed as a company secretary of the Company in July 2020. Prior to his appointment of company secretary, Mr. Lau was a director of the Company from November 22, 2017 to June 24, 2020.

Mr. Lau has approximately 20 years of working experience in accounting, corporate finance, debt restructuring and private equity investment. He obtained a bachelor's degree in business administration from the City University of Hong Kong in 2002. He is a member of the American Institute of Certified Public Accountants and also certified as a certified public accountant in Washington State of the United States of America.

Mr. Lau has been an independent non-executive director of Sau San Tong Holdings Limited, a company listed on the GEM board of the Stock Exchange (stock code: 8200) since December 2016. He has also been an independent non-executive director of Samson Paper Holdings Limited, a company listed on the Main board the Stock Exchange (stock code: 731) since July 17, 2020.

Mr. Jiang Feng (江峰) ("Mr. Jiang"), aged 47, was appointed as an executive Director on April 19, 2021.

Mr. Jiang has extensive experience in sales and sales management. He has over 25 years of working experience in petroleum and petrochemical industries. He obtained a bachelor's degree in Exploration Geophysics from Jianghan Petroleum Institute* (江漢石油學院) (currently known as Yangtze University (長江大學)) in June 1994 and obtained a master's degree of Business Administration from Communication University of China (中國傳媒大學) in July 2014.

Mr. Jiang is the sales director of Beijing Hongteng Weitong Technology Co., Ltd (北京鴻騰偉通科技有限公司), which is one of the subsidiaries of the Company.

Tang Andong (唐安東) ("Mr. Tang"), aged 57, was appointed as an executive Director on July 31, 2019. Mr. Tang resigned as executive Director on April 7, 2021.

Mr. Tang has over 30 years of working experience in industrial automation, industrial informatization and energy optimization. He is responsible for leading, undertaking and completing major system integration projects in petrochemical, coal chemical, textile and other fields. Mr. Tang obtained a bachelor's degree in computer science and technology engineering from Tsinghua University.

Mr. Tang has been the chairman of Zhongchao United Energy Technology (Beijing) Co., Ltd. (中超聯合能源科技(北京)有限公司) since 2010 and the chairman of Hongteng Weitong Technology Development Co., Ltd. (鴻騰偉通科技發展有限公司) since 2015. Mr. Tang is one of the beneficial owners of the Sailen International IOT Limited ("**GH Vendor**"). The Group acquired Green Harmony from the GH Vendor in 2018. Mr. Tang is a director of Hongteng Technology Limited (鴻騰科技有限公司), and the chairman of Beijing Risecomm Communication Technology Company Limited (北京瑞斯康通信技術有限公司) ("**Risecomm Beijing Comm**") and Beijing Hongteng Weitong Technology Co., Ltd. (北京鴻騰偉通科技有限公司), all of which are subsidiaries of the Company.

NON-EXECUTIVE DIRECTORS

Cheung Fan (張帆) ("Mr. Cheung"), aged 49, was appointed as a non-executive Director on September 7, 2018. On June 10, 2019, Mr. Cheung was re-designated as the Chairman of the Board and the chairman of Nomination Committee.

Mr. Cheung has over 10 years of working experience in financial services and capital market. Mr. Cheung has worked in Phillip Securities (HK) Ltd. and Quam Securities Company Limited (now known as China Tonghai Securities Limited) during the period from 2006 to 2010 and from 2011 to 2015 respectively. Mr. Cheung was the chief executive officer and a director of Long Asia Securities Limited ("**Long Asia**") (formerly known as Long Asia Securities and Futures Limited) from 2017 to October 2018 and became the chief executive officer of Lead Securities (HK) Limited (after the change of business name from Long Asia) since November 2018 accordingly, which he is mainly responsible for stock dealing, initial public offering subscription and securities underwriting. He is also a responsible officer to carry on Type 1 (dealing in securities) regulated activity under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong).

* *for identification only*

Wang Shiguang (王世光) ("Mr. Wang"), aged 49, is a non-executive Director. He was appointed as a Director in February 2016, and was designated as an executive Director and the chairman of the Board in May 2017. Mr. Wang was re-appointed as a non-executive Director at the annual general meeting of the Company held in May 2018 and remains as the chairman of the Board. Mr. Wang was subsequently ceased to be the chairman of the Board and the chairman of the nomination committee with effect from June 10, 2019. He is the spouse of Ms. Chen Junling, the general manager of Risecomm Beijing Comm. Mr. Wang has been the senior vice president of Risecomm WFOE and Risecomm Beijing Comm since June 2014 and a director of Old Cayman, Risecomm HK and Risecomm HK Technology since April 2015, March 2016 and March 2016, respectively.

Mr. Wang has approximately 20 years of experience in electronics and power meter sales and marketing. Prior to joining the Group, Mr. Wang was the chairman of the board and general manager of Beijing Rui Si Kang Electronics Company Limited ("**Beijing RSK Electronics**"), the Group's previous strategic sales partner, from September 2009 to March 2014 responsible for overall strategic planning and operational management of Beijing RSK Electronics. He acted as the chairman of the board and general manager of Beijing Dragon Electrical Industry and Technology Company Limited (北京龍電基業電氣技術有限公司), a company engaged in, among others, sales of electronics related equipment and components, from May 1999 to September 2009 responsible for overall strategic planning and operational management of the company.

Mr. Wang graduated from Henan University (河南大學) in the PRC with a major in Accounting (correspondence course) in July 1996. Mr. Wang obtained a master's degree in Business Administration (distance learning course) at the Open University of Hong Kong in Hong Kong in June 2016.

As of December 31, 2020, Mr. Wang was interested in certain Shares. Please refer to the section headed "Directors' and Chief Executives' Interests and Short Positions in the Shares, Underlying Shares and Debentures of the Company or any Associated Corporation" in this report for further details.

Ms. Pan Hong (潘紅) ("Ms. Pan"), aged 35, has been appointed as a non-executive Director with effect from June 24, 2020.

Ms. Pan obtained a master's degree in civil and commercial law from China University of Political Science and Law in June 2011 and holds a legal professional qualification in the People's Republic of China. She is currently licensed as a responsible officer under the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) ("**SFO**") to carry on Type 9 (asset management) regulated activities. Ms. Pan has been the general manager and the executive director of Lead Asset Management (HK) Limited since June 2018 and is the person in charge of the Lead Group's overseas business and M&A and restructuring business. Prior to joining the company, Ms. Pan had worked for well-known investment institutions in China and responsible for investment management. She has extensive experience in financial services and capital markets.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Zou Heqiang (鄒合強) ("Mr. Zou"), aged 52, has been appointed as the independent non-executive Director on May 29, 2019.

Mr. Zou graduated from Shanghai Medical University in 1991 with major in forensic medicine and obtained a master degree in Law from the Shanghai Academy of Social Sciences in 2005. Mr. Zou holds the qualifications of lawyer and deputy chief physician of general surgery.

After graduating from undergraduate degree, Mr. Zou has been engaged in the clinical work and management of pathology research, general surgery and intensive care, and obtained the title of deputy chief physician of general surgery. He changed to the lawyer industry in 2008 and is currently practicing at Shanghai Yingdong Law Firm, mainly focusing on the medical dispute resolution, system construction in the field of medical safety management and contract disputes. Mr. Zou was appointed as the legal counsel of the Shanghai Jing'an District Health Commission (上海市靜安區衛生健康委員會) and the mediator of the Shanghai Jing'an District Medical Dispute Resolution Committee (上海市靜安區醫患糾紛調解委員會). At the same time, he has been employed as the legal advisor for certain companies and has accumulated extensive experiences in corporate compliance and risk control.

Lo Wan Man (盧韻雯) ("Ms. Lo"), aged 46, has been appointed as the independent non-executive Director on May 29, 2019.

Ms. Lo has over 20 years of experience in the area of accounting, auditing and financial management for both listed and private companies in Hong Kong and the PRC by working in an international accounting firm and other listed companies. She obtained a master of science in finance from City University of Hong Kong in July 2005. She worked at Ernst & Young from March 2001 to December 2003. She was then employed by Emperor Motion Picture (Hong Kong) Limited as finance manager from May 2004 to July 2008. Subsequently, she worked at New World Telecommunications Limited as finance manager in July 2008 until her resignation in March 2010. She was a finance manager of Midland IC&I Limited from May 2011 to January 2014. Since May 2015 she has been employed by MCGI Consultancy Limited as a senior consultant. Since April 2019, she has been appointed as the company secretary and authorized representative of Man Shun Group (Holdings) Limited, a company listed on the Main board of the Stock Exchange (stock code: 1746). Ms. Lo is a certified public accountant of the Hong Kong Institute of Certified Public Accountants since January 2003.

Ong King Keung (王競強) ("Mr. Ong"), aged 45, was appointed as an independent non-executive Director on May 16, 2017. Mr. Ong is responsible for providing independent judgment and scrutinizing the performance of the Group.

Mr. Ong obtained a bachelor's degree in accountancy from the Hong Kong Polytechnic University and a master's degree in corporate finance from the City University of Hong Kong. He is a member of both the Hong Kong Institute of Certified Public Accountants and the Association of Chartered Certified Accountants. He has over 15 years of experience in auditing and accounting industry. Mr. Ong is currently the company secretary of Unity Investments Holdings Limited (listed on main board in Hong Kong, stock code: 913).

Mr. Ong is an independent non-executive director of Bingo Group Holdings Limited (listed on GEM board in Hong Kong, stock code: 8220) and My Heart Bodibra Group Limited (listed on GEM board in Hong Kong, stock code: 8297).

Mr. Ong was an independent non-executive director of China Water Affairs Group Limited (listed on Main board in Hong Kong, stock code: 855) for the period from March 2007 to November 2019; and Tech Pro Technology Development Limited (listed on Main board in Hong Kong, stock code: 3823 (cancellation of Listing with effect from March 2, 2020)) for the period from March 2017 to February 2019.

Mr. Ong had also been an independent non-executive director of Deson Construction International Holdings Limited (now known as Smart City Development Holdings Limited) (listed on Main board in Hong Kong, stock code: 8268) since December 2014 and has been subsequently re-designated as a non-executive director since December 2015. In July 2019, Mr. Ong resigned as non-executive director of such company.

SENIOR MANAGEMENT OF THE GROUP

Chen Junling (陳俊玲) ("Ms. Chen"), aged 48, is the general manager of Risecomm Beijing Comm responsible for overall supervision of sales and marketing of the AMR business. She has joined the Group as the general manager of Risecomm Beijing Comm since June 2014. She is the spouse of Mr. Wang Shiguang, who is a non-executive Director.

Ms. Chen has approximately 20 years of experience in electronics and power meter sales and marketing.

Prior to joining the Group, from November 2000 to August 2009, Ms. Chen worked as a sales manager in Beijing Taide Jiaxun Technology Co., Ltd., a company engaged in, among others, the sales of electrical and communication equipment. Ms. Chen was the sales manager of Beijing RSK Electronics from September 2009 to March 2014. Ms. Chen graduated from Henan Province Zhumadian First High School in the PRC in July 1990.

Liu Ming (劉明) ("Mr. Liu"), aged 50, is the vice president of Risecomm WFOE responsible for sales management of the smart energy management products and solutions. He joined the Group in June 2006 as the sales and marketing director of Risecomm WFOE and has been the vice president of Risecomm WFOE since February 2009. Mr. Liu has also been a director of Risecomm (Beijing) Technology Company Limited ("**Risecomm Beijing Tech**") since May 2016.

Mr. Liu has over 25 years of experience in the intelligent technology industry. From 1994 to 2003, Mr. Liu worked in Shenzhen Kaifa Technology Co., Ltd., a company principally engaged in manufacturing electronic products and listed on the Shenzhen Stock Exchange (stock code: 000021), as a marketing manager. From 2003 to 2005, Mr. Liu worked as a deputy general manager in Shenzhen Haoyuan Technology Co. Ltd. From 2005 to May 2006, Mr. Liu worked in Shenzhen Haoyuan Electronics Co., Ltd., as a deputy general manager.

Mr. Liu obtained a bachelor's degree in Electro-mechanical and Electronic Precision Machinery from the University of Electronic Science and Technology of China in the PRC in July 1994.

Chen Shuiying (陳水英) ("Ms. Chen SY"), aged 46, is the vice president and financial controller of Risecomm WFOE responsible for financial system management of the Group. She has joined the Group as the financial controller of Risecomm WFOE since March 2013. Ms. Chen SY has been a director of each of Risecomm HK and Risecomm HK Technology since December 2015. She has been a director of Risecomm WFOE since May 2018. She has also been the vice president of Risecomm WFOE since April 2020.

Ms. Chen SY has approximately 20 years of experience in the areas of finance and accounting. From 1997 to 2001, Ms. Chen SY worked as an account supervisor at Shenzhen Guanlanhu Golf Club Co., Ltd., a golf and leisure resort operator in the PRC. From November 2001 to October 2008, Ms. Chen SY worked as a senior finance manager at Sylva Industries Limited, a Hong Kong company engaged in the manufacturing of rechargeable batteries, responsible for financial analysis. From November 2008 to October 2012, Ms. Chen SY worked as the finance manager at ASV Stuebbe Pumps & Valves (Shenzhen) Co., Ltd., a company principally engaged in manufacturing and development of plastic pumps, valves and instrumentation systems, responsible for overall financial management of all subsidiaries in Asia.

Ms. Chen SY obtained a bachelor's degree in International Finance from Nanjing Audit University, (currently known as Nanjing Audit University) in the PRC in July 1997.

Zhang Youyun (張友運) ("Mr. Zhang"), aged 61, has joined the Group as an administrative controller of Risecomm WFOE since June 2006 and has been the executive vice president of Risecomm WFOE since April 2015. Mr. Zhang has been a director of Risecomm WFOE and NM Technology since May 2018 and April 2018, respectively. Mr. Zhang was an executive Director until July 31, 2019. Mr. Zhang was a director of Risecomm Beijing Tech from May to August 2016.

Mr. Zhang has more than 30 years of experience in the intelligent technology industry. Prior to joining the Group, from 1982 to 1993, Mr. Zhang worked as an engineer in Changjiang Woolen and Textile Limited (長江毛紡織有限公司). In 1993, Mr. Zhang commenced working in Shenzhen Kaifa Technology Co., Ltd. (深圳長城開發科技股份有限公司), a company principally engaged in manufacturing electronic products and listed on the Shenzhen Stock Exchange (stock code: 000021), and worked as a program manager from 1996 to 2003. He then worked at Shenzhen Haoyuan Technology Co. Ltd. (深圳市昊元科技有限公司), a company engaged in, among others, development of communication and control IC chips and related application products, as a deputy general manager from 2003 to 2005. From April 2005 to May 2006, Mr. Zhang worked in Shenzhen Haoyuan Electronics Co., Ltd. (深圳市昊元電子有限公司), a technological development company in the PRC, as a deputy general manager.

Mr. Zhang obtained a bachelor's degree in Industrial Electrical Automation from Hua Dong Textile Institute (華東紡織工學院) (currently known as Donghua University (東華大學)) in the PRC in July 1982. In May 2018, Mr. Zhang was awarded the"Electrical Engineering Senior Engineer"qualification certificate issued by Shenzhen Human Resources and Social Security Bureau (深圳人力資源和社會保障局).

Save as disclosed herein, to best of the knowledge, information and belief of the Directors having made all reasonable enquiries, each of the members of the senior management has not been a director of any public company the securities of which are listed on any securities market in Hong Kong or overseas in the three years immediately preceding the date of this report.

Directors' Report

The Directors are pleased to present their report and the audited consolidated financial statements of the Group for the year ended December 31, 2020.

PRINCIPAL ACTIVITIES

The Company was incorporated in the Cayman Islands as an exempted company with limited liability on August 19, 2015 under the Companies Law of the Cayman Islands. The Company acts as an investment holding company. The activities of its principal subsidiaries and an associate are set out in notes 23 and 24 to the consolidated financial statements, respectively.

SHARE CAPITAL

As of December 31, 2020, the total issued share capital of the Company was approximately HKD98,662 divided into 986,619,071 ordinary Shares of nominal value of HKD0.0001 each. Details of movements during the year under review in the share capital of the Company are set out in note 29 to the consolidated financial statements.

DEBENTURES IN ISSUE

The Company did not have any debentures in issue for the year under review.

BUSINESS REVIEW

A fair review of the business of the Group during the year under review, a discussion about the Group's future business development and an analysis of the Group's performance using financial key performance indicators are set out in the sections headed "Business Review" and "Prospects" in the "Management Discussion and Analysis" in this report and a discussion of the principal risks and uncertainties facing by the Group is included in this section and note 6 to the consolidated financial statements. The review forms part of this Directors' Report.

ENVIRONMENT PROTECTION

The Group has formulated certain policies in accordance with environmental regulations, including, during the stage of design, research, and development, conducting environmental impact assessment for various types of materials or machines prior to making any purchasing decision, enhancing awareness of environmental protection among all employees by organizing environmental protection activities, training programmes and promotions. Top management of the Group plays a leading role in establishing a well-defined structure and system for environmental management by outlining corresponding responsibility, scope and policy.

During the daily operations, the Group has paid close attention to the latest development of domestic and international environmental protection laws and regulations to ensure that the environmental policies are in line with the domestic and international standards, as well as the global development.

The two major operating subsidiaries of the Group received ISO14001:2015 environment management system certifications, which are valid to May 2024 and December 2021 respectively and subject to renewal. During the year under review, the Group did not receive any notice or warning in relation to pollution in respect of its production, nor had the Group been subject to any fines, penalties or other legal actions by government agencies in the PRC resulting from any non-compliance with any environmental protection laws in the PRC.

RELATIONSHIP WITH EMPLOYEES

The Group's success depends on its ability to attract, retain and motivate qualified personnel. The Group has generally been able to attract and retain qualified personnel and maintain a stable core management team. The Group is dedicated to the training and development of its employees. The Group leverages its R&D capabilities and other resources to ensure that each employee maintains a current skill-set through continuous training. The Group provides introductory training and orientation for all new employees, as well as on-the-job training to continually improve its employees' technical, professional and management skills.

In accordance with applicable PRC laws and regulations, the Group provides its employees with basic pension, basic medical insurance, workplace injury insurance, unemployment insurance, maternity insurance and housing provident funds. The Group pays great attention to its employee welfare, and continually improve its welfare system.

The Group believes that it maintains a good working relationship with its employees and the Group did not experience any significant labor disputes or disputes with the labor department of the PRC government during the year under review.

The two major operating subsidiaries of the Group have received ISO45001:2018 certifications for occupational health and safety management system, which are valid to May 2024 and December 2021 respectively and subject to renewal. The Group has implemented safety measures at its product assembly hub to ensure compliance with applicable regulatory requirements and to minimize the risk of injury of employees. The Group conducts periodic inspections of operating facilities to ensure that its product assembly operations are in compliance with existing laws and regulations. Furthermore, the Group requires new employees to receive work safety training.

RELATIONSHIP WITH CUSTOMERS AND SUPPLIERS

The Group strives to build and maintain long term and strong relationships with customers. The Group's business department has from time to time conducted a customer satisfaction management survey with a view to understand and fulfil customers' demands and enhance their satisfaction. In terms of suppliers, the Group's objective is to keep mutually beneficial and win-win partnerships with all suppliers. At the same time, the Group regularly evaluates the performance of its suppliers.

COMPLIANCE WITH LAWS AND REGULATIONS

The Group has compliance and risk management policies and procedures, and members of the senior management are delegated with the continuing responsibility to monitor adherence and compliance with all significant legal and regulatory requirements. These policies and procedures are reviewed regularly. As far as the Board is aware, the Group has complied in material respects with the relevant laws and regulations that have a significant impact on the business and operation of the Group.

RISK FACTORS

The main activities of the Group include R&D, production and sales of PLC products and provision of SMIA services and products. During the year under review, the Group's AMR business was largely affected by the market environments in China's AMR deployment, procurement paces of State Grid and China Southern Power Grid Co., Ltd. ("**Southern Grid**") and the unexpected further delay in debut of the Group's PLC based broadband AMR products. The outbreak of the Pandemic in early 2020 has affected the business and economic activities around the world and has brought about additional uncertainties to the Group's operating environment and has to a certain extent impacted the Group's operations and financial position. The long-term business and profitability growth of the Group are expected to be continuously impacted by variables of major qualitative factors (such as the development of political and economic policies of China and further development of Pandemic). The Group's current operations and development are under influence of certain factors mainly including:

PLC Technology in AMR business in China

The Group designs and develops AMR products to a large extent for sale to meter manufacturers which in turn supply smart meters to power grid companies in China, as well as for sale to power grid companies, both directly and indirectly through their designated entities and from time to time, other technology companies. The competition landscape has been changed as a portion of the PLC market shares retained by SOE, in general. Hence, the competition among domestic PLC market participants are even more intense although the overall market demand in PLC remains strong and promising.

To mitigate the effect from AMR business risk, the Group continues to strengthen its capabilities in PLC technology and R&D to enhance its AMR product functionality and features, in addition to expansion of new markets. Meanwhile, the HPLC chips, being one of the high data rate PLC products for AMR and SEM business of the Group, developed by the Group have satisfied the requirements of Electric Energy Data Acquisition Standards (電力用電資訊採集系列標準) of State Grid and have passed the inspection and testing thereof by State Grid Measurement Center (國家電網計量中心). Such accreditation indicates that the HPLC chips of the Group meet the market entry requirements promulgated by State Grid Measurement Center and therefore are eligible for participation in the centralized biddings conducted by the State Grid. The HPLC chips developed by the Group will better meet the application needs of State Grid and accelerate the Group's development in smart energy applications market.

SMIA business

The ongoing economic conflict between the world's two largest national economies, China and the U.S. affected the strategic development and expansion planning on the State-owned enterprises, particularly in the petroleum industry which resulted in the reconsideration on the prioritization of resources deployment. This may lead to unexpected delay in delivery/implementation of certain contracts held by the Group. To mitigate the effect from SMIA business risk, the Group will further explore potential customers in different industries.

Exchange rate risk

Most of the businesses of the Group are settled in Renminbi while businesses in foreign currencies are mainly settled in USD. The fluctuation of exchange rate of both currencies will have certain impact on the Group's business which are settled in foreign currencies. However, the net proceeds from initial global offering raised by the Company is denominated in HKD. The fluctuation of RMB exchange rate will cause exchange loss or gain to the Group's business transacted in foreign currencies. To manage the effect from exchange rate fluctuation, the Group will persistently assess the risk exposure of exchange rate.

DIVIDEND POLICY

The Company has adopted a Dividend Policy on payment of dividends. The Company intends to distribute no less than 30% of its profit attributable to equity shareholders as dividends to its Shareholders, subject to the conditions and factors as set out below:

- results of operations;
- working capital and cash position;
- future business and earnings;
- capital requirements;
- contractual restrictions, if any; and
- any other factors that the Directors may consider relevant.

Depending on the financial conditions of the Company and the Group and the conditions and factors as set out above, dividends may be proposed and/or declared by the Board for a financial year or period:

- interim dividend;
- final dividend;
- special dividend; and
- any distribution of net profits that the Board may deem appropriate.

The Board has the discretion to declare and distribute dividends to the Shareholders, subject to the provisions of the Articles of Association of the Company (the "**Articles**") and all applicable laws and regulations and the factors set out above. Any final dividend for a financial year will be subject to Shareholders' approval.

FINAL DIVIDEND

The Board did not recommend the payment of a final dividend for the year under review.

DISTRIBUTABLE RESERVES

The Company's reserves available for distribution to Shareholders as at December 31, 2020 comprised the share premium and accumulated losses of RMB nil (2019: RMB32,117,000).

DIRECTORS

The directors of the Company during the year under review and up to the date of this report were:

Executive Directors

Mr. Yue Jingxing
Mr. Lau Wai Leung, Alfred *(resigned on June 24, 2020 and appointed on January 19, 2021)*
Mr. Jiang Feng *(appointed on April 19, 2021)*
Mr. Tang Andong *(resigned on April 7, 2021)*

Non-Executive Directors

Mr. Cheung Fan *(Chairman)*
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong *(resigned on January 19, 2021)*
Ms. Pan Hong *(appointed on June 24, 2020)*

Independent Non-Executive Directors

Mr. Ong King Keung
Ms. Lo Wan Man
Mr. Zou Heqiang

DIRECTORS' PROFILES

Directors' profiles are set out on page 13 to 16 of this report.

Pursuant to Article 84(1) of the Articles, Mr. Yue Jingxing, Mr. Cheung Fan and Mr. Wang Shiguang will retire at the forthcoming annual general meeting. In addition, Ms. Pan Hong, Mr. Lau Wai Leung, Alfred and Mr. Jiang Feng shall hold office until the forthcoming annual general meeting pursuant to Article 83(3) of the Articles. All of the above retiring Directors, being eligible, will offer themselves for re-election at the forthcoming annual general meeting.

CHANGE IN DIRECTORS' BIOGRAPHICAL DETAILS

Change in Directors' biographical details since the date of the Interim Report 2020 and up to the date of this report, which are required to be disclosed pursuant to rule 13.51B(1) of the Listing Rules are set out below:

Mr. Lau Wai Leung, Alfred	Mr. Lau was appointed as an executive director of the Company on January 19, 2021 for an initial term of three years and the annual director's fee of Mr. Lau was HKD120,000.
Mr. Zhou, Francis Bingrong	Mr. Zhou resigned as a non-executive director of the Company with effect from January 19, 2021.

Save as disclosed above, the Company is not aware of other changes in the Directors' information which are required to be disclosed pursuant to rule 13.51B(1) of the Listing Rules.

PERMITTED INDEMNITY PROVISION

Under the Articles, the Company had a permitted indemnity provision (as defined in section 469 of the Companies Ordinance) in force for the benefit of the Directors during the year under review and up to the date of approval of this Directors' Report, pursuant to which the Company shall indemnify any Director against any liability, loss suffered and expenses incurred by the Director in connection with any legal proceedings in which he/she is involved by reason of being a Director, except in any case where the matter in respect of which indemnification is sought was caused by the fraud or dishonesty of the Directors. The Company has maintained insurance cover for Directors' and officers' liabilities in respect of legal actions against the Directors arising out of corporate activities. The insurance coverage is reviewed on an annual basis. During the year under review, no claims were made against the Directors.

DIRECTORS' SERVICE CONTRACTS

Mr. Yue Jingxing, an executive Director, entered into a service contract with the Company for an initial term of three years from April 16, 2021, and the term of the service contract shall be renewed and extended automatically for successive terms of one year upon expiry of the then current term, until terminated either by not less than three months' written notice served by either party on the other or payment in lieu of notice.

Mr. Lau Wai Leung, Alfred, an executive Director, entered into a service contract with the Company for an initial term of three years from January 19, 2021, and the term of the service contract shall be renewed and extended automatically for successive terms of one year upon expiry of the then current term, until terminated either by Mr. Lau by giving not less than three months' written notice expiring at the end of the initial term of his appointment or any time thereafter to the Company, or by the Company by giving not less than three months' written notice expiring at the first anniversary of the initial term of his appointment or any time thereafter to him.

Mr. Jiang Feng, an executive Director, has entered into a service contract with the Company for an initial term of three years from April 19, 2021, and the term of the service contract shall be renewed and extended automatically for successive terms of one year upon expiry of the then current term, until terminated either by Mr. Jiang by giving not less than three months' written notice expiring at the end of the initial term of his appointment or any time thereafter to the Company, or by the Company by giving not less than three months' written notice expiring at the first anniversary of the initial term of his appointment or any time thereafter to him.

Mr. Wang Shiguang, a non-executive Director, entered into a letter of appointment with the Company for an initial term of one year renewable automatically for successive term of one year commencing from the next day after the expiry of the current term of his appointment, unless terminated by not less than three months' written notice served by either party on the other expiring at the end of the initial term or at any time thereafter.

Mr. Cheung Fan, a non-executive Director, entered into a letter of appointment (as amended and supplemented) with the Company for an initial term of three years renewable automatically for successive term of one year upon expiry of the then current term, until terminated by not less than three months' written notice served by either party on the other.

Ms. Pan Hong, a non-executive Director, entered into a letter of appointment with the Company for an initial term of three years until terminated by not less than three months' written notice served by either party on the other.

Save as disclosed above, none of the Directors being proposed for re-election at the forthcoming annual general meeting has entered into a service contract or letter of appointment with the Company which is not determinable by the Company within one year without payment of compensation, other than statutory compensation.

RIGHTS OF DIRECTORS TO ACQUIRE SHARES OR DEBENTURES

Save as disclosed under the section headed "Share Option Schemes" below, at no time during the year under review was the Company or any of its subsidiaries a party to any arrangements to enable the Directors to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or any other body corporate and none of the Directors, their spouses or children under the age of 18, had any rights to subscribe for securities of the Company, or had exercised any such rights during the year under review.

DIRECTORS' INTERESTS IN TRANSACTIONS, ARRANGEMENTS OR CONTRACTS OF SIGNIFICANCE

Save as disclosed in note 42 to the consolidated financial statements, no transactions, arrangements and contracts of significance in relation to the Group's business to which the Company or any of its subsidiaries was a party and in which a Director or his connected entity had a material interest, whether directly or indirectly, subsisted at the end of the year under review or at any time during the year under review.

CONTRACTS OF SIGNIFICANCE

Save as disclosed in the consolidated financial statements, no controlling Shareholder or any of its subsidiaries has any contract of significance (including contract of significance for the provision of services) with the Company or its subsidiaries during the year under review.

PROPERTY, PLANT AND EQUIPMENT

Details of movements in property, plant and equipment of the Group are set out in note 19 to the consolidated financial statements.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN THE SHARES, UNDERLYING SHARES AND DEBENTURES OF THE COMPANY OR ANY ASSOCIATED CORPORATION

As of December 31, 2020, the interests and short positions of the Directors and chief executives of the Company in the shares, underlying shares and debentures of the Company or any associated corporation (within the meaning of Part XV of the Securities and Futures Ordinance, Chapter 571 of the Laws of Hong Kong (the "**SFO**")) as recorded in the register required to be kept under Section 352 of the SFO or otherwise notified to the Company and the Stock Exchange pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") set out in Appendix 10 to the Listing Rules, were as follows:

Name of Director	Relevant company	Nature of interest	Number of Shares in the relevant company (Note 1)	Approximate Percentage* of interest
Mr. Yue Jingxing	The Company	Interest in a controlled corporation (Note 2(i))	93,543,624 (L)	9.48%
		Beneficial owner (Note 2(ii))	863,587 (L)	0.09%
Mr. Wang Shiguang	The Company	Interest of spouse (Note 3)	97,527,845 (L)	9.89%

* The percentage represents the number of shares/underlying shares involved divided by the number of the issued Shares as of December 31, 2020.

Notes:

(1) The letter "L" denotes the Directors' long position in the Shares.

(2) Mr. Yue is the sole shareholder of Seashore Fortune Limited ("**Seashore Fortune**") which holds 93,543,624 Shares. By virtue of the SFO, Mr. Yue is deemed to be interested in the Shares in which Seashore Fortune is interested. The disclosed interest represents (i) the interest in the Company held by Seashore Fortune; and (ii) options held by Mr. Yue under the Pre-IPO Share Option Scheme adopted by the Company on August 25, 2016 (the "**Pre-IPO Share Option Scheme**").

(3) Mr. Wang, a non-executive Director and the spouse of Ms. Chen Junling, is deemed to be interested in Ms. Chen Junling's interest in the Company by virtue of the SFO.

(4) The total issued shares of the Company was 986,619,071 Shares as of December 31, 2020.

Save as disclosed above, as of December 31, 2020, none of the Directors or chief executives of the Company had any interests or short positions in the shares, underlying shares and debentures of the Company or any associated corporations (within the meaning of Part XV of the SFO), as recorded in the register required to be kept under Section 352 of the SFO, or as otherwise notified to the Company and the Stock Exchange pursuant to the Model Code.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND SHORT POSITIONS IN THE SHARES AND UNDERLYING SHARES

As of December 31, 2020, so far as is known to the Directors, the following corporations or persons (other than a Director or the chief executives of the Company) had an interest or short position in the Shares and underlying Shares as recorded in the register required to be kept by the Company under Section 336 of the SFO:

Name of Shareholder	Nature of interest	Number of Shares (Note 1)	Approximate Percentage* of Company's issued share capital
Seashore Fortune	Beneficial owner	93,543,624 (L)	9.48%
Ms. Chen Junling	Interest in a controlled corporation (Note 2)	97,527,845 (L)	9.89%
Magical Success Holdings Limited ("**Magical Success**")	Beneficial owner (Note 2)	97,527,845 (L)	9.89%
SB Asia Investment Fund II L.P. ("**SAIF**")	Beneficial owner (Notes 3 & 4)	197,340,537 (L) (Note 7)	20.00%
SAIF II GP L.P.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 7)	20.00%
SAIF Partners II L.P.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 7)	20.00%
SAIF II GP Capital Ltd.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 7)	20.00%
Mr. Andrew Y. Yan	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 7)	20.00%
Cisco System, Inc	Interest in a controlled corporation (Note 4)	197,340,537 (L) (Note 7)	20.00%
Software Research Associates, Inc. ("**SRA**")	Beneficial owner (Notes 5 & 6)	187,500,000 (L) (Note 7)	19.00%
SRA Holdings, Inc. ("**SRA Holdings**")	Interest in a controlled corporation (Notes 5 & 6)	187,500,000 (L) (Notes 7)	19.00%
Spitzer Fund VI L.P.	Beneficial owner	123,763,311 (L) (Note 7)	12.54%

* The percentage represents the number of Shares/underlying Shares involved divided by the number of the issued Shares as of December 31, 2020.

Notes:

(1) The letter "L" denotes the person's or corporation's long position in the Shares.

(2) Ms. Chen Junling is the sole shareholder of Magical Success which held 97,527,845 Shares. By virtue of the SFO, Ms. Chen Junling is deemed to be interested in the Shares in which Magical Success is interested.

(3) SAIF is an exempted limited partnership registered under the laws of the Cayman Islands. The general partner of SAIF is SAIF II GP L.P., a limited partnership established in the Cayman Islands, whose general partner is SAIF Partners II L.P., a limited partnership established in the Cayman Islands. The general partner of SAIF Partners II L.P. is SAIF II GP Capital Ltd., an exempted limited liability company incorporated in the Cayman Islands wholly owned by Mr. Andrew Y. Yan. By virtue of the SFO, SAIF II GP L.P., SAIF Partners II L.P., SAIF II GP Capital Ltd. and Mr. Andrew Y. Yan are deemed to be interested in the Shares in which SAIF is interested.

(4) Cisco Systems, Inc., being a limited partner of SAIF, holds 38.9% of equity interest in SAIF. By virtue of the SFO, Cisco Systems, Inc. is deemed to be interested in the Shares in which SAIF is interested.

(5) These 187,500,000 Shares represented the total number of Shares which may be allotted and issued to SRA upon the exercise of the conversion rights attaching to the Convertible Bonds for the aggregate principal amount of HK$150,000,000 at the adjusted conversion price of HK$0.80 per conversion share. The exercise of the conversion rights attaching to the Convertible Bonds is subject to the terms and conditions thereof.

(6) SRA is wholly owned by SRA Holdings. By virtue of the SFO, SRA Holdings is deemed to be interested in the Shares in which SRA is interested.

(7) Based on the disclosure of interests forms submitted by these substantial shareholders respectively as of December 31, 2020.

(8) The total issued shares of the Company was 986,619,071 Shares as of December 31, 2020.

Save as disclosed above, as of December 31, 2020, other than the Directors and the chief executives of the Company whose interests are set out in the paragraph headed "Directors' and Chief Executives' Interests and Short Positions in the Shares, Underlying Shares and Debentures of the Company or any Associated Corporation" above, no person had interest or short position in the Shares or underlying Shares which were required to be recorded in the register required to be kept by the Company pursuant to Section 336 of the SFO.

EQUITY-LINKED AGREEMENT

During the year under review, save for the Convertible Bonds and the Share Option Schemes as set out in the paragraph headed "Share Option Schemes" of this Directors' Report, the Company did not enter into any other equity-linked agreement, nor did any other equity-linked agreement exist during the year under review. Please refer to the section headed "Management Discussion and Analysis" and notes 33 and 39 to the consolidated financial statements for further information about the Convertible Bonds and the Share Option Schemes.

SHARE OPTION SCHEMES

Share Option Scheme

As disclosed in the prospectus of the Company dated May 29, 2017 (the "**Prospectus**") the Company adopted a share option scheme (the "**Share Option Scheme**") on May 16, 2017. The purpose of the Share Option Scheme is to enable the Company to grant share options to selected participants as incentives for their contribution to the Group. All Directors, employees, suppliers, customers, persons that, among others, contributed to the development and performance of the Group, advisers or consultants of the Group are eligible to participate in the Share Option Scheme.

The Share Option Scheme will remain in force for a period of 10 years commencing from June 9, 2017. The remaining life of the Share Option Scheme was approximately 6 years as at December 31, 2020.

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) under the Share Option Scheme and under any other share option schemes of the Company must not in aggregate exceed 10% of the total number of Shares in issue on June 9, 2017, being 80,000,000 Shares (the "**Scheme Limit**"), excluding for this purpose Shares which would have been issuable pursuant to options which have lapsed in accordance with the terms of the Share Option Scheme (or any other share option schemes of the Company). As at the date of this Directors' Report, the total number of Shares available for allotment and issue pursuant to the exercise of options granted under the Share Option Scheme was 9,830,000 Shares, representing about 1.0% of the issued share capital of the Company. The Board may renew the Scheme Limit with Shareholders' approval provided that each such renewal may not exceed 10% of the Shares in issue as at the date of the Shareholders' approval.

Notwithstanding the foregoing, the maximum number of Shares which may be issued upon exercise of all outstanding options granted and yet to be exercised under the Share Option Scheme and any other share option schemes of the Company at any time shall not exceed 30% of the Shares in issue from time to time.

Unless approved by the Shareholders, the total number of Shares issued and to be issued upon exercise of the options granted under the Share Option Scheme and any other share option scheme of the Company (including both exercised, outstanding options and Shares which were the subject of options which have been granted and accepted under the Share Option Scheme and any other share option schemes of the Company but subsequently cancelled) to each participant in any 12-month period shall not exceed 1% of the Shares in issue as at the date of the grant.

An option may be accepted by a participant within 21 days from the date of the offer of grant of the option. A nominal consideration of HKD1 is payable on acceptance of the grant of an option.

An option may be exercised in accordance with the terms of the Share Option Scheme at any time after the date upon which the option is deemed to be granted and accepted and prior to the expiry of 10 years from that date. The period during which an option may be exercised will be determined by the Board in its absolute discretion, save that no option may be exercised more than 10 years after it has been granted. No option may be granted more than 10 years commencing from June 9, 2017. A grantee may be required to achieve any performance targets as the Board may then specify in the grant before any options granted under the Share Option Scheme can be exercised.

The subscription price for the Shares under the Share Option Scheme will be a price determined by the Board, but shall not be less than the highest of: (i) the closing price of Shares as stated in the Stock Exchange's daily quotations sheet on the date of grant, which must be a day on which the Stock Exchange is open for the business of dealing in securities; (ii) the average closing price of the Shares as stated in the Stock Exchange's daily quotation sheets for the five business days immediately preceding the date of the grant; and (iii) the nominal value of a Share.

Details of movements of the options granted under the Share Option Scheme during the year under review are as follows:

Employees

Date of grant	Exercisable period	Outstanding as at December 31, 2019	Exercise Price per Share HKD	During the period under review Granted	Exercised	Cancelled	Lapsed	Outstanding as at December 31, 2020
September 3, 2018	From September 3, 2018 to September 2, 2026	1,125,000	1.71	–	–	–	(1,125,000)	–
September 3, 2018	From September 3, 2020 to September 2, 2026	4,201,669	1.71	–	–	–	(925,001)	3,276,668
September 3, 2018	From September 3, 2021 to September 2, 2026	4,201,669	1.71	–	–	–	(925,001)	3,276,668
September 3, 2018	From September 3, 2022 to September 2, 2026	4,201,662	1.71	–	–	–	(924,998)	3,276,664
Total		**13,730,000**		**–**	**–**	**–**	**(3,900,000)**	**9,830,000**

No share option was granted to a director, chief executive or substantial shareholder (as defined in the Listing Rules) of the Company or an associate (as defined in the Listing Rules) of any of them under the Share Option Scheme during the year under review. 3,900,000 share options were lapsed as the relevant employees resigned during the exercisable period as specified.

Save as disclosed above, no other share options under the Share Option Scheme were exercised, cancelled or lapsed during the year under review.

Pre-IPO Share Option Scheme

As disclosed in the Prospectus, the Company adopted the Pre-IPO Share Option Scheme on August 25, 2016 and granted options to subscribe for an aggregate of 771,680 Shares. Immediately following the completion of the Capitalization Issue (as defined in the Prospectus), the total number of Shares which may be allotted and issued upon exercise of all the outstanding options granted under the Pre-IPO Share Option Scheme increased from 495,180 Shares to 16,210,417 Shares. The purpose of the Pre-IPO Share Option Scheme is to recognize the contribution that certain parties made or may have made to the growth of the Group and/or the listing of Shares on the Stock Exchange. The principal terms of the Pre-IPO Share Option Scheme are substantially the same as the terms of the Share Option Scheme except for the following principal terms:

(a) the exercise price per Share shall not be less than the par value of such Share. Subject to the preceding sentence, the Board shall determine the exercise price at its sole discretion;

(b) the total number of Shares which may be allotted and issued upon exercise of all the outstanding options granted under the Pre-IPO Share Option Scheme immediately following completion of the Capitalization Issue and the Global Offering (as defined in the Prospectus) is 16,210,417 Shares, representing approximately 2.03% of the issued share capital of the Company immediately upon completion of the Capitalization Issue and the Global Offering and taking no account of any shares which may be allotted and issued pursuant to the exercise of the Over-allotment Options (as defined in the Prospectus) or the options granted or to be granted under the Pre-IPO Share Option Scheme or the Share Option Scheme;

(c) the eligible participant under the Pre-IPO Share Option Scheme are the full-time employees, executives or officers (including executive, non-executive and independent non-executive Directors) of the Company or the full-time employees of any of the subsidiaries of the level of manager or above and other full-time employees of the Company or any of the subsidiaries who, in the sole opinion of the Board, have contributed or will contribute to the Company and/or any of the subsidiaries;

(d) the conditions which the Board may in its absolute discretion to consider (including, without limitation, any minimum period for which an option must be held before it can be exercised and/or any performance targets which must be achieved before an option can be exercised) as it may think fit; and

(e) except for the options which have been granted under the Pre-IPO Share Option Scheme, no further options will be offered or granted under the Pre-IPO Share Option Scheme, as the right to do so will terminate upon the listing of the Shares on the Stock Exchange.

HKD1.00 was payable by each grantee as consideration for grant of the options.

The Pre-IPO Share Option Scheme will remain in force for a period of 10 years after its adoption date.

Details of movements of the options granted under the Pre-IPO Share Option Scheme during the year under review are as follows:

Director(s)

Name of Director(s)	Date of grant	Exercisable period	Outstanding as at December 31, 2019	Exercise Price per Share (Note 1) USD	During the year under review Granted	Exercised	Cancelled	Lapsed	Outstanding as at December 31, 2020
Mr. Yue Jingxing	August 25, 2016	From August 25, 2016 to March 25, 2024	863,587	0.0003	–	–	–	–	863,587
	Total		**863,587**		**–**	**–**	**–**	**–**	**863,587**

Note:

(1) Calculated based on the aggregate exercise price of the options granted under the Pre-IPO Share Option Scheme divided by the number of Shares to be subscribed upon full exercise of such options.

No further options were granted under the Pre-IPO Share Option Scheme on or after June 9, 2017 as the right to do so terminated on June 9, 2017.

Save as disclosed above, no other Pre-IPO Share Options were exercised, cancelled or lapsed during the year under review.

RETIREMENT SCHEMES

The Group participates in defined contribution retirement benefit schemes organized by the PRC municipal and provincial government authorities for the Group's eligible employees in the PRC, and operates a Mandatory Provident Fund scheme for the employees in Hong Kong. Particulars of these retirement plans are set out in note 16 to the consolidated financial statements.

INDEPENDENCE OF INDEPENDENT NON-EXECUTIVE DIRECTORS

The Company has received from each of the independent non-executive Directors an annual confirmation of his independence pursuant to Rule 3.13 of the Listing Rules. The Company considers all the independent non- executive Directors are independent.

RELATED PARTY TRANSACTION

Details of related party transactions of the Group are set out in note 42 to the consolidated financial statements. Transaction as set out in note 42(a) to the consolidated financial statements constitutes a continuing connected transaction of the Group during the year under review which is exempted from the reporting, annual review, announcement and independent shareholders' approval requirements under Chapter 14A of the Listing Rules, as such, the Company has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules.

MANAGEMENT CONTRACT

No contracts concerning the management and administration of the whole or any substantial part of the Group's business were entered into during the year under review or subsisted at the end of the year under review.

PURCHASE, REDEMPTION OR SALE OF THE LISTED SECURITIES OF THE COMPANY

Neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's listed securities during the year under review.

PRE-EMPTIVE RIGHTS

There are no provisions for pre-emptive rights under the Articles, or the laws of the Cayman Islands, which would oblige the Company to offer new Shares on a pro-rata basis to existing Shareholders.

TAX RELIEF

The Company is not aware of any tax relief or exemption available to the Shareholders by reason of their holding of the Shares during the year under review.

MAJOR CUSTOMERS AND SUPPLIERS

Details of the Group's transactions with its major suppliers and customers during the year under review are set out below:

During the year under review, the Group's largest customer accounted for approximately 41.5% (2019: approximately 19.2%) of the total revenue of the Group and the aggregated revenue attributable to the five largest customers accounted for approximately 70.0% (2019: approximately 43.3%) of the total revenue of the Group.

During the year under review, the Group's largest supplier (including outsourced service provider) accounted for approximately 13.7% (2019: approximately 23.0%) and the aggregated purchases (including outsourced service fees) attributable to the Group's five largest suppliers (including outsourced service providers) accounted for approximately 49.1% (2019: approximately 63.5%) of the total purchases (including outsourced service fees) of the Group.

None of the Directors, their close associates or any Shareholders (which to the knowledge of the Directors owned more than 5% of the Company's issued share capital) had any interest in any of the five largest customers or suppliers of the Group.

SUFFICIENCY OF PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors as at the latest practicable date prior to the issue of the annual report, there was a sufficient prescribed public float of the issued Shares under the Listing Rules.

USE OF PROCEEDS

From Initial Global Offering after the Re-allocation made as of July 3, 2019

References are made to the announcements of the Company dated June 8, 2017, June 21, 2017 and July 3, 2019. The aggregated net proceeds from the global offering of the shares of the Company in connection with the Listing and exercise of the over-allotment option by China Galaxy International Securities (Hong Kong) Co., Limited (on behalf of the International Underwriters (as defined in the Prospectus) was approximately HKD158.2 million. Proposed application of net proceeds as stated in the Prospectus had been adjusted according to the principles as specified in the section headed "Future Plans and Use of Proceeds" of the Prospectus.

On July 3, 2019, the Board resolved to change the use of the unutilised net proceeds (the "**Re-allocation**"). For details of the Re-allocation, please refer to the announcement of the Company dated July 3, 2019.

The following table presented the utilization of the net proceeds during the year under review after the Re-allocation made as of July 3, 2019:

From Initial Global Offering after the Re-allocation made as of July 3, 2019

	Original Planned use of net proceeds HKD'million	Re-allocation on July 3, 2019 HKD'million	Amount utilized as at December 31, 2020 HKD'million	Unutilized net proceeds as at December 31, 2020 HKD'million
Research and development of the PLC technology	95.7	(37.8)	44.3	13.6
Sales and marketing	32.0	(6.9)	11.3	13.8
Repayment of an entrusted bank loan	14.7	–	14.7	–
Working capital and general corporate purposes	15.8	–	15.8	–
Repayment of interest expenses	–	44.7	27.7	17.0
	158.2	–	113.8	44.4

As at the date of this report, the Company does not anticipate any change to the above plan of use of proceeds. The Company previously anticipated that the above net proceeds were expected to be fully utilized on or before December 31, 2020, however, due to an implementation of tightened cost control measures by the Group, the remaining unutilized net proceeds as at December 31, 2020 are expected to be fully utilized on or before December 31, 2021.

EMPLOYEE INFORMATION

The emolument policy of the employees of the Group is set up by the management on the basis of their merits, qualifications and competence.

As at December 31, 2020, the Group had an aggregate of 177 employees (as at December 31, 2019: 221 employees). The Group recruited and promoted individual persons according to their capabilities and development potential. The Group determined the remuneration packages of all employees including the Directors with reference to individual performance and prevailing market salary scale.

The Group is dedicated to the training and development of its employees. The Group leverages its research and development capabilities and other resources to ensure that each employee maintains a current skill-set through continuous training. The Group provides introductory training and orientation for all new employees, as well as on-the-job training to continually improve its employees' technical, professional and management skills. The Company has also adopted a share option scheme for the purpose of providing incentives and rewards to eligible participants, including the employees of the Group, who contribute to the success of the Group's operations.

CLOSURE OF REGISTER OF MEMBERS FOR THE 2021 AGM

The register of members of the Company will be closed from Tuesday, June 22, 2021 to Friday, June 25, 2021 (both days inclusive) for the purpose of determining the right to attend and vote at the forthcoming annual general meeting of the Company to be held on Friday, June 25, 2021 (the "**2021 AGM**") or any adjournment thereof. In order to be qualified for attending and voting at the 2021 AGM, unregistered holders of Shares should ensure that all share transfer documents accompanied by the corresponding share certificates are lodged with the Company's branch share registrar and transfer office in Hong Kong, Tricor Investor Services Limited at Level 54, Hopewell Centre, 183 Queen's Road East, Hong Kong, for registration not later than 4:30 p.m. (Hong Kong time) on Monday, June 21, 2021.

EVENT AFTER THE REPORTING PERIOD

Details of significant events to cause material impact on the Group from the end of the year under review to the date of this report are set out in note 43 to the consolidated financial statements.

FINANCIAL SUMMARY

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the past five financial years are set out on page 148 of this report.

AUDIT COMMITTEE

The Audit Committee has discussed with the management of the Group and reviewed this report and the audited annual financial results of the Group for the year under review, including the accounting principles and practices adopted by the Group, and discussed financial related matters.

THE AUDIT COMMITTEE'S VIEW AND THE PLAN TO ADDRESS THE DISCLAIMER OF AUDIT OPINION

The fundamental reason for the disclaimer of audit opinion (the "**Disclaimer**") made by the auditor of the Company ("**Auditor**") for the year under review is the fact that the Group incurred a net loss of approximately RMB126.0 million during the year under review and, as of that date, the Group's current liabilities exceeded its current assets by RMB75.5 million. Despite the fact that the Directors have undertaken a number of measures to improve the Group's liquidity and financial position, which are set out in note 2 to the consolidated financial statements, the conditional share subscription and share placing have not been completed and no agreement has been reached with the bondholder to extend the maturity date of the Convertible Bonds (as defined below) as negotiations have not yet commenced as of the date of the consolidated financial statements were approved and authorised for issue by the Board. In addition, the economic uncertainties created by the Pandemic and the trade disputes between the PRC and United States may negatively impact the Group's operation. These events and conditions indicate the existence of a material uncertainty which may cast significant doubt on the Group's ability to continue as a going concern, therefore, it may be unable to realise its assets and discharge its liabilities in the normal course of business. Therefore, the Auditor was unable to form an audit opinion on the consolidated financial statements. Please refer to note 2 to the consolidated financial statements for details.

The audit committee of the Company (the "**Audit Committee**") has reviewed the Disclaimer for the year under review and has well noted the basis thereof. The Audit Committee have also reviewed and agreed with the Board's position as set out above. The management of the Company (the "**Management**") has reviewed the impact of the Disclaimer on the Group and considers that it does not have significant impact on the Group's operation subject to (i) the Company will negotiate with Sailen International IOT Limited regarding the repayment of the promissory notes relating to the acquisition of Green Harmony Limited ("**Green Harmony**") (as detailed in note 32 to the consolidated financial statements) if the conditional share subscription and/or share placing could not be completed; and (ii) the promissory notes relating to the acquisition of Green Harmony and the Convertible Bonds would be settled by further fund raising by way of equity financing to be conducted by the Company and such could be completed before the maturity date (or, as the case may be, the extended maturity date) of such promissory notes and Convertible Bonds. The Management has discussed and confirmed with the Auditor that it is expected that the action plans set out in note 2 to the consolidated financial statements will be implemented and, if such action plans are successfully implemented, the Company expects the Disclaimer will be removed in the annual results of the Group for the financial year ending 31 December 2021.

There was no disagreement between the views of the Audit Committee and the Management in respect of the Disclaimer and the Company's plan to address the Disclaimer.

AUDITOR

The financial statements for the year ended December 31, 2020 have been audited by RSM Hong Kong. KPMG resigned as auditors of the Company with effect from December 7, 2020. RSM Hong Kong was appointed as auditor of the Company with effect from December 7, 2020 to fill the casual vacancy and to hold office until the conclusion of the next annual general meeting of the Company.

On behalf of the Board

Cheung Fan
Chairman and Non-executive Director

Hong Kong, March 29, 2021

Corporate Governance Report

CORPORATE GOVERNANCE PRACTICES

The Board is committed to maintaining good corporate governance standards.

The Board believes that high corporate governance standards are essential in providing a framework for the Group to safeguard the interests of shareholders, enhance corporate value, formulate its business strategies and policies, and enhance its transparency and accountability.

The Company's corporate governance practices are based on the principles and code provisions as set out in the Corporate Governance Code (the "**CG Code**") contained in Appendix 14 to the Listing Rules.

Save for the deviation from the code provision E.1.2 of the CG Code, the Company has complied with the CG Code during the year under review.

Code provision E.1.2 of the CG Code stipulates that the chairman of the Board should attend annual general meeting. He should also invite the chairman of the audit, remuneration, nomination and any other committees (as appropriate) to attend. In their absence, he should invite another member of the committee or failing this his duly appointed delegate, to attend. These persons should be available to answer questions at the annual general meeting. The Chairman of the Board, Mr. Cheung Fan did not attend the annual general meeting held on June 15, 2020 due to other business engagement. However, Mr. Lau Wai Leung, Alfred, the executive director of the Company, took the chair of that meeting and Ms. Lo Wan Man, a member of the nomination committee, attended that meeting to answer the questions.

DIRECTORS' SECURITIES TRANSACTIONS

The Company has adopted a code of conduct regarding Directors' transactions in securities of the Company (the "**Company's Code**") on terms no less exacting than the required standard set out in the Model Code for Securities Transactions by Directors of Listed Issuers (the "**Model Code**") as set out in Appendix 10 to the Listing Rules.

Having made specific enquiry with the Directors, all the Directors, confirmed that they have complied with the required standard set out in the Model Code during the year under review except for Mr. Tang Andong, an executive Director, who had through an investment holding company in which he controls, purchased a total of 84,497,500 shares of the Company ("**Shares**") and disposed of a total number of 84,497,500 Shares on 143 occasions (collectively, "**Dealings**") during the period between 18 November 2019 and 16 November 2020 without first notifying in writing the chairman of the Board or any other Director designated by the Board for the purpose of the Model Code and obtaining a dated written acknowledgement prior to such dealing in Shares. Furthermore, (i) 54 of the Dealings took place during the blackout period for the publication of the financial results of the Company for the year ended 31 December 2019 (i.e. between 26 January 2020 and 7 May 2020); and (ii) one of the Dealings took place during the blackout period for the publication of the financial results of the Company for the six months ended 30 June 2020 (i.e. between 29 July 2020 and 28 August 2020) (collectively with (i), "**Blackout Period Dealings**"). Therefore, Mr. Tang had breached B.8 of the Model Code in respect of the Dealings, and A.3 of the Model Code in respect of the Blackout Period Dealings.

The Company has put in place the following measures to ensure compliance with the Model Code by the Directors:

(1) the Company has sent notification to all Directors and senior management prior to each black-out period ("**Black-out Period**") for the publication of the relevant financial results of the Company, informing them the relevant dates of the Black-out Period and reminding them that they must not deal in the securities of the Company during such period; and

(2) the Company has from time to time organized trainings to the Directors to keep the Directors abreast of the Listing Rules requirements and changes thereof from time to time, including but not limited to the requirements under the Model Code provided by an external training service provider.

Given Mr. Tang's deviation from the Model Code, the Company has reiterated and reminded the Directors the relevant rules and requirements in relation to Directors' dealing in securities to ensure the compliance of the Model Code. The Company arranged training for the Directors in relation to the Model Code facilitated by the external internal control adviser engaged by the Company in March 2021. Furthermore, the Company has appointed an external internal control adviser to conduct review on, among others, the internal control system of the Company regarding the Model Code.

The Company has also extended the coverage of the Model Code adoption to the senior management of the Company who are likely to be in possession of unpublished inside information of the Company (the "**relevant employees**"). No incident of non-compliance of the Model Code by the relevant employees was noted by the Company throughout the year under review.

BOARD OF DIRECTORS

The Board oversees the Group's businesses, strategic decisions and performance and should take decisions objectively in the best interests of the Company.

The Board should regularly review the contribution required from a Director to perform his responsibilities to the Company, and whether the Director is spending sufficient time performing them.

Board Composition

The Board comprises of the following Directors during the year under review and up to the date of this report:

Executive Directors
Mr. Yue Jingxing *(Member of Remuneration Committee)*
Mr. Lau Wai Leung, Alfred
Mr. Jiang Feng *(appointed on April 19, 2021)*
Mr. Tang Andong *(resigned on April 7, 2021)*

Non-executive Directors
Mr. Cheung Fan *(Chairman and Chairman of Nomination Committee)*
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong *(resigned on January 19, 2021)*
Ms. Pan Hong

Independent Non-executive Directors
Mr. Ong King Keung *(Chairman of Audit Committee and Remuneration Committee, and Member of Nomination Committee)*
Ms. Lo Wan Man *(Member of Audit Committee, Remuneration Committee and Nomination Committee)*
Mr. Zou Heqiang *(Member of Audit Committee)*

The biographical information of the Directors are set out in the section headed "Biographical Details of Directors and Senior Management" on pages 13 to 18 of this annual report.

None of the members of the Board is related to one another.

Chairman and Chief Executive Officer

The roles of the chairman and Chief Executive Officer ("**CEO**") are served by different individuals to achieve a balance of authority and power. The main responsibility of the chairman is to lead the Board and manage its work to ensure that it effectively operates and fully discharges its responsibilities. Supported by the members of committees of the Board, the CEO is responsible for the day-to-day management of the Company and its subsidiaries' business, recommending strategies to the Board, and determining and implementing operational decisions. Mr. Cheung Fan is the chairman of the Company. Due to work allocation, Mr. Yue Jingxing has ceased to act as the CEO of the Company with effect from June 24, 2020 and the board of the Company is in the course of identifying a suitable candidate as the new CEO of the Company and will make further announcement upon the appointment of the position.

Independent Non-executive Directors

Throughout the year under review and up to the date of this report, the Company has complied with the requirements of the Listing Rules relating to the appointment of at least three independent non-executive directors representing one-third of the Board with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each independent non-executive Director of their independence pursuant to the requirements of Rule 3.13 of the Listing Rules. The Company considers all independent non-executive Directors to be independent in accordance with the independence guidelines set out in the Listing Rules.

Appointment and Re-election of Directors

The non-executive Directors (including independent non-executive Directors), except Mr. Wang Shiguang who is appointed for an initial term of one year, are appointed for a specific term of three years, subject to renewal after the expiry of the then current term.

The Articles provides that all Directors appointed to fill a casual vacancy shall be subject to election by Shareholders at the first general meeting after appointment.

Under the Articles, at each annual general meeting, one-third of the Directors for the time being (or, if their number is not a multiple of three, the number nearest to but not less than one-third) shall retire from office by rotation provided that every Director shall be subject to retirement by rotation at least once every three years. The retiring Directors shall be eligible for re-election.

Responsibilities of the Directors

The Board should assume responsibility for leadership and control of the Company, and is collectively responsible for directing and supervising the Company's affairs.

The Board directly, and indirectly through its committees, leads and provides direction to management by laying down strategies and overseeing their implementation, monitors the Group's operational and financial performance, and ensures that sound internal control and risk management systems are in place.

All Directors, including non-executive Directors and independent non-executive Directors, have brought a wide spectrum of valuable business experience, knowledge and professionalism to the Board for its efficient and effective functioning.

The independent non-executive Directors are responsible for ensuring a high standard of regulatory reporting of the Company and providing a balance in the Board for bringing effective independent judgement on corporate actions and operations.

All Directors have full and timely access to all the information of the Company and may, upon request, seek independent professional advice in appropriate circumstances for discharging their duties to the Company.

The Board reserves for its decision all major matters relating to policy matters, strategies and budgets, internal control and risk management, material transactions (in particular those that may involve conflict of interests), financial information, appointment of directors and other significant operational matters of the Company. Responsibilities relating to implementing decisions of the Board, directing and co-ordinating the daily operation and management of the Company are delegated to the management.

Continuous Professional Development of Directors

Directors shall keep abreast of regulatory developments and changes in order to effectively perform their responsibilities and to ensure that their contribution to the Board remains informed and relevant.

Every newly appointed Director has received formal, comprehensive and tailored induction on the first occasion of his appointment to ensure appropriate understanding of the business and operations of the Company and full awareness of Director's responsibilities and obligations under the Listing Rules and relevant statutory requirements.

Directors should participate in appropriate continuous professional development to develop and refresh their knowledge and skills. Internally-facilitated briefings for Directors would be arranged and reading materials on relevant topics would be provided to Directors where appropriate. All Directors are encouraged to attend relevant training courses at the Company's expenses.

The record of continuous professional development relating to director's duties and regulatory and business development that have been received by the Directors during the year under review and up to date of this report are summarized as follows:

Directors	**Type of Training (Note)**
Executive Directors	
Mr. Yue Jingxing	A
Mr. Tang Andong *(resigned on April 7, 2021)*	A & B
Mr. Lau Wai Leung, Alfred	A
Mr. Jiang Feng *(appointed on April 19, 2021)*	N/A
Non-Executive Directors	
Mr. Cheung Fan	A
Mr. Wang Shiguang	A
Mr. Zhou, Francis Bingrong *(resigned on January 19, 2021)*	A
Ms. Pan Hong	A
Independent Non-Executive Directors	
Mr. Ong King Keung	A
Ms. Lo Wan Man	A & B
Mr. Zou Heqiang	A

Note:

Types of Training

A: Attending training sessions, including but not limited to, briefings, seminars, conferences and workshops

B: Reading relevant news alerts, newspapers, journals, magazines and relevant publications

BOARD COMMITTEES

The Board has established three committees, namely, the Audit Committee, Remuneration Committee and Nomination Committee, for overseeing particular aspects of the Company's affairs. All Board committees of the Company are established with specific written terms of reference which deal clearly with their authority and duties. The terms of reference of the Audit Committee, Remuneration Committee and Nomination Committee are posted on the Company's website and the Stock Exchange's website and are available to Shareholders upon request.

The list of the chairman and members of each Board committee is set out under "Corporate Information" on page 2.

Audit Committee

The Audit Committee consists of three independent non-executive Directors namely Mr. Ong King Keung (chairman), Ms. Lo Wan Man and Mr. Zou Heqiang.

The terms of reference of the Audit Committee are of no less exacting terms than those set out in the CG Code. The duties of the Audit Committee include, without limitation, (a) making recommendations to the Board on the appointment, re-appointment and removal of the external auditor, and to approve the remuneration and terms of engagement of the external auditor, and any questions of its resignation or dismissal; (b) monitoring the integrity of the financial statements and annual report and accounts, and the interim report, and reviewing significant financial reporting judgments contained therein; (c) reviewing the financial control, risk management and internal control systems; and (d) developing and reviewing the Company's policies and practices on corporate governance and making recommendations to the Board.

The Audit Committee held four meetings to review, in respect of the year under review, the interim and annual financial results and reports and significant issues on the financial reporting, operational and compliance controls, the effectiveness of the risk management and internal control systems and internal audit function, engagement of non-audit services and relevant scope of work, arrangements for employees to raise concerns about possible improprieties and to recommend the appointment of new external auditor.

The Audit Committee also met the external auditor without the presence of the executive Directors. There is no disagreement between the Board and the Audit Committee regarding the appointment of external auditor.

Remuneration Committee

The Remuneration Committee consists of two independent non-executive Directors, namely Mr. Ong King Keung (chairman) and Ms. Lo Wan Man, and one executive Director namely Mr. Yue Jingxing.

The terms of reference of the Remuneration Committee are of no less exacting terms than those set out in the CG Code. The primary functions of the Remuneration Committee include (a) making recommendations to the Board on the Company's policy and structure for all Directors' and senior management and establishing a formal and transparent procedure for developing remuneration policy; (b) reviewing and approving the management's remuneration proposal with reference to the Board's corporate goals and objectives; (c) making recommendations to the Board on the remuneration packages of individual Directors and senior management.

The Remuneration Committee held one meeting during the year under review to review and make recommendation to the Board on the remuneration policy and the remuneration packages of the Directors and senior management.

Details of the annual remuneration of the members of the senior management by band for the year under review are set out below:

Remuneration band (HKD)	Number of individuals
HKD nil–HKD500,000	1
HKD500,001–HKD1,000,000	3
HKD1,000,001–HKD1,500,000	–
HKD1,500,001–HKD2,000,000	–

Details of the remuneration of each Director for the year under review are set out in note 15 to the consolidated financial statements.

The Remuneration Committee also made recommendations to the Board on the terms of letter of appointment of new non-executive Director appointed during the year under review.

Nomination Committee

The Nomination Committee consists of one non-executive Director, namely Mr. Cheung Fan (chairman) and two independent non- executive Directors, namely Mr. Ong King Keung and Ms. Lo Wan Man.

The terms of reference of the Nomination Committee are of no less exacting terms than those set out in the CG Code. The Company has complied with the requirements under Code Provision A.5.1.

The principal duties of the Nomination Committee include, without limitation, (a) reviewing the structure, size and diversity (including without limitation, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service) of the Board at least annually and making recommendations on any proposed changes to the Board to complement the corporate strategy; (b) identifying individuals suitably qualified to become members of the Board and selecting or making recommendations to the Board on the selection of individuals nominated for directorships; (c) assessing the independence of the independent non-executive Directors; and (d) making recommendations to the Board on the appointment or re-appointment of the Directors and succession planning for the Directors, in particular the chairman and the chief executive officer.

In assessing the Board composition, the Nomination Committee would take into account various aspects as well as factors concerning Board diversity as set out in the Company's Board Diversity policy. The Nomination Committee would discuss and agree on measurable objectives for achieving diversity on the Board, where necessary, and recommend them to the Board for adoption.

In identifying and selecting suitable candidates for directorships, the Nomination Committee would consider the candidate's character, qualifications, experience, independence and other relevant criteria necessary to complement the corporate strategy and achieve Board diversity, where appropriate, before making recommendation to the Board.

The Nomination Committee held one meeting to review the structure, size and composition of the Board and the independence of the independent non-executive Directors and to consider the qualifications of the retiring Directors standing for election at the annual general meeting. The Nomination Committee also considered and recommended to the Board on the appointment of non-executive Director during the year under review.

Board Diversity Policy

The Company has adopted a Board Diversity Policy which sets out the approach to achieve diversity of the Board and is available on the website of the Company. The Company recognizes and embraces the benefits of having a diverse Board and sees increasing diversity at the Board level as an essential element in maintaining the Company's competitive advantage.

Pursuant to the Board Diversity Policy, the Nomination Committee will review annually the structure, size and composition of the Board and where appropriate, make recommendations on changes to the Board to complement the Company's corporate strategy and to ensure that the Board maintains a balanced diverse profile. In relation to reviewing and assessing the Board composition, the Nomination Committee is committed to diversity at all levels and will consider a number of aspects, including but not limited to gender, age, cultural and educational background, professional qualifications, skills, knowledge and regional and industry experience.

The Company aims to maintain an appropriate balance of diversity perspectives that are relevant to the Company's business growth and is also committed to ensuring that recruitment and selection practices at all levels (from the Board downwards) are appropriately structured so that a diverse range of candidates are considered.

The Board will consider setting measurable objectives to implement the Board Diversity Policy and review such objectives from time to time to ensure their appropriateness and ascertain the progress made towards achieving those objectives.

At present, the Nomination Committee considered that the Board is sufficiently diverse and the Board has not set any measurable objectives.

The Nomination Committee will review the Board Diversity Policy, as appropriate, to ensure its effectiveness.

Director Nomination Policy

The Company has adopted a Director Nomination Policy which sets out the selection criteria and process and the Board succession planning considerations in relation to nomination and appointment of Directors and aims to ensure that the Board has a balance of skills, experience and diversity of perspectives appropriate to the Company and the continuity of the Board and appropriate leadership at Board level.

The Director Nomination Policy sets out the factors for assessing the suitability and the potential contribution to the Board of a proposed candidate, including but not limited to the following:

- character and integrity;
- qualifications including professional qualifications, skills, knowledge and experience that are relevant to the Company's business and corporate strategy;
- diversity in all aspects, including but not limited to gender, age (18 years or above), cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service;
- requirements of independent non-executive Directors on the Board and independence of the proposed independent non–executive Directors in accordance with the Listing Rules; and
- commitment in respect of available time and relevant interest to discharge duties as a member of the Board and/or Board committee(s) of the Company.

The Director Nomination Policy also sets out the procedures and process for the selection and appointment of new Directors and re-election of Directors at general meetings. During the year under review, the Nomination Committee adhered to the following nomination procedures and the process set out in the Director Nomination Policy to select and recommend candidates for directorship:

(a) Appointment of new Director

(i) Upon receipt of the proposal on appointment of new Director and the biographical information (or relevant details) of the candidate, the Nomination Committee should, evaluate such candidate based on the criteria as set out above to determine whether such candidate is qualified for directorship.

(ii) If the process yields one or more desirable candidates, the Nomination Committee should rank them by order of preference based on the needs of the Company and reference check of each candidate (where applicable).

(iii) The Nomination Committee should then recommend to the Board to appoint the appropriate candidate for directorship, as applicable.

(iv) For any person that is nominated by a Shareholder for election as a Director at the general meeting of the Company, the Nomination Committee should evaluate such candidate based on the criteria as set out above to determine whether such candidate is qualified for directorship.

Where appropriate, the Nomination Committee and/or the Board should make recommendation to Shareholders in respect of the proposed election of Director at the general meeting.

(b) Re-election of Director at General Meeting

(i) The Nomination Committee should review the overall contribution and service to the Company of the retiring Director and the level of participation and performance on the Board.

(ii) The Nomination Committee should also review and determine whether the retiring Director continues to meet the criteria as set out above.

(iii) The Nomination Committee and/or the Board should then make recommendation to shareholders in respect of the proposed re-election of Director at the general meeting.

During the year under review, there were some changes in the composition of the Board. Details are set out in Directors' Report.

The Nomination Committee will review the Director Nomination Policy, as appropriate, to ensure its effectiveness.

Corporate Governance Functions

The Board is responsible for performing the functions set out in the code provision D.3.1 of the CG Code.

During the year under review, the Board had reviewed the Company's corporate governance policies and practices, training and continuous professional development of Directors and senior management, the Company's policies and practices on compliance with legal and regulatory requirements, the compliance of the Model Code and the Company's compliance with the CG Code and disclosure in this Corporate Governance Report.

ATTENDANCE RECORDS OF DIRECTORS AND COMMITTEE MEMBERS

Board meetings should be held at least four times a year at approximately quarterly intervals, involving active participation, either in person or through electronic means of communication, of a majority of Directors entitled to be present.

Apart from Board meetings, the Chairman also held meetings with non-executive Directors without the presence of other Directors during the year under review.

The attendance record of each Director at meetings is set out in the table below:

	Attendance/Number of Meetings				
Name of Director	**Board**	**Audit Committee**	**Remuneration Committee**	**Nomination Committee**	**2020 AGM**
Mr. Yue Jingxing	11/11	N/A	1/1	N/A	1/1
Mr. Lau Wai Leung, Alfred *(resigned on June 24, 2020 and appointed on January 19, 2021)*	7/7	N/A	N/A	N/A	1/1
Mr. Jiang Feng *(appointed on April 19, 2021)*	N/A	N/A	N/A	N/A	N/A
Mr. Tang Andong *(resigned on April 7, 2021)*	10/11	N/A	N/A	N/A	1/1
Mr. Cheung Fan	5/11	N/A	N/A	0/1	0/1
Mr. Wang Shiguang	8/11	N/A	N/A	N/A	1/1
Mr. Zhou Francis Bingrong *(resigned on January 19, 2021)*	1/11	N/A	N/A	N/A	0/1
Ms. Pan Hong *(appointed on June 24, 2020)*	3/4	N/A	N/A	N/A	N/A
Mr. Ong King Keung	10/11	4/4	1/1	1/1	0/1
Ms. Lo Wan Man	10/11	4/4	1/1	1/1	1/1
Mr. Zou Heqiang	11/11	4/4	N/A	N/A	1/1

RISK MANAGEMENT AND INTERNAL CONTROLS

The Board acknowledged their responsibility for overseeing the risk management and internal control systems of the Group and for reviewing its effectiveness and adequacy.

In order to safeguard the Group's assets, effectiveness of business operation, ensure the reliability of financial report that the Company employs in its business or releases to the public and ensure compliance with relevant laws and regulations, the Company has established the risk management and internal control systems and conducts regular reviews of the effectiveness of such systems through the Audit Committee, executive management, functional departments, external advisers and external auditors. The risk management and internal control systems are designed to manage rather than eliminate the risk to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss.

The Group has developed and adopted different risk management procedures and guidelines with defined authority. All departments conducted internal control assessment regularly to identify risks that potentially impact the business of the Group and various aspects including key operational and financial process, regulatory compliance and information security. The management, in coordination with department heads, assessed the likelihood of risk occurrence, provide treatment plans, and monitor the risk management progress. The management monitors the assessment of the risk management and internal controls and reported to the Board and the Audit Committee on the effectiveness of the risk management and internal control systems. The internal audit function of the Group examined key issues in relation to the accounting practices and all material controls and provided its findings and recommendations for improvement to the Audit Committee.

In reviewing the risk management and internal control systems by the Board, the Group has further engaged an external professional firm in view of facilitating the internal audit function. The professional firm is arranged to conduct internal audit on the Group every six months (who reports to the Audit Committee) with a view to facilitating adequate resources and quality review to satisfy the Group's internal audit function as required by the Stock Exchange and to assist the Board in identifying and assessing the risks through a series of interviews, and perform semi-annual reviews on the effectiveness of the Group's internal control systems. The reviews cover material controls including financial, operational and compliance controls at entity and operational levels. The Audit Committee and the Board have discussed and reviewed the relevant results of the review. The Group will continuously enhance its risk management and internal control systems according to findings therein and recommendations made to the Group.

The Group has established procedures in handling and dissemination of inside information in an accurate, secure and timely manner and to avoid possible mishandling of inside information within the Group.

The risk management and internal control systems are reviewed and assessed on an on-going basis by the Audit Committee and the Board, and will be further reviewed and assessed at least once each year by the Board.

Based on the risk management and internal control systems established and maintained by the Group, the internal audit findings, the reviews by external professional firm on internal audit of the Group, the review of the effectiveness of risk management and internal control systems performed by the management, respective Board Committees and the Board, the Board is of the view that the Group has maintained effective and adequate risk management and internal control systems during the year under review.

DIRECTORS' RESPONSIBILITY IN RESPECT OF THE CONSOLIDATED FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the consolidated financial statements of the Company for the year under review.

The Group incurred a net loss of approximately RMB126,034,000 during the year ended 31 December 2020 and, as of that date, the Group's current liabilities exceeded its current assets by approximately RMB75,537,000. Its current liabilities, include acquisition consideration payables, convertible bonds and lease liabilities amounting to approximately RMB120,520,000, approximately RMB119,076,000 and approximately RMB4,488,000 respectively while its cash and cash equivalents amounted to approximately RMB121,669,000 only. These events and conditions, along with other matters as set forth in note 2 to the consolidated financial statements, indicate the existence of material uncertainties which may cast significant doubt on the Group's ability to continue as a going concern. The directors of the Company have undertaken a number of measures to improve the Group's liquidity and financial position, which are set out in note 2 to the consolidated financial statements.

The consolidated financial statements have been prepared on a going concern basis, the validity of which is dependent on the successful outcomes of these measures, which are subject to significant uncertainties. The conditional share subscription and share placing have not been completed and no agreement has been reached with the bondholder to extend the maturity date of the convertible bonds as negotiations have not yet commenced as of the date of this report. In addition, the economic uncertainties created by the Pandemic and the trade disputes between the PRC and United States may negatively impact the Group's operations.

Accordingly, the Auditor were unable to obtain sufficient appropriate audit evidence to satisfy themselves about the appropriateness of the use of the going concern basis of accounting in the preparation of the consolidated financial statements. Should the Group be unable to continue as a going concern, adjustments would have to be made to write down the carrying value of the Group's assets to their recoverable amounts, to provide for any further liabilities which might arise, and to reclassify non-current assets and non-current liabilities as current assets and current liabilities respectively. The effects of these adjustments have not been reflected in the consolidated financial statements. Accordingly, the auditor of the Company made disclaimer of audit opinion for the year under review. Please refer to the section headed "The Audit Committee's View and the Plan to Address the Disclaimer of Audit Opinion" in the "Directors' Report" in this report and note 2 to the consolidated financial statements for further details.

The statement of the independent auditor of the Company about their reporting responsibilities on the consolidated financial statements is set out in the Independent Auditor's Report on pages 67 to 68.

AUDITOR REMUNERATION

Following the resignation of KPMG as the Company's external auditor on December 7, 2020, RSM Hong Kong ("**RSM**") was appointed as the new external auditor of the Company on even date to fill the casual vacancy and to hold office until the conclusion of the 2021 annual general meeting of the Company. The independence of the external auditor is monitored by the Audit Committee which is primarily responsible for making recommendations to the Board on the appointment of the external auditor as well as approving their terms of engagement and remuneration.

For the year ended December 31, 2020, the total remuneration in respect of the audit and non-audit services provided by the external auditors of the Company were as follows:

Service Category	Fees paid/ payable RMB
Audit services	2,080,000
Non-audit services	–
	2,080,000

COMPANY SECRETARY

Following the resignation of Mr. Leung Ka Lok as the company secretary of the Company on July 3, 2020, Mr. Lau Wai Leung, Alfred has been appointed as the company secretary of the Company on even date.

During the year under review, Mr. Lau Wai Leung, Alfred has taken no less than 15 hours of relevant professional training in compliance with Rule 3.29 of the Listing Rules.

SHAREHOLDERS' RIGHTS

To safeguard Shareholder interests and rights, separate resolution should be proposed for each substantially separate issue at general meetings, including the election of individual Director. All resolutions put forward at general meetings will be voted on by poll pursuant to the Listing Rules and poll results will be posted on the websites of the Company and of the Stock Exchange after each general meeting.

Convening an Extraordinary General Meeting and Putting Forward Proposals at General Meetings

Extraordinary general meetings may be convened by Directors on requisition of one or more Shareholders holding, at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company. Such requisition shall be made in writing to the Board or the Company Secretary of the Company by mail to 7/F., The Wellington, 198 Wellington Street, Central, Hong Kong, to require an extraordinary general meeting to be called by the Directors for the transaction of any business specified in such requisition. Such meeting shall be held within two months after the deposit of such requisition. If within twenty-one days of such deposit the Board fails to proceed to convene such meeting, the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

Putting Forward Enquiries to the Board

For putting forward any enquiries to the Board of the Company, Shareholders may send written enquiries to the Company. The Company will not normally deal with verbal or anonymous enquiries.

Contact Details

Shareholders may send their enquiries or requests as mentioned above to the following:

Address: 7/F., The Wellington, 198 Wellington Street, Central, Hong Kong
(For the attention of the Company Secretary)

Email: ir@risecomm.com.hk

For the avoidance of doubt, Shareholder(s) must deposit and send the original duly signed written requisition, notice or statement, or enquiry (as the case may be) to the above address and provide their full name, contact details and identification in order to give effect thereto. Shareholders' information may be disclosed as required by law.

COMMUNICATION WITH SHAREHOLDERS AND INVESTORS

The Company considers that effective communication with Shareholders is essential for enhancing investor relations and investor understanding of the Group's business performance and strategies. The Company endeavours to maintain an on-going dialogue with Shareholders and in particular, through annual general meetings and other general meetings. At the 2020 AGM held on June 15, 2020, Directors (or their delegates as appropriate) were available to meet Shareholders and answer their enquiries.

During the year under review, the Company has not made any changes to its Articles. An up to date version of the Company's Articles is also available on the website of the Company at www.risecomm.com.cn and the website of the Stock Exchange at www. hkex.com.hk.

Policies relating to Shareholders

The Company has in place a Shareholders' Communication Policy to ensure that Shareholders' views and concerns are appropriately addressed. The policy is regularly reviewed to ensure its effectiveness.

The Company has adopted a Dividend Policy on payment of dividends. Details are set out in Directors' Report.

Environmental, Social and Governance Report

ABOUT THIS REPORT

The Group is pleased to present the Environmental, Social and Governance Report (the "**Report**"). The purpose of the Report is to disclose to investors and other stakeholders the Group's strategies, policies and performance in the areas such as environmental protection, corporate management, talent training, supply chain management, social responsibility, social welfare undertakings in 2020.

REPORTING PERIOD AND SCOPE

Information contained in this Report covers the period from January 1, 2020 to December 31, 2020, which is consistent with the financial year covered by the Group's Annual Report 2020. Its main business operation areas include its headquarters in Nanshan, Shenzhen, the PRC, and its offices in Beijing, Wuxi, Hunan and Hong Kong, China.

The Report is prepared in both Chinese and English versions. Should there be any discrepancy between the Chinese and the English versions, the English version shall prevail.

BASIS OF PREPARATION

This Report is prepared in accordance with Appendix 27 of the Listing Rules — "Environmental, Social and Governance Reporting Guide" (the "**ESG Reporting Guide**") based on the principles of materiality, quantitative, balance and consistency, and has complied with the "comply or explain" provisions as set out in the Listing Rules. The data disclosed in this Report are from the Company's official documents and statistical report.

OBJECTIVE OF THE REPORT

The Group believes that the integration of environmental, social and governance ("**ESG**") considerations into the Group's business operation has become an integral part of the Group's corporate development strategy. Meanwhile, it also focuses on fostering closer connection with its stakeholders, listening to their voices, working openly with partners to overcome challenges, caring for and growing with employees, and taking on more social responsibilities, in order to seek continuous improvement.

HOW TO OBTAIN THE REPORT

The Report is part of the Group's annual report and is available on the Group's website. For more information about the Group, please visit http://www.risecomm.com.cn.

CONTACT METHOD

The Group attaches great importance to the valuable opinions of stakeholders and welcomes suggestions on the Report or on the Group's overall performance on sustainable development, please contact us by email at ir@risecomm.com.hk.

ABOUT THE GROUP

The Group, is a high and new technology enterprise ("**HNTE**") which engages in scientific research, product development and the provision of technical services. The Group's headquarter is situated in Shenzhen, the PRC, with offices in Beijing, Wuxi, Hunan and Hong Kong, the PRC. The Group's production, R&D and sales businesses are mainly carried out by its various subsidiaries, namely Risecomm WFOE, Risecomm Beijing Comm, Risecomm Wuxi and Beijing Hongten Weitong Technology Co., Ltd.. As a high technology enterprise driven by R&D, Risecomm WFOE is honoured as a National HNTE, Shenzhen HNTE and National Integrated Circuit Design Enterprise.

Based on smart manufacturing, the Group uses the power line chip design as the source, and form the strategic layout of smart grid and smart energy management applications in parallel. With its advanced R&D strength and ample industry experience, the Group provides two major businesses to the market. Firstly, through Power Line Communication ("**PLC**") technology, the Group provides: (i) Automatic Meter Reading ("**AMR**") and other business including provision of design, development and sale of PLC-products, energy saving and environmental protection products and solutions used in streetlight control, building energy management, photovoltaic power management, and providing maintenance services in connection with the development and upgrading of AMR systems by power grid companies in the PRC; and (ii) Smart Manufacturing In Automotive ("**SMIA**") business including sales of software license, production safety products, construction contracts as well as the provision of software post-contract customer support services in connection with the smart manufacturing and industrial automation system applied in the petroleum and petrochemical industries.

There are major changes in energy management and control and energy usage pattern in the PRC and even the world which presents huge social responsibility and development opportunities for energy conservation and emission reduction. The Group has stay true to its original aspiration to actively fulfill its corporate social responsibility while achieving leapfrog development and sustained innovation, takes into account the various factors of sustainable development in the formulation and management of enterprise strategies and strives for a full understanding of the social and environmental impacts of measures and decisions before their implementation.

STAKEHOLDERS ENGAGEMENT

In addition to tireless efforts taken in business operation in providing returns for shareholders and protecting investors' interests, the Group has maintained effective communication with relevant stakeholders through various channels and paid particular attention to their feedbacks, in order to get a better understanding of their expectation and areas of concerns, which allows the Group to make appropriate improvement and implementation so as to further improve sustainable development strategy and reinforce the Group's contribution to society.

Stakeholders	Engagement Channels	Expectations
Government and Regulatory Authorities	— On-site inspection and checking — Research through work conferences, work reports preparation and approval submission — Information release on HKExnews and company's website, such as annual reports, interim reports and announcements	— Compliance with laws and regulations — Making tax payment, conducting operation in accordance with laws, under government supervision and evaluation — Participating in the formulation of industry standards — Promoting economic development and employment
Shareholders and Investors	— Annual general meeting and other shareholder meetings — Information release on HKExnews and company's website, such as annual reports, interim reports and announcements — Meeting with investors and analysts	— Return on investment — Information disclosure and transparency — Protection of interests and fair treatment of shareholders
Employees	— Meetings — Trainings, seminars and briefing sessions — Cultural and sports activities — Intranet and emails	— Protection of rights and interests of employees — Comfortable working environment — Career development opportunities and self-realization — Occupational health and safety
Customers	— Websites and brochures — Emails and customer service hotlines — Feedback forms — Regular meetings — Industry exhibitions	— Safe and high-quality products — Stable cooperation — Information transparency — Integrity — Business ethics
Suppliers and Business Partners	— Regular meetings, supplier conferences, phone calls and interviews — Review and assessment	— Long-term partnership — Honest cooperation, fairness and openness — Information resources sharing — Quality of supply — Reduction of business risks
Peer and Industry Associations	— Industry conferences and meetings — Site visits and field trips	— Experience sharing — Fair competition — Cooperation
Society and the Public	— Volunteering activities — Charity and social investment	— Community participation — Social responsibilities — Provision of career opportunities

MATERIALITY ASSESSMENT

On the basis of previous year's stakeholder survey, the Group conducted several communications with various stakeholder representatives in 2020, including group discussions, telephone interviews and so on, in order to understand the stakeholders' concerns and expectations. The Group believes that the annual stakeholder communication is to help enterprises identify priorities and important work contents in areas where improvement is needed. It also expects to understand what the Group needs to improve from the results of each communication, and give a more targeted response in the Report in order to continuously improve the Group's reputation.

The following table is a summary of the Group's material ESG issues contained in this Report:

ESG Reporting Guide	**Material ESG Issues**	**Materiality to the Group**		
A. Environmental		**Low**	**Medium**	**High**
A1. Emissions	Harmful Exhaust Gas and Greenhouse Gas ("**GHG**") Emissions	✓		
	Sewage Reduction	✓		
	Hazardous and Non-hazardous Waste	✓		
A2. Use of Resources	Energy Saving			✓
	Water Saving			✓
	Environmentally Friendly Packaging Materials		✓	
A3. The Environment and Natural Resources	Assist Customers in Energy Saving and Emission Reduction			✓
	Creating a Green Office Environment			✓
	Supplier with Environmental Protection Concepts		✓	
B. Social		**Low**	**Medium**	**High**
B1. Employment	Protection of Employees Rights and Interests			✓
	Benefits and Rewards			✓
	Advocating Work-life Balance			✓
B2. Health and Safety	Safe Production			✓
	Occupational Health Training			✓
B3. Development and Training	Training Management			✓
B4. Labour Standards	Prevention of Child or Forced Labour	✓		
B5. Supply Chain Management	Supply Chain Management			✓
	Transparent Procurement		✓	
B6. Product Responsibility	Quality Control			✓
	Green Products			✓
	Intellectual Property Rights		✓	
	Privacy Protection		✓	
B7. Anti-corruption	Anti-corruption			✓
B8. Community Investment	Community Investment			✓

The Group is a fabless R&D oriented PLC technology company specialized in the design, development and sale of proprietary PLC-related SOC IC, modules, devices and solutions. The Group adopts fabless production model, under which, instead of in-house manufacturing IC chipsets, it sources IC chipsets, as its main raw materials, from IC chipsets suppliers which provide ASICs based on its proprietary design it developed. Unlike general manufacturing enterprises, the Group assembles its products with the adoption of fabless production model, which greatly reduces the negative impacts on the environment during the course of operation and production.

ENVIRONMENTAL PROTECTION

With the development of the world industrial revolution and the rapid development of economy and technology, human society has begun to enter a new era, but at the same time, our environment has suffered unprecedented damage. In the 21st century, environmental problems have become a severe challenge for the world. Therefore, the Group has always regarded environmental protection as a prerequisite for the steady development of enterprises, so it shoulders the important mission of "sustainable development" and strives to ensure the ultimate goal of legitimate and compliance operation. The Group respects and conserves nature, strictly complies with national laws, regulations and standards, takes the initiative to consider the impact of decision-making and activities on the environment as a whole, and strives to achieve a harmonious coexistence with the environment.

For the year ended December 31, 2020, the Group did not have any violation of relevant local environmental laws and regulations in relation to exhaust gas and GHG emissions, water and land discharge, and the generation of hazardous and non-hazardous wastes that have a significant impact on the Group, including but not limited to "Environmental Protection Law of the People's Republic of China" (中華人民共和國環境保護法), "Water Pollution Prevention Law of the People's Republic of China" (中華人民共和國水污染防治法), "Atmospheric Pollution Prevention and Control Law of the People's Republic of China" (中華人民共和國大氣污染防治法), "Law of the People's Republic of China on Prevention and Control of Pollution From Environmental Noise" (中華人民共和國環境噪聲污染防治法) and "Law of the People's Republic of China 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).

Emissions

The Group has obtained the ISO14001 environmental management system certification, which indicates that its operation and management of R&D, production and sales have achieved internationally recognised standards. The Group has also formulated the Waste Management Policy to establish regulations and guidance on waste disposal and manage and monitor the effectiveness of targeted measures for different kinds of waste. Moreover, it acts in accordance with the "Control Procedures for Monitoring and Measurement of Environment, Occupational Health and Safety", and regularly engages inspection bodies to conduct accurate monitoring of emissions and provide monitoring reports, so as to keep abreast of the Group's performance in environmental protection and formulate measures for improvement.

For the year ended December 31, 2020, the Group did not receive any notice or warning on pollution in respect of its production, nor had the Group been subject to any fines, penalties or other legal actions by government agencies in the PRC resulting from any non- compliance with any environmental protection laws and regulations in the PRC.

GHG emissions

The Group's production activities mainly use electricity to maintain machine operation, general lighting and indoor temperature control etc. As such, the main source of its carbon emission is GHG generated from electricity consumption. Meanwhile, its products are energy-saving and environmentally-friendly. The Group has installed its self-developed air conditioner controllers and energy-saving control switches in all office areas and plants. Such on-site application allows backstage control of the usage of lighting and air-conditioners and thus effectively saves electricity resources. The Group has promoted this series of energy-saving products to its customers and have achieved the desired energy-saving effect.

For the year ended December 31, 2020, in order to strengthen the control on operating cost, the Group took up the originally outsourced after-sales maintenance services on its own. However, due to the decrease in business of the Company and the decrease in the number of vehicles used, two vehicles were sold for the purpose of reducing consumption. Therefore, the vehicle utilization rate has dropped as compared to 2019, resulting in direct GHG emissions (Scope 1) caused by fuel consumption from vehicles decreased by approximately 1% from 102.59 tCO_2e in 2019 to 101.12 tCO_2e in 2020.

Direct GHG emissions (Scope 1) have decreased due to the decrease in vehicle usage in the Group, the total GHG emissions have decreased by approximately 9% from about 224.74 tCO_2e in 2019 to approximately 204.75 tCO_2e in 2020. This is mainly due to the decrease in indirect GHG emissions from purchased electricity of the Group from approximately 122.15 tCO_2e in 2019 to approximately 103.63 tCO_2e in 2020 by approximately 15%. The reasons for decreased indirect GHG emissions from purchased electricity of the Group were as follows:

GHG Emissions Indicator[1]	Unit	2020	2019
Direct GHG emissions (Scope 1)[2]	tCO_2e	**101.12**	102.59
Indirect GHG emissions (Scope 2)[2]	tCO_2e	**103.63**	122.15
Total GHG emissions (Scope 1 and 2)[2]	tCO_2e	**204.75**	224.74
Intensity[3]	tCO_2e/turnover (RMB'000)	**0.0010**	0.0010

Notes:

1. GHG emission data are presented in terms of carbon dioxide equivalent, with reference to, including but not limited to, the reporting requirements of "The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standards" issued by the World Resources Institute and the World Business Council for Sustainable Development, "How to prepare an ESG Report — Appendix 2: Reporting Guidance on Environmental KPIs" issued by the Stock Exchange, latest released emission factors of China's regional power grid basis, the emission factor released by the Hong Kong Electric Investments in 2019 and "Global Warming Potential Values "from the IPCC Fifth Assessment Report, 2014.

2. Scope 1: Direct GHG emissions from vehicles owned by the Group.
   Scope 2: Indirect GHG emissions from the generation of purchased electricity consumed by the Group.

3. As of December 31, 2020, the Group's turnover was approximately RMB212,734 thousand.

Treatment of exhaust gases

The Group's main air pollutant are vehicle exhaust gases emission and welding fumes produced in welding work stations.

Immaterial amount of fumes is produced during welding and will be discharged into high-altitude air after being collected and filtered according to the requirements from the environmental protection authority in the PRC. Discharging pipes are installed above each welding work station of production lines in the assembly hub in Hunan. Welding gas will be sucked into the pipes and discharged into high-altitude air after being filtered and purified. The Group has established a routine maintenance system. Discharging pipes in the factories are regularly cleaned.

In order to continue to strengthen the control of operating costs, the Group has intensified its efforts to provide its own after-sales maintenance services. As a result, the vehicle utilization rate has dropped compared to 2019. Also, due to the decrease in business of the Group and the decrease in the number of vehicles used, two vehicles were sold for the purpose of reducing consumption. For the year ended December 31, 2020, the performance of vehicle exhaust gases emissions was as follow:

Types of Emission	Unit	2020	2019
Sulphur oxides	Tonnes	**0.0006**	0.0006
Nitrogen oxides	Tonnes	**0.0982**	0.1167
Particulate Matters	Tonnes	**0.0079**	0.0083

Sewage reduction

The Group does not generate industrial sewage as water is not required in its production process. Sewage generated by the Group is mainly domestic sewage, which will be discharged to municipal sewage system after primary treatment in regional septic tank, and then undergone advanced treatment in regional sewage treatment plant. The Group has also renovated its water-saving tanks installed in washrooms and carried out other measures to reduce domestic sewage discharge. For the year ended December 31, 2020, the performance of sewage reduction was as follows:

Types of Sewage	Unit	2020	2019
Domestic sewage	Cubic meters	**1,070.49**	2,343.70
Intensity	Cubic meters/turnover (RMB'000)	**0.005**	0.011

The overall domestic sewage reduction of the Group decreased by approximately 54% from approximately 2,343.70 cubic meters in 2019 to approximately 1,070.49 cubic meters in 2020. The main reasons are:

1. During the year ended December 31, 2020, the Group further controlled the entry and exit of Shenzhen Nanshan production units in first half of the year and the Group reduced the leased area in the second half of 2020, therefore the production volume of Shenzhen Nanshan decreased significantly; and

2. The Group has adopted a streamlined structure in the context of a slowdown in the overall growth rate of the industry, thereby improving internal operation efficiency, reducing human resources and saving water.

Hazardous and non-hazardous wastes

Production Department

The Group strictly complies with the national regulations governing the management of electronic waste equipment, promotes the recycling and reuse of waste products, and reduces the rate of waste disposal. The solid wastes are mainly lead-free tin slag, metal and plastic waste, waste packaging materials and other recyclable wastes produced during the production process, as well as office waste generated during operation process, fluorescent lights and disposed batteries, a small amount of defective devices and semi-finished scrapped devices. The Group's general waste is contracted to professional recyclers for centralized recycling. Hazardous wastes are handed over to departments qualified for hazardous wastes disposal and registered with the Environmental Protection Bureau. Due to the Group's business nature, the Group does not have any hazardous waste electronics and generate any significant hazardous waste discharge in the daily operations.

The Group has a strict classification system for different types of wastes. Wastes are stored, handled and recorded separately. Waste bins are set up according to the type of wastes and are placed in appropriate areas. Wastes generated by each department are classified and threw into designated waste bins according to the "Waste Management Requirements", and engaged qualified recyclers for disposal. The Group has also put much efforts on recycling and reusing general or valuable components and parts (such as universal chip on printed circuit board) to reduce the impacts on nature.

Office Areas

Recyclable wastes are recycled, while hazardous wastes (e.g. end-of-life fluorescent lights and batteries) are collected in specific site, which will then be handed over to outsourced parties with appropriate qualification for disposal after reaching a certain amount.

The Group promotes the use of various electronic mobile office software to reduce paper usage. Electronic mobile system such as the R&D projects "Product Life Cycle Management" and "Enterprise Resource Planning" were used for approval procedure, which further expanded the paperless network and the coverage of mobile office. Paperless systems were established for internal communications such as employee learning and development. As a result, the amount of paper used in the office has been reduced and the results are satisfactory. In addition, in 2020, the Group further increased the company's process basics to declare and approve on the OA system. Most of the internal approval processes have become paperless, which has significantly reduced office paper use by approximately 39%. For the year ended December 31, 2020, the Group's non-hazardous waste discharge performance is summarized as follows:

Types of Wastes	Unit	2020	2019
Total amount of non-hazardous wastes	Tonnes	**0.59**	0.96
Intensity	Tonnes/turnover (RMB'000)	**0.000003**	0.000004

Use of Resources

Energy saving

The Group acknowledges that every enterprise should work towards the trend of low-carbon operation. The Group has been committed to environmental protection and invested substantial capital and human resources in environmental protection, striving to provide smart energy saving and emission reduction management solutions for the global market with PLC technology, and application of which includes streetlight control, building energy management and photovoltaic power management. Meanwhile, it has always been devoting our efforts to efficient use of energy in order to strike a balance between corporate development and environmental protection.

Since 2018, the Group has provided the original outsourced after-sale maintenance services by the Group. Therefore, the Group's vehicle utilisation rate has continued to increase. However, there was a decrease of service demand due to the outbreak of COVID-19 pandemic, the utilisation rate of vehicle has dropped. On the other hand, employees working in Beijing office and Beishan office were subject to work from home arrangement due to the outbreak of COVID-19 pandemic, there was no power consumption from the abovementioned premises as a result. Other power consumption is the power required for general operations, coupled with the reasons described in the section of GHG emissions and the energy-saving measures implemented by the Group, resulting in a reduction in the amount of purchased electricity. Based on the above, the overall energy consumption decreased by approximately 5% from approximately 571,532.45 kWh in 2019 to approximately 543,076.85 kWh in 2020. The Group's energy consumption for the year ended December 31, 2020 is as follows:

Types of Energy	Unit	2020	2019
Petrol[4]	kWh	**368,461.85**	373,832.81
Purchased electricity	kWh	**174,615.00**	197,699.64
Total	kWh	**543,076.85**	571,532.45
Intensity	kWh/turnover (RMB'000)	**2.55**	2.61

Note:

4. Actual petrol consumption in 2020 and 2019 is approximately 38,019.63 liters and approximately 38,573.80 liters.

Energy efficiency

The Group adopts its self-developed building energy management system to centralize the management of its internal air conditioners in a planned manner and remotely control the temperature and switching time of the working environment, which effectively reduces wear and tear and extend the service life of air conditioners. In 2020, these enhancement projects have allowed it to efficiently reduce energy usage of air conditioning system as well as the entire floors and cut down carbon dioxide emissions of the Group.

Water saving

As always, internal energy-saving education to its employees is continuously carried out to develop the awareness of conservation. For example, once the water pipeline leakage was discovered, timely reporting and repairing would be carried out. Visual energy-saving slogans for water-saving, energy-saving and paper-saving are posted in the area of office, pantry and toilet to raise environmental awareness of employees. Compared with the water consumption of the previous year, its efforts on saving water resources have been proven to be effective.

The Group has been strived to promote environmental protection and raise employees' awareness of environmental protection, and reasons are mentioned in the "Sewage reduction" section, and overall water consumption has been reduced by approximately 54% from approximately 2,343.70 cubic meters in 2019 to approximately 1,070.49 cubic meters in 2020.

Water Consumption	Unit	2020	2019
Water consumption	Cubic meters	**1,070.49**	2,343.70
Intensity	Cubic meters/turnover (RMB'000)	**0.005**	0.011

Environmentally friendly packaging materials

The Group has reduced the use of materials and prioritized recyclable and reusable materials without impairing the packaging quality. Also, the Group has increased the reusage rate of packaging materials, which greatly reduced the actual usage of packaging materials. For example, the Product Assembly Hub in Yantian, Shenzhen adopted reusable plastic materials in production cycle and temporary storage packaging, which significantly reduced the wastage on packaging cartons. Furthermore, in terms of product design, plastics have been replaced by recyclable aluminium alloy for certain products in order to reduce the damages to the environment.

In 2020, the demand for PLC products of the narrow-band AMR system provided by the Group fell, and orders declined; and the Group's broadband AMR products unexpectedly further delay in launch, so the packing material of production unit in Hunan in PE plastic bag, Paper carton and Pearl cotton has been decreased significantly. Packaging materials used by the Group for the year ended December 31, 2020 are as follows:

Types of Packaging Material	Unit	2020	2019
PE plastic bag	Tonnes	**0.003**	0.006
Paper carton	Tonnes	**–**	1.76
Pearl cotton	Tonnes	**0.04**	0.06

The Environment and Natural Resources

Assisting customers in energy conservation and emission reduction

The Group continues to save energy, improve energy efficiency and reduce the pressure of energy use on the environment. Through its self-developed PLC technology and in-depth integration with the new generation of information technology such as the Internet of Things, big data and cloud computing, the Group strives to provide users with integrated energy management solutions and equipment and develops the Internet of Things for energy, with a view to facilitate energy conservation and emission reduction, while providing a safe, comfortable and efficient working environment. Many of its customers have started to adopt the Risecomm Building Energy Management Equipment extensively in workshops, dormitories, offices, and indoor work and study space in schools. Compared with that before the installation of the system, the energy saving effect is significant.

Creating a green workplace

In 2020, the Group, according to its pre-determined schedule, implemented the concept of green environmental protection in the operation of office areas, focusing on improving the office environment, which aims at reducing the emissions of its own office operations and improving the efficiency of the use of resources and energy. In terms of emission reduction awareness, as in the previous year, the Group has continued to organise "Walking for health" activities to encourage employees to embrace low carbon footprint travel. There is no significant waste of natural resources in the Group's business. It also introduces energy-saving equipment in its office, such as multi-functional photocopiers (with printing, scanning and fax functions) that meet efficiency standards to promote green office and reduce energy consumption.

Supplier with environmental protection concepts

In 2020, the Group uses established principles to select suppliers and gives priority to printing materials with green concepts. Using recycling paper to print companies' leaflets, albums, greeting cards, etc., and also work with printers and advertising companies with environmental protection concepts. In order to implement the environmental awareness and social responsibility requirements to all suppliers as a whole in terms of supply of production materials, the Group has formulated the relevant system, "Procurement Management Process", and also gives priority to suppliers who comply with national environmental standards and environmentally conscious suppliers when selecting suppliers.

SOCIAL RESPONSIBILITY

The Group takes initiative to fulfil its social responsibility in corporate development, insists on sustainable development, humanistic care and environmental protection and applied the concept of social responsibility consistently throughout the entire supply chain, and has created an efficient supply chain platform for mutual benefit and better carried forward corporate social responsibility on this basis. For the year ended December 31, 2020, the Group has established, continuously operated and updated, a strong social responsibility management system through the following initiatives.

Employment and Labour Practices

Employment

The Group puts the core values of "people-oriented" and "investing in people" into practice and emphasizes to have "mutual commitment" with its employees, incorporating the pursuit of individual employee into long term corporate development. Through sharing the growth with its employees, the Group develops its business together with the staff.

Analysis of human resources

As at December 31, 2020, the Group and its subsidiaries had total of 177 employees, 122 of whom were male and 55 were female, representing 69% and 31% of the total number of employees respectively. Among all employees, 9 employees held doctorate and postgraduate degree, 85 employees held university degree and 83 employees were below degree level, representing 5%, 48% and 47% of the total number of employees respectively.

Breakdowns of the employees by gender, age group and employee category as at December 31, 2020 are set out below:

	2020		2019	
Type of Employees	**Number of employees**	**Approximate percentage of the total number**	Number of employees	Approximate percentage of the total number
By gender				
Male	**122**	**69**	151	68
Female	**55**	**31**	70	32
Total	**177**	**100**	221	100
By age group				
Aged 30 or below	**38**	**21**	67	30
Aged 31-40	**76**	**43**	90	41
Aged 41-50	**40**	**23**	40	18
Aged 51 or above	**23**	**13**	24	11
Total	**177**	**100**	221	100
By employee category				
General	**105**	**59**	126	57
Middle Management	**55**	**31**	78	35
Senior Management	**17**	**10**	17	8
Total	**177**	**100**	221	100

Protection of employees' right

Employees are the foundation of corporate development. The Group has been actively protecting the basic rights of employees. In terms of employment, the Company has strictly complied with "Labour Law of the People's Republic of China" (中華人民共和國勞動法), "Law of the People's Republic of China on the Protection of Rights and Interests of Women" (中華人民共和國婦女權益保護法) and other relevant requirements of the places where its overseas companies operate. The Group has also developed a human resources management system, with the Human Resources Control Procedures being established in a scientific and reasonable manner and applied in the areas of recruitment, promotion, remuneration, benefit, assessment, training, employee relations and communication etc. of the Company, so as to ensure the fairness of employment conditions, without discrimination in age, gender, place of origin, ethnicity, customs, religion, social hierarchy, physical disability, political affiliation and so on. Child labour and forced labour are explicitly forbidden.

Benefits and remuneration

The Group provides competitive remuneration and benefit for all employees and contributes to various kinds of social insurance in accordance with local policies, such as pension, medical care, work-related injuries, maternity, unemployment insurance and housing provident funds. In order to attract, retain and motivate employees, the Company conducts comprehensive assessment of employees according to annual performance appraisal. Key performance indicators of employees will be recorded through the system, and the management department will evaluate employees' performance based on the completion time and quality of work as well as their contribution to the Company. Performance assessment results are divided into 5 levels, and are in line with annual performance pay, bonuses, and promotions, thereby generating employees' enthusiasm for working.

Encouraging work-life balance

As always, the Group attaches great importance to occupational health of each employee and strictly abides by national policies on holidays and working hours, encourages employees to balance work and life, and ensures that employees enjoy benefits such as sick leave, marriage leave, maternity leave and annual leave. It advocates entrepreneurial spirit in the Company, encourages the team to share their successful experience and happiness in office, and has established an "internal trainer" incentive scheme to encourage technological innovation and experience sharing. In addition, the Group has organized various types of entertainment and leisure activities for employees and established recreation and sports groups such as basketball club, badminton club, table tennis club and reading club, so as to enrich employees' leisure time. Team activities and social activities are regularly organised as well, allowing employees to enjoy their lives in a stressful working atmosphere.

Caring for employees' families

The Group cares about its employees not only in daily operation, but also the family of each employee. The Group presents gifts to employees on their birthday, wedding, death of relatives as well as traditional festivals. The "Family Day Trip" and "Family Visit Day" have been the Group's events for showing care to its employees.

For the year ended December 31, 2020, the Group actively complied with requirements in "Labour Law of the People's Republic of China" (中華人民共和國勞動法), "Labour Contract Law of the People's Republic of China" (中華人民共和國勞動合同法) and other laws and regulations, and no major violation matters against human resources laws and regulations have been found.

Female employees' rights

With respect to the protection of female employees' rights, the Group also complies with the relevant state laws and regulations to provide its female employees in all branch offices around the country with a maternity leave of at least 98 days and maternity allowances. In the meantime, the Group also provides pregnant or breastfeeding female employees with suitable work positions, breaks and pregnancy-friendly facilities. Pregnant employees are entitled to paid maternity leave and lactating mothers are allowed to have 1 hour breast feeding leave per day. These initiatives allow them to continue to develop their career and professional skills at any time regardless of their physical conditions or family status.

Health and Safety

The Group attaches great importance to the safety and health of its employees in the course of operation, and strives to create a safe and comfortable working atmosphere. The Group has purchased commercial insurance for employees who travel frequently and arranged body check for all employees to ensure their physical and mental health.

The Group has built a clear organizational structure of safety production management and established a safety management committee. The Group fully applied the "OHSAS18001 Occupational Health and Safety Management System" and "ISO14001 Environmental Management System". Based on the actual condition of the Company, it has established 29 procedures and management documents in various categories, covering emergency management, fire control management, dangerous goods management, construction management, safety training and safety production inspection, so as to implement safety management in all aspects. At the same time, the Group has dedicated personnel to manage these systems and files, and conduct regular assessment, maintenance, updating and upgrading.

Safety seminars and drills

Due to the COVID-19 pandemic, no training and drills were held by the Group in 2020 to avoid over-crowding.

For the year ended December 31, 2020, the Group strictly enforced relevant laws and regulations such as "Labour Law of the People's Republic of China" (中華人民共和國勞動法), "Production Safety Law of the People's Republic of China" (中華人民共和國安全生產法), "Law of the People's Republic of China on the Prevention and Treatment of Occupational Diseases" (中華人民共和國職業病防治法) and "Fire Protection Law of the People's Republic of China" (中華人民共和國消防法). No violation against laws and regulations related to health and safety in the workplace have been found, and no cases of death due to work relationship and serious injuries at work occurred.

Development and Training

The Group has established the diversified career development paths to help staff development, which is expressly stated in the Human Resources Procedures, Training Management Measures, and Management Measures for Job Qualification and Performance Evaluation, and has implemented a continuous improvement model to promote training:

Analysing training needs → Designing training methods and courses → Training → Results evaluation and review

The Group's training methods include tutorials, meetings and discussions, technical exchanges and industry forums, information learning, etc. Employees can set goals and upgrade themselves according to their actual situation and get fair promotion.

In order to develop employees' potential and abilities to fulfil their duties and handle challenges in work, the Group has provided training for employees at all levels to help them to achieve self-improvement. The Group firmly believes that, every employee is its most precious asset. In terms of training contents, the Group has designed professional, general and project-based courses. Among these, professional courses are provided to employees working in R&D centre, sales centre, production centre, quality control, finance and various departments and positions. General courses and project-based courses cover a wider range of topics, including fire safety, occupational health and professional ethics. The Group designs different training programs for different levels of employees, for example, according to management level, it will design training targeted from the junior to the senior level.

The Group provides room for each employee to grow and develop, and sets up a proper training system to ensure that every employee in the Group will remain competitive and attractive in the highly competitive industry development.

Labour Standards

The Group employs staff in accordance with "Labour Law of the People's Republic of China" (中華人民共和國勞動法), "Labour Contract Law of the People's Republic of China" (中華人民共和國勞動合同法), "Special Rules on the Labour Protection of Female Employees" (女職工勞動保護特別規定) and "Regulations of the Shenzhen Special Economic Zone on the Promotion of the Harmonious Labour Relationship" (深圳經濟特區和諧勞動關係促進條例), actively complies with relevant labour laws and regulations, safeguards the labour interests of employees, creates a safe and stable working environment, ensures workplace hygiene and safety and properly takes care of employees' physical and mental health.

The Group strictly prohibits the employment of any child or forced labour in its business. The Group reviews its employment practices from time to time and inspects the employment status of suppliers and business partners to prevent potential irregularities. In addition, the Group requires employees to fill in the entry form and provide personal data (including resume, academic certificates, career background check, etc.) in an honest manner upon joining. The Human Resources Department and the Project Office will review before hiring to ensure that the recruitment complies with regulations and laws. For the year ended December 31, 2020, the Group did not find any significant violations against laws and regulations relating to the prevention of child and forced labour.

OPERATING PRACTICES

Supply Chain Management

To better perform corporate social responsibilities, the Company has established a supply chain management system which is managed by the supply chain management team of the Group in a centralized manner. Suppliers are selected and evaluated on the basis of fairness, impartiality, objectivity and information transparency. All existing and potential suppliers will be informed of the requirements of the Group on the social responsibility of suppliers, so as to promote suppliers' greater commitment to social responsibilities and environmental protection awareness. The Company has developed the Supplier Management Procedures which provides detailed standards and requirements in terms of corporate social responsibility, quality management, environment management, occupational safety, intellectual property, materials management, quality control and other aspects. All suppliers are required to carry out their social responsibilities.

The Group has entered into quality assurance agreements with most of its suppliers, which set out the specific quality standards that suppliers must comply with and the passing rates required for quality inspection. The Group conducts internal checks on the raw materials received from its suppliers and delivers them for production afterwards. In particular, all the raw materials needed for outsourced production are purchased by the Group and passed its internal quality inspection before delivered to the outsourced manufacturers to ensure the quality of the raw materials of the products.

The following table shows the distribution of the Group's suppliers for the year ended December 31, 2020:

Distribution Area	Number of suppliers
The PRC (including Hong Kong)	243
Overseas	0

Supplier management process:

Background investigation → Preliminary assessment → On-site examination → Sample approval → Comprehensive evaluation → Submission of approval → Monitoring and continuous improvement

Selection and assessment

The Group emphasizes social responsibility during the resources collection, evaluation, selection and development process of suppliers under the premise of guaranteeing the quality and cost-performance, and prefers high-quality potential suppliers which comply with national requirements on environmental protection and social responsibility. The process is designed to guarantee equal opportunities for suppliers as well as fair and impartial evaluation and selection.

Supplier assessment is conducted by a team. A list specifying the scope of assessment is provided by category. In order to be qualified, a supplier must meet the requirements of the Company in respect of product quality, safety, environmental protection, management responsibility, social obligations and risk management. Its assessment team will assess and ascertain the qualification of supplier in an objective and fair manner and in strict compliance with the requirements of the process.

Based on the principle of "quality first, mutual benefits, joint development", the Group has built a solid foundation for win- win cooperation with its suppliers. The Group has the right to request for continuous quality improvement and the suppliers has the obligation to continuously improve the quality of their products.

Monitoring and improvement

The "Corporate Resources Planning", "Supplier Management Procedures" and Supplier Database System allow the Group to conduct supplier management categorised by different supplies or different classifications of service qualification. The database system records suppliers' comprehensive information on business registration, on-time delivery, quality level, price management and performance evaluation score, etc. The Group has adopted supplier resource sharing strategies to conduct joint tendering and centralized procurement for projects at different places, which enhances the quality of products and reduces the cost of procurement in a dramatic way.

The Group requires suppliers to establish comprehensive quality and environment management system with reference to ISO9001, ISO14001 and OHSAS18001. Its supplier quality assurance team will conduct regular review and evaluation on the suppliers' level of attainment in respect of their implementation and management. Suppliers failed to meet its requirements will be required to make improvement and receive counselling for the establishment of comprehensive management system.

Transparent procurement

In respect of supply chain management and procurement, the Group has adhered to the philosophy of "transparent procurement", and has also been committed to its environment management and social responsibilities, so as to ensure that the corporate social responsibilities are fulfilled throughout the process of supply chain management and procurement and such process is "fair, open and equitable". Management personnel of suppliers are required to exercise strict self-discipline and supervise their subordinates to create an ethical business environment within the Company with self-awareness to protect and ensure that their team members who work with the Group are aware of and abide by the requirements of "transparent procurement". Any form of bribery shall be prohibited, and any improper business practices or unethical behaviour shall be disclosed to the Group proactively.

Product Responsibility

The Group adheres to the principle that "Quality is the life of Risecomm and the dignity of every employee". In order to constantly provide customers with satisfactory products and services, the Group has been devoting its efforts to establish and improve its quality management system. The Group places importance on the reliability of product design, failure analysis and comprehensive reliability verification. All products would undergo strict system testing before they are finalized. R&D, pilot production, mass production, pre-sale technical support and after-sales service are all carried out by specialized quality control personnel.

For the year ended December 31, 2020, the Group did not find any major violation against the health and safety, advertising, labelling and privacy of the products and services provided, and strictly complied with relevant laws and regulations, including but not limited to, "Product Quality Law of the People's Republic of China" (中華人民共和國產品質量法), "Law of the People's Republic of China on the Protection of Consumer Rights and Interests" (中華人民共和國消費者權益保護法), "Advertising Law of the People's Republic of China" (中華人民共和國廣告法), "Copyright Law of the People's Republic of China" (中華人民共和國著作權法), "Patent Law of the People's Republic of China" (中華人民共和國專利法) and "Trademark Law of the People's Republic of China" (中華人民共和國商標法), etc.

The Group has obtained the ISO9001 quality management system certification. The Group has also established a specialized quality control team responsible for carrying out quality control procedures based on the ISO9001 standard. The Group carries out quality control measures at various stages of the procurement and product manufacturing process. All suppliers must undergo different inspections before the Group approves their engagement, including on-site examinations and assessments, as well as sample tests, to ensure that the raw materials purchased by the Group and services outsourced by the Group would meet its quality standards and customer's product requirements.

The Group also regularly sends quality control personnel to outsourced manufacturers to perform standard quality control procedures and closely monitor outsourced production processes. For IC chipsets, upon receipt of IC chipsets from chipset suppliers, it will conduct a series of internal inspections. For example, its warehouse and procurement personnel will first check the quantity and model of the IC chipsets, and its quality control team will check the vacuum packaging, function and quality of the IC chipsets as well as related quality control reports provided by suppliers. Any inferior products identified during the acceptance process will be returned to the supplier. For the year ended December 31, 2020, the Group received 2 products and services related complaints. Remediation actions such as replacing the damaged products and exchanging new products were carried out.

Its IC chipset inventory will be managed in accordance with the "first-in-first-out" policy. The Group will conduct quality reviews on IC chipsets aged over six months to ensure that the chipsets are qualified for production use. The Group also operates internal testing and quality control systems to ensure consistent quality of finished products and application of proprietary technologies. These procedures mainly include functional and product safety tests, as well as packaging inspections. Due to its business nature, the Group considers information relating to advertising and labelling is immaterial.

Green product

Provision of energy-efficient green products and solutions to reduce carbon emission is the main objective of product development of the Group. Its smart energy control products have been in compliance with the energy-efficient requirements throughout the development, production and delivery process. Through advanced technology, optimised design of standby function of products and streamlined product packaging, the Group has been improving the management of its energy- saving control system, enhancing management efficiency, and facilitating its operation.

Intellectual property rights

In order to protect the intellectual properties of the Group, the Group has formulated the Management Measures for Intellectual Property to regulate the requirements of protection and supervision in accordance with the "Patent Law of the People's Republic of China" (中華人民共和國專利法), the "Detailed Rules for the Implementation of the Patent Law of the People's Republic of China" (中華人民共和國專利法實施細則) and the "Provisions of Patent of Guangdong Province" (廣東省專利條例), etc. Also, it has established an intellectual property rights management system in accordance with the national requirements under GB/T 29490-2013 "Enterprise Intellectual Property Management Practice" (企業智慧財產權管理規範), so as to protect the intellectual property rights of the Group.

As of December 31, 2020, the Group held an important intellectual property portfolio comprising 20 patents, 118 computer software copyrights and 8 registered IC layout designs, and 8 patents pending registration in the relevant jurisdiction, signifying the Group's achievements in R&D in PLC technology and the MSI of the petroleum and petrochemical industries.

Privacy protection

Furthermore, the Group places great importance to the privacy protection of customers, employees and suppliers, and is committed to maintaining and safeguarding its relevant information, including brand-related intellectual property and confidential information or any form of confidential information of potential property interests or economic value. At the same time, cooperating suppliers are required to sign relating provisions to prevent leakage of confidential information and prevent the relevant information from unauthorized use through appropriate technical means and processes. Any leakage of supplier or staff information will be strictly investigated and processed in accordance with the effective provisions signed or internal regulations.

Anti-corruption

In respect of staff management, the management and all employees in the Group are required to strictly follow the principle of "being a man of integrity and working with integrity" and comply with the "Code of Conduct for Employees", the "Management Rules of Motivation and Discipline", the "Management Rules of Anti-corruption and Reporting and Complaint" and related national laws and regulations. In the event that an employee's interests are found to be infringed as a result of internal frauds, unethical business practice, violation against laws and regulations or professional misconduct, complaints and reports may be made directly to the supervisor or relevant department.

In order to further prevent fraudulent practices, enhance the governance and internal control and protect the legitimate interests of the Group and shareholders, the Group has also created an email address specialized for reporting, through which employees may directly report illegal or irregularities in work or operation to the top management. Investigation will be taken to the extent permitted by laws.

Subsidiaries are required to strictly comply with the "Hong Kong Financial Reporting Standards" and strengthen random financial audit to prevent financial risks. Also, the Group has made its anti-corruption management requirements clear, expanded internal and external reporting channels and established a smooth and efficient management system to support employees to report directly on any suspected violation against integrity regulations. The identity of whistle-blower will be protected.

Supplier management

The Group requires its suppliers to include anti-bribery provisions in contracts so as to guarantee that their personnel (company employees, agents, negotiators or other designated personnel) will not make any direct or indirect bribery or other improper payments to the Group's employees and not engage in activities which are in contravention with business ethics and the "Anti–unfair Competition Law" (反不正當競爭法) and other laws and regulations. If a supplier is found to have violated any laws or commitments in the contract, the Group has the right to terminate any transaction with the suppliers involved.

The Group has authorized the human resources department to set up reporting telephone hotline and email address for external parties (including suppliers and customers) and to monitor violation against laws or regulations which involves individual unlawful profits and damage to the Group's reputable and economic benefits.

For the year ended December 31, 2020, the Group strictly complied with the relevant laws and regulations to prevent bribery, extortion, fraud and money laundering, including but not limited to, "Company Law of the People's Republic of China (中華人民共和國公司法)", "The Bidding Law of the People's Republic of China (中華人民共和國招標投標法)", "Criminal Law of the People's Republic of China (中華人民共和國刑法)", "Anti-Unfair Competition Law of the People's Republic of China (中華人民共和國反不正當競爭法)" and "Interim Provisions on Banning Commercial Bribery (關於禁止商業賄賂行為的暫行規定)". The Group was not aware of any case related to corruption and bribery. There are no concluded legal cases regarding corrupt practices brought against the Group or its employees.

Community Investment

Since its establishment, the Group has been actively devoted to social-charitable services. The Group bears in mind of its social responsibility in actively fostering good relationship with the communities where it operates and participates in the promotion of exchanges among enterprise in high-tech parks. However, due to the COVID-19 pandemic and to avoid over-crowding in the premise, the Group did not participate in charitable activities in 2020.

Independent Auditor's Report

To the SHAREHOLDERS of RISECOMM GROUP HOLDINGS LIMITED

(Incorporated in the Cayman Islands with limited liability)

DISCLAIMER OF OPINION

We were engaged to audit the consolidated financial statements of Risecomm Group Holdings Limited (the "**Company**") and its subsidiaries (the "**Group**") set out on pages 69 to 147, 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, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

We do not express an opinion on the consolidated financial statements of the Group. Because of the significance of the matter described in the Basis for Disclaimer of Opinion section of our report, we have not been able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these consolidated financial statements. In all other respects, in our opinion the consolidated financial statements have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR DISCLAIMER OF OPINION

Material Uncertainties Related to Going Concern

We draw attention to note 2 in the consolidated financial statements, which indicates that the Group incurred a net loss of approximately RMB126,034,000 during the year ended 31 December 2020 and, as of that date, the Group's current liabilities exceeded its current assets by approximately RMB75,537,000. Its current liabilities, include acquisition consideration payables, convertible bonds and lease liabilities amounting to approximately RMB120,520,000, approximately RMB119,076,000 and approximately RMB4,488,000 respectively while its cash and cash equivalents amounted to approximately RMB121,669,000 only. These events and conditions, along with other matters as set forth in note 2 to the consolidated financial statements, indicate the existence of material uncertainties which may cast significant doubt on the Group's ability to continue as a going concern.

The directors of the Company have undertaken a number of measures to improve the Group's liquidity and financial position, which are set out in note 2 to the consolidated financial statements.

The consolidated financial statements have been prepared on a going concern basis, the validity of which is dependent on the successful outcomes of these measures, which are subject to significant uncertainties. The conditional share subscription and share placing have not been completed and no agreement has been reached with the bondholder to extend the maturity date of the convertible bonds as negotiations have not yet commenced as of the date of this report. In addition, the economic uncertainties created by the COVID-19 pandemic and the trade disputes between the PRC and United States may negatively impact the Group's operations.

Accordingly, we were unable to obtain sufficient appropriate audit evidence to satisfy ourselves about the appropriateness of the use of the going concern basis of accounting in the preparation of the consolidated financial statements. Should the Group be unable to continue as a going concern, adjustments would have to be made to write down the carrying value of the Group's assets to their recoverable amounts, to provide for any further liabilities which might arise, and to reclassify non-current assets and non-current liabilities as current assets and current liabilities respectively. The effects of these adjustments have not been reflected in the consolidated financial statements.

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 Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants (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 Audit Committee assists the Directors in discharging their responsibilities for overseeing the Group's financial reporting process.

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

Our responsibility is to conduct an audit of the Group's consolidated financial statements in accordance with Hong Kong Standards on Auditing issued by the HKICPA and to issue an auditor's report. This report is made solely to you, as a body, and for no other purpose. We do not assume responsibility towards or accept liabilities to any other person for the contents of this report. However, because of the matters described in the Basis for Disclaimer of Opinion section of our report, we were not able to obtain sufficient appropriate audit evidence to provide a basis for an audit opinion on these consolidated financial statements.

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants (the "Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

The engagement partner on the audit resulting in this independent auditor's report is Liu Eugene.

RSM Hong Kong
Certified Public Accountants
Hong Kong
29 March 2021

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2020

	Note	2020 RMB'000	2019 RMB'000
Revenue	8	**212,734**	218,575
Cost of sales		**(179,200)**	(153,800)
Gross profit		**33,534**	64,775
Other income, gains/(losses)	9	**8,052**	11,364
Allowance for impairment losses on financial assets, net		**(27,940)**	(21,442)
Selling and marketing expenses		**(19,131)**	(31,147)
General and administrative expenses		**(77,184)**	(73,703)
Research and development expenses		**(21,712)**	(31,639)
Loss from operations		**(104,381)**	(81,792)
Impairment losses of goodwill		**(23,256)**	(171,173)
Finance costs	11	**(9,928)**	(3,245)
Share of results of an associate		**25**	(50)
Fair value (losses)/gains on financial instruments at fair value	7(c)	**(15,442)**	5,635
Loss before tax		**(152,982)**	(250,625)
Income tax credit	12	**26,948**	13,812
Loss for the year attributable to owners of the Company		**(126,034)**	(236,813)
Loss per share attributable to owners of the Company			
Basic and diluted (RMB cents)	18	**(12.77)**	(27.56)
Loss for the year		**(126,034)**	(236,813)
Other comprehensive income/(loss)			
Items that may be reclassified subsequently to profit or loss:			
Exchange differences on translation of financial statements of entities outside mainland China		**12,926**	(3,680)
Total comprehensive loss for the year		**(113,108)**	(240,493)
Attributable to:			
Owners of the Company		**(113,108)**	(240,493)

Consolidated Statement of Financial Position

At 31 December 2020

	Note	2020 RMB'000	2019 RMB'000
ASSETS			
Non-current assets			
Property, plant and equipment	19	**24,330**	28,539
Right-of-use assets	20	**14,218**	18,003
Goodwill	21	**20,718**	43,974
Intangible assets	22	**141,540**	180,452
Interest in an associate	24	**42**	396
Deferred tax assets	36	**35,915**	20,692
Total non-current assets		**236,763**	292,056
Current assets			
Inventories	25	**22,501**	25,697
Contract costs	26	**5,831**	29,120
Trade and other receivables	27	**131,585**	126,216
Restricted bank deposits	28	**–**	326
Bank and cash balances	28	**121,669**	145,110
Total current assets		**281,586**	326,469
TOTAL ASSETS		**518,349**	618,525
EQUITY AND LIABILITIES			
Equity attributable to owners of the Company			
Share capital	29	**86**	86
Reserves	31	**114,255**	225,059
Total equity		**114,341**	225,145

Consolidated Statement of Financial Position *(continued)*

At 31 December 2020

	Note	2020 RMB'000	2019 RMB'000
LIABILITIES			
Non-current liabilities			
Acquisition consideration payables	32	**–**	118,814
Convertible bonds	33	**–**	116,196
Deferred income	34	**2,985**	4,834
Lease liabilities	35	**10,238**	10,360
Deferred tax liabilities	36	**33,662**	41,369
Total non-current liabilities		**46,885**	291,573
Current liabilities			
Trade and other payables	37	**79,445**	78,312
Contract liabilities	38	**31,133**	9,656
Lease liabilities	35	**4,488**	7,797
Acquisition consideration payables	32	**120,520**	–
Convertible bonds	33	**119,076**	–
Income tax payables		**2,461**	6,042
Total current liabilities		**357,123**	101,807
TOTAL EQUITY AND LIABILITIES		**518,349**	618,525

Approved by the Board of Directors on 29 March 2021 and are signed on its behalf by:

Yue Jingxing
Director

Lau Wai Leung, Alfred
Director

Consolidated Statement of Changes in Equity

For the year ended 31 December 2020

	Attributable to owners of the Company						
	Share capital RMB'000 (note 29)	Share premium RMB'000 (note 31(b)(i))	Capital reserve RMB'000 (note 31(b)(ii))	Statutory reserve RMB'000 (note 31(b)(iii))	Exchange reserve RMB'000 (note 31(b)(iv))	Retained earnings/ (accumulated losses) RMB'000	Total Equity RMB'000
At 1 January 2019	71	167,037	132,102	21,835	12,223	67,518	400,786
Total comprehensive losses for the year	–	–	–	–	(3,680)	(236,813)	(240,493)
Equity-settled share-based payments (note 39)	–	–	3,378	–	–	–	3,378
Appropriation to reserves	–	–	–	491	–	(491)	–
Issue of ordinary shares under share option plan (note 39)	1	2,889	(2,866)	–	–	–	24
Issue of ordinary shares for share consideration payment (note 29)	1	8,803	–	–	–	–	8,804
Placing of shares (note 29)	13	52,633	–	–	–	–	52,646
Changes in equity for the year	15	64,325	512	491	(3,680)	(237,304)	(175,641)
At 31 December 2019	86	231,362	132,614	22,326	8,543	(169,786)	225,145
At 1 January 2020	**86**	**231,362**	**132,614**	**22,326**	**8,543**	**(169,786)**	**225,145**
Total comprehensive losses for the year	**–**	**–**	**–**	**–**	**12,926**	**(126,034)**	**(113,108)**
Equity-settled share-based payments (note 39)	**–**	**–**	**2,304**	**–**	**–**	**–**	**2,304**
Share options forfeited (note 39)	**–**	**–**	**(1,745)**	**–**	**–**	**1,745**	**–**
Appropriation to reserves	**–**	**–**	**–**	**372**	**–**	**(372)**	**–**
Changes in equity for the year	**–**	**–**	**559**	**372**	**12,926**	**(124,661)**	**(110,804)**
At 31 December 2020	**86**	**231,362**	**133,173**	**22,698**	**21,469**	**(294,447)**	**114,341**

Consolidated Statement of Cash Flows

For the year ended 31 December 2020

	Note	2020 RMB'000	2019 RMB'000
CASH FLOWS FROM OPERATING ACTIVITIES			
Loss before taxation		**(152,982)**	(250,625)
Adjustments for:			
Finance costs	11	**9,928**	3,245
Share of (profit)/loss of associate		**(25)**	50
Depreciation of property, plant and equipment	19	**5,034**	6,035
Depreciation of right-of-use assets	20	**7,414**	6,607
Amortisation of intangible assets	22	**34,204**	37,570
Loss on disposal of property, plant and equipment	9	**45**	281
Equity-settled share-based payment		**2,304**	3,378
Fair value loss/(gains) on financial instruments at fair value	7(c)	**15,442**	(5,635)
Allowance for impairment losses of financial assets, net	27	**27,940**	20,450
Impairment losses of intangible assets		**4,708**	–
Impairment losses of goodwill	21	**23,256**	171,173
Impairment losses of an associate	24	**379**	–
Write-down of inventories		**2,119**	7,481
Interest income from financial investment		**–**	(99)
Interest income from bank deposits	9	**(2,523)**	(1,829)
Gain on lease modification	9	**(134)**	–
COVID-19 related concessions received	9	**(248)**	–
Net foreign exchange gain	9	**(152)**	–
Operating loss before working capital changes		**(23,291)**	(1,918)
Decrease in inventories		**1,077**	47
Decrease/(increase) in contract costs		**23,289**	(21,572)
(Increase)/decrease in trade and other receivables		**(33,309)**	112,745
Decrease/(increase) in restricted bank deposits		**326**	(178)
Increase/(decrease) in trade and other payables		**1,133**	(45,694)
Increase/(decrease) in contract liabilities		**21,477**	(14,044)
Decrease in deferred income		**(1,849)**	(1,900)
Cash (used in)/generated from operations		**(11,147)**	27,486
Income tax refund/(paid)		**437**	(6,407)
Interest on lease liabilities		**(747)**	(726)
Net cash (used in)/generated from operating activities		**(11,457)**	20,353

Consolidated Statement of Cash Flows *(continued)*

For the year ended 31 December 2020

	Note	2020 RMB'000	2019 RMB'000
CASH FLOWS FROM INVESTING ACTIVITIES			
Payment for acquisition of subsidiaries, net of cash acquired		–	(166,776)
Interest received from financial investment		–	99
Interest received		2,523	1,829
Purchase of property, plant and equipment		(981)	(4,089)
Proceeds from disposal of property, plant and equipment		111	111
Purchase of intangible assets		–	(953)
Expenditure on development project		–	(1,706)
Proceeds from maturity of financial investment at fair value through profit or loss		–	10,000
Net cash generated from/(used in) investing activities		1,653	(161,485)
CASH FLOWS FROM FINANCING ACTIVITIES			
Payment for interest on acquisition consideration payable		–	(20,395)
Payment for interest on convertible bonds		(5,185)	(5,314)
Proceeds from shares issued under share option scheme		–	24
Cash received from placing of shares		–	52,646
Principal element of lease payment		(7,066)	(6,453)
Payment for other financing activities		–	(62)
Net cash (used in)/generated from financing activities		(12,251)	20,446
NET DECREASE IN CASH AND CASH EQUIVALENTS		(22,055)	(120,686)
EFFECT OF FOREIGN EXCHANGE RATE CHANGES		(1,386)	(1,241)
CASH AND CASH EQUIVALENTS AT 1 JANUARY		145,110	267,037
CASH AND CASH EQUIVALENTS AT 31 DECEMBER		121,669	145,110
ANALYSIS OF CASH AND CASH EQUIVALENTS			
Bank and cash balances		121,669	145,110

1. GENERAL INFORMATION

Risecomm Group Holdings Limited (the "**Company**" together with its subsidiaries, the "**Group**") was incorporated in the Cayman Islands as an exempted company with limited liability under the Companies Law, Cap 22 (Law 3 of 1961, as consolidated and revised) of the Cayman Islands on 19 August 2015 and its shares are listed on the Main Board of The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**"). The address of the registered office is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman, KY1-1111, Cayman Islands and the principal place of business of the Company in China is 41/F, Block A, Building 8, Shenzhen International Innovation Valley, Xili Street, Nanshan District, Shenzhen, the People's Republic of China (the "**PRC**").

The Company is an investment holding company. The principal activities of its subsidiaries are set out in note 23 to the consolidated financial statements.

2. BASIS OF PREPARATION

These consolidated financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("**HKFRSs**") issued by the Hong Kong Institute of Certified Public Accountants (the "**HKICPA**"). HKFRSs comprise Hong Kong Financial Reporting Standards ("**HKFRS**"); Hong Kong Accounting Standards ("**HKAS**"); and Interpretations. These consolidated financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on the Stock Exchange and with the disclosure requirements of the Hong Kong Companies Ordinance (Cap.622). Significant accounting policies adopted by the Group are disclosed below.

The HKICPA has issued certain new and revised HKFRSs that are first effective or available for early adoption for the accounting period of the Group. Note 3 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 and prior accounting period reflected in these consolidated financial statements.

The Group incurred a net loss of approximately RMB126,034,000 during the year ended 31 December 2020 and, as of that date, the Group's current liabilities exceeded its current assets by approximately RMB75,537,000. Its current acquisition consideration payables, convertible bonds and lease liabilities amounted to approximately RMB120,520,000, approximately RMB119,076,000 and approximately RMB4,488,000 respectively while its cash and cash equivalents amounted to approximately RMB121,669,000 only. These events and conditions indicate the existence of a material uncertainty which may cast significant doubt on the Group's ability to continue as a going concern, therefore, it may be unable to realise its assets and discharge its liabilities in the normal course of business. Notwithstanding the above, the consolidated financial statements have been prepared on a going concern basis as the directors have taken the following measures:

(a) The Group will be able to obtain the new equity financing:

On 25 January 2021, the Company entered into a conditional subscription agreement (the "**Subscription agreement**") with Sailen International IOT Limited ("**Sailen IOT**") that Sailen IOT conditionally agreed to subscribe for and the Company conditionally agreed to allot and issue 403,000,000 shares at the subscription price at HK$0.24 for an aggregate amount of approximately HK$96,000,000 after deducting the professional fees and other related expenses. The amount will be off set against the outstanding principal of the promissory notes relating to the acquisition of Green Harmony Limited ("**Green Harmony**") as disclosed in note 32 to the consolidated financial statements.

On 25 January 2021, the Company entered into a conditional placing agreement with Kingkey Securities Group Limited ("**Kingkey**") that Kingkey has conditionally agreed to procure not less than six independent placees to subscribe for up to 347,000,000 shares at a price of HK$0.24 for an aggregate amount of approximately HK$82,500,000 after deducting professional fees and other related expenses. The proceeds intended to be partially used for full settlement of the remaining outstanding principal of the promissory notes to the vendor of Green Harmony as disclosed in note 32 to the consolidated financial statements and the remaining part will be used for general working capital purpose;

2. BASIS OF PREPARATION *(Continued)*

(a) The Group will be able to obtain the new equity financing: *(Continued)*
The Company is currently in progress of finalising the circular in relation to the conditional subscription agreement and the conditional placing agreement described above. Details were disclosed in the announcements of the Company dated 25 January 2021, 11 February 2021 and 2 March 2021.

If the above conditional share subscription and/or share placing could not be completed, the Company will negotiate with Sailen IOT on other arrangements.

Saved as disclosed above, the Company is also considering for further fund raising by way of equity financing.

(b) The Group was in progress to implement operational plans to control costs and generate sufficient operating cash flows to meet its current and future obligations. These actions include cost control measures, timely collection of outstanding receivables; and

(c) The Group will negotiate with convertible bond holder for the extension of repayment date.

The directors have reviewed the Group's cashflow projections prepared by the management. The cash flow projection cover a period of not less than twelve months from 31 December 2020. Having taken into account the above-mentioned plans and measures, the directors consider that the Group will have sufficient financial resources to meet in full its working capital requirements and financial obligations as and when they fall due within the next twelve months from the date of the consolidated statement of financial position. Accordingly, the consolidated financial statements have been prepared on a going concern basis.

However, significant uncertainties exist as to whether management of the Company will be able to achieve its plans and measures as described above. As of the date of approval of the consolidated financial statements, the conditional share subscription and share placing have not been completed and the plan for the further fund raising by way of equity financing has not yet been commenced. The COVID-19 pandemic and trade disputes between the PRC and the United States create economic uncertainties which may negatively impact management's ability to successfully implement its operation plans. Negotiations with the bondholder to extend the maturity date of the convertible bond due 13 August 2021 have not yet been entered into.

Should the Group fail to achieve the above-mentioned plans and measures, it may be unable to continue as a going concern, and adjustments would have to be made to write down the carrying value of the assets to their recoverable amounts, to provide for any further liabilities which might arise and to classify non-current assets and liabilities as current assets and liabilities respectively. The effects of these potential adjustments have not been reflected in these consolidated financial statements.

3. ADOPTION OF NEW AND REVISED HONG KONG FINANCIAL REPORTING STANDARDS

(a) Application of new and revised HKFRSs

The Group has applied the Amendments to References to the Conceptual Framework in HKFRS Standards and the following amendments to HKFRSs issued by the HKICPA for the first time, which are mandatorily effective for the annual period beginning on or after 1 January 2020 for the preparation of the consolidated financial statements:

Amendments to HKAS 1 and HKAS 8	Definition of Material
Amendments to HKFRS 3	Definition of a Business
Amendments to HKFRS 9, HKAS 39 and HKFRS 7	Interest Rate Benchmark Reform

In addition, the Group has early applied the Amendments to HKFRS 16, COVID-19 Related Rent Concessions.

Except as described below, the application of the Amendments to References to the Conceptual Framework in HKFRS Standards and the amendments to HKFRSs in the current year had no material impact on the Group's financial positions and performance for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

(i) Amendments to HKAS 1 and HKAS 8 Definition of Material

The amendments provide a new definition of material that states "information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity." The amendments also clarify that materiality depends on the nature or magnitude of information, either individually or in combination with other information, in the context of the financial statements taken as a whole.

The application of the Amendments had no material impact on the consolidated financial statement.

(ii) Amendment to HKFRS 16, COVID-19-Related Rent Concessions

The amendment provides a practical expedient that allows a lessee to by-pass the need to evaluate whether certain qualifying rent concessions occurring as a direct consequence of the COVID-19 pandemic ("**COVID-19 Related Rent Concessions**") are lease modifications and, instead, account for those rent concessions as if they were not lease modifications.

The Group has elected to early adopt the amendments and applies the practical expedient to all qualifying COVID-19 Related Rent Concessions granted to the Group during the year. Consequently, rent concessions received have been accounted for as negative variable lease payments recognised in profit or loss in the period in which the event or condition that triggers those payments occurred (see note 20). There is no impact on the opening balance of equity at 1 January 2020.

3. ADOPTION OF NEW AND REVISED HONG KONG FINANCIAL REPORTING STANDARDS *(Continued)*

(b) New and revised HKFRSs in issue but not yet effective

Other than the amendments to HKFRS 16, COVID-19 Related Rent Concessions, the Group has not applied any new and revised HKFRSs that have been issued but are not yet effective for the financial year beginning 1 January 2020.

These new and revised HKFRSs include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Amendment to HKFRS 9, HKAS 39, HKFRS 7, HKFRS 4 and HKFRS 16 *Interest Rate Benchmark Reform — Phase 2*	1 January 2021
Amendments to HKFRS 3 *Reference to the Conceptual Framework*	1 January 2022
Amendments to HKAS 16 *Property, plant and equipment: proceeds before intended use*	1 January 2022
Amendments to HKAS 37 *Onerous contracts — cost of fulfilling a contract*	1 January 2022
Annual Improvements to HKFRSs 2018–2020 Cycle	1 January 2022
Amendments to HKAS 1 *Classification of liabilities as current or non-current*	1 January 2023

The Group is in the process of making an assessment of what the impact of these amendments and new standards is expected to be in the period of initial application. So far it has concluded that the adoption of them is unlikely to have a significant impact on the consolidated financial statements.

4. SIGNIFICANT ACCOUNTING POLICIES

These consolidated financial statements have been prepared under the historical cost convention, unless mentioned otherwise in the accounting policies below (e.g. certain financial instruments that are measured at fair value).

The preparation of financial statements in conformity with HKFRSs requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Group's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 5.

The significant accounting policies applied in the preparation of these consolidated financial statements are set out below.

(a) Consolidation

The consolidated financial statements include the financial statements of the Company and its subsidiaries made up to 31 December. Subsidiaries are entities, including structured entities, over which the Group has control. 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. The Group has power over an entity when the Group has existing rights that give it the current ability to direct the relevant activities, i.e. activities that significantly affect the entity's returns.

When assessing control, the Group considers its potential voting rights as well as potential voting rights held by other parties. A potential voting right is considered only if the holder has the practical ability to exercise that right.

Subsidiaries are consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date the control ceases.

The gain or loss on the disposal of a subsidiary that results in a loss of control represents the difference between (i) the fair value of the consideration of the sale plus the fair value of any investment retained in that subsidiary; and (ii) the Company's share of the net assets of that subsidiary plus any remaining goodwill and any accumulated foreign currency translation reserve relating to that subsidiary.

Intragroup transactions, balances and unrealised profits are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

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

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(b) Business combination and goodwill

The acquisition method is used to account for the acquisition of a subsidiary in a business combination. The consideration transferred in a business combination is measured at the acquisition-date fair value of the assets given, equity instruments issued, liabilities incurred and any contingent consideration. Acquisition-related costs are recognised as expenses in the periods in which the costs are incurred and the services are received. Identifiable assets and liabilities of the subsidiary in the acquisition are measured at their acquisition-date fair values.

The excess of the sum of the consideration transferred over the Group's share of the net fair value of the subsidiary's identifiable assets and liabilities is recorded as goodwill. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the sum of the consideration transferred is recognised in consolidated profit or loss as a gain on bargain purchase which is attributed to the Group.

In a business combination achieved in stages, the previously held equity interest in the subsidiary is remeasured at its acquisition-date fair value and the resulting gain or loss is recognised in consolidated profit or loss. The fair value is added to the sum of the consideration transferred in a business combination to calculate the goodwill.

The non-controlling interests in the subsidiary are initially measured at the non-controlling shareholders' proportionate share of the net fair value of the subsidiary's identifiable assets and liabilities at the acquisition date.

After initial recognition, goodwill is measured at cost less accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the cash-generating units ("**CGUs**") or groups of CGUs that is expected to benefit from the synergies of the combination. Each unit or group of units to which the goodwill is allocated represents the lowest level within the Group at which the goodwill is monitored for internal management purposes. Goodwill impairment reviews are undertaken annually, or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of the CGU containing the goodwill is compared to its recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognised immediately as an expense and is not subsequently reversed.

(c) Associates

Associates are entities over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of an entity but is not control over those policies. The existence and effect of potential voting rights that are currently exercisable or convertible, including potential voting rights held by other entities, are considered when assessing whether the Group has significant influence. In assessing whether a potential voting right contributes to significant influence, the holder's intention and financial ability to exercise or convert that right is not considered.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(c) Associates *(Continued)*

Investment in an associate is accounted for in the consolidated financial statements by the equity method and is initially recognised at cost. Identifiable assets and liabilities of the associate in an acquisition are measured at their fair values at the acquisition date. The excess of the cost of the investment over the Group's share of the net fair value of the associate's identifiable assets and liabilities is recorded as goodwill which is included in the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of acquisition is recognised in consolidated profit or loss.

The Group assesses whether there is an objective evidence that the interest in an associate may be impaired. When any objective evidence exists, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with HKAS 36 *Impairment of Assets* as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs of disposal) with its carrying amount. Any impairment loss recognised is not allocated to any asset, including goodwill, that forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognised in accordance with HKAS 36 to the extent that the recoverable amount of the investment subsequently increases.

The Group's share of an associate's post-acquisition profits or losses and other comprehensive income is recognised in consolidated statement of profit or loss and other comprehensive income. When the Group's share of losses in an associate equals or exceeds its interest in the associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the associate. If the associate subsequently reports profits, the Group resumes recognising its share of those profits only after its share of the profits equals the share of losses not recognised.

The gain or loss on the disposal of an associate that results in a loss of significant influence represents the difference between (i) the fair value of the consideration of the sale plus the fair value of any investment retained in that associate; and (ii) the Group's entire carrying amount of that associate (including goodwill) and any related accumulated foreign currency translation reserve.

Unrealised profits on transactions between the Group and its associates are eliminated to the extent of the Group's interests in the associates. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

(d) Foreign currency translation

(i) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the "**functional currency**"). The consolidated financial statements are presented in Renminbi ("**RMB**"), the functional currency of the Company is Hong Kong dollars. The directors consider that choosing Renminbi as the presentation currency best suits the needs of the shareholders and investors.

(ii) Transactions and balances in each entity's financial statements

Transactions in foreign currencies are translated into the functional currency on initial recognition using the exchange rates prevailing on the transaction dates. Monetary assets and liabilities in foreign currencies are translated at the exchange rates at the end of each reporting period. Gains and losses resulting from this translation policy are recognised in profit or loss.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(d) Foreign currency translation *(Continued)*

(ii) Transactions and balances in each entity's financial statements *(Continued)*

Non-monetary items that are measured at fair value in foreign currencies are translated using the exchange rates at the dates when the fair values are determined.

When a gain or loss on a non-monetary item is recognised in other comprehensive income, any exchange component of that gain or loss is recognised in other comprehensive income. When a gain or loss on a non-monetary item is recognised in profit or loss, any exchange component of that gain or loss is recognised in profit or loss.

(iii) Translation on consolidation

The results and financial position of all the Group entities that have a functional currency different from the Company's presentation currency are translated into the Company's presentation currency as follows:

— Assets and liabilities for each statement of financial position presented are translated at the closing rate at the date of that statement of financial position;

— Income and expenses are translated at average exchange rates for the period (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the exchange rates on the transaction dates); and

— All resulting exchange differences are recognised in other comprehensive income and accumulated in the exchange reserve.

On consolidation, exchange differences arising from the translation of monetary items that form part of the net investment in foreign entities are recognised in other comprehensive income and accumulated in the exchange reserve. When a foreign operation is sold, such exchange differences are reclassified to consolidated profit or loss as part of the gain or loss on disposal.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate.

(e) Property, plant and equipment

Property, plant and equipment, including buildings held for use in the production or supply of goods or services, or for administrative purposes, are stated in the consolidated statement of financial position at cost, less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. All other repairs and maintenance are recognised in profit or loss during the period in which they are incurred.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(e) Property, plant and equipment *(Continued)*

Depreciation of property, plant and equipment is calculated at rates sufficient to write off their cost less their residual values over the estimated useful lives on a straight-line basis. The principal annual rates are as follows:

Buildings	5%
Leasehold improvements	20%–33.3%
Machinery and equipment	10%–20%
Office and other equipment	20%–33.3%
Motor vehicles	12.5%–25%

The residual values, useful lives and depreciation method are reviewed and adjusted, if appropriate, at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

The gain or loss on disposal of property, plant and equipment is the difference between the net sales proceeds and the carrying amount of the relevant asset, and is recognised in profit or loss.

(f) Leases

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) The Group as a lessee

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. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. 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.

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.

Right-of-use assets in which the Group is reasonably certain to obtain ownership of the underlying leased assets at the end of the lease term are depreciated from commencement date to the end of the useful life. Otherwise, right-of-use assets are depreciated on a straight-line basis over the shorter of its estimated useful life and the lease term.

Refundable rental deposits paid are accounted under HKFRS 9 *Financial instruments* and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments and included in the cost of right-of-use assets.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Leases *(Continued)*

(i) The Group as a lessee *(Continued)*

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.

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. 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.

(ii) The Group 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.

(g) Intangible assets

(i) Internally-generated intangible assets — research and development expenditure

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An internally generated intangible asset arising from the Group's AMR business' development is recognised only if all of the following conditions are met:

— The technical feasibility of completing the intangible asset so that it will be available for use or sale;

— Management intends to complete the intangible asset and use or sell it;

— There is ability to use or sell the intangible asset;

— It can be demonstrated how the intangible asset will generate probable future economic benefits;

— Adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available;

— The expenditure attributable to the intangible asset during its development can be reliably measured.

Internally generated intangible assets are stated at cost less accumulated amortisation and impairment losses. Amortisation is calculated on a straight-line basis over their estimated useful lives of 5 years. Where no internally generated intangible asset can be recognised, development expenditure is recognised in profit or loss in the period in which it is incurred.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(g) Intangible assets *(Continued)*

(ii) Intangible assets acquired separately

Other intangible assets represent the software and other intangible assets identified in acquisitions which are stated in the consolidated statement of financial position, being amortised on a straight-line basis over their estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follow:

Software and others	3–10 years
Non-compete undertaking	5–7 years
Customer relationships	3–10 years
Unfulfilled contracts	2 years

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and any impairment losses.

Both the estimated useful life and method of amortisation are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis.

(h) Inventories

Inventories are stated at the lower of cost and net realisable value. Cost is determined using the weighted average basis. The cost of finished goods and work in progress comprises raw materials, direct labour and an appropriate proportion of all production overhead expenditure, and where appropriate, subcontracting charges. Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

(i) Contract costs

Contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory, property, plant and equipment or intangible assets.

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained. Incremental costs of obtaining a contract are capitalised when incurred if the costs are expected to be recovered, unless the expected amortisation period is one year or less from the date of initial recognition of the asset, in which case the costs are expensed when incurred. Other costs of obtaining a contract are expensed when incurred.

Costs to fulfil a contract are capitalised if the costs relate directly to an existing contract or to a specifically identifiable anticipated contract; generate or enhance resources that will be used to provide goods or services in the future; and are expected to be recovered. Costs that relate directly to an existing contract or to a specifically identifiable anticipated contract may include direct labour, direct materials, allocations of costs, costs that are explicitly chargeable to the customer and other costs that are incurred only because the group entered into the contract. Other costs of fulfilling a contract, which are not capitalised as inventory, property, plant and equipment or intangible assets, are expensed as incurred.

Capitalised contract costs are stated at cost less accumulated amortisation and impairment losses. Impairment losses are recognised to the extent that the carrying amount of the contract cost asset exceeds the net of (i) remaining amount of consideration that the group expects to receive in exchange for the goods or services to which the asset relates, less (ii) any costs that relate directly to providing those goods or services that have not yet been recognised as expenses.

Amortisation of capitalised contract costs is charged to profit or loss when the revenue to which the asset relates is recognised.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Contract assets and contract liabilities

Contract asset is recognised when the Group recognises revenue 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 4(z) and are reclassified to receivables when the right to the consideration has become unconditional.

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue. A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such case, a corresponding receivable would also be recognised.

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.

(k) Construction contracts

A contract with a customer is classified by the Group as a construction contract when the contract relates to work on volatile organic compounds related assets under the control of the customer and therefore the Group's construction activities create or enhance an asset under the customer's control.

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the cost-to-cost method, i.e. based on the proportion of the actual costs incurred relative to the estimated total costs. The directors consider that this input method is an appropriate measure of the progress towards complete satisfaction of these performance obligations under HKFRS 15.

The Group becomes entitled to invoice customers for construction of properties based on achieving a series of performance-related milestones. When a particular milestone is reached the customer is sent a relevant statement of work signed by an assessor of the customers and an invoice for the related milestone payment. The Group will previously have recognised a contract asset for any work performed. Any amount previously recognised as a contract asset is reclassified to trade receivables at the point at which it is invoiced to the customer. If the milestone payment exceeds the revenue recognised to date under the cost-to-cost method then the Group recognises a contract liability for the difference. There is not considered to be a significant financing component in construction contracts with customers as the period between the recognition of revenue under the cost-to-cost method and the milestone payment is always less than one year.

When the outcome of the contract cannot be reasonably measured, revenue is recognised only to the extent of contract costs incurred that are expected to be recovered.

If at any time the costs to complete the contract are estimated to exceed the remaining amount of the consideration under the contract, then a provision is recognised.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(l) Recognition and derecognition of financial instruments

Financial assets and financial liabilities are recognised in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss ("**FVTPL**") are recognised immediately in profit or loss.

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognises its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a collateralised borrowing for the proceeds received.

The Group derecognises financial liabilities when, and only when, the Group's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss.

(m) Financial assets

All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the marketplace. All recognised financial assets are measured subsequently in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

Debt investments

Debt 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;

— fair value through other comprehensive income ("**FVTOCI**") — 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; or

— FVTPL, if the investment does not meet the criteria for being measured at amortised cost or FVTOCI (recycling). Changes in the fair value of the investment (including interest) are recognised in profit or loss.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Financial assets *(Continued)*

Equity investments

An investment in equity securities is classified as FVTPL unless the equity investment is not held for trading purposes and on initial recognition of the investment the Group makes an election to designate the investment at FVTOCI (non-recycling) such that subsequent changes in fair value are recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained profits. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVTPL or FVTOCI, are recognised in profit or loss as other income.

(n) 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.

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses.

(o) Cash and cash equivalents

Cash and cash equivalents comprises cash at bank and on hand, demand deposits with banks, and short-term highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of change in value, having been within three months of maturity at acquisition. Cash and cash equivalents are assessed for ECL.

(p) Financial liabilities and equity instruments

Financial liabilities and equity instruments are classified according to the substance of the contractual arrangements entered into and the definitions of a financial liability and an equity instrument under HKFRSs. An equity instrument is any contract that evidences a residual interest in the assets of the Group after deducting all of its liabilities. The accounting policies adopted for specific financial liabilities and equity instruments are set out below.

(q) Convertible bonds

A conversion option that will be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Company's own equity instruments is a conversion option derivative.

The Group has designated the convertible bonds with conversion option derivative held by the bond holders as financial liabilities at FVTPL. At the date of initial recognition and at the end of subsequent reporting periods, the convertible bonds are measured at fair value with changes in fair value recognised directly in profit or loss in the period in which they arise.

(r) Trade and other payables

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

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recorded at the proceeds received, net of direct issue costs.

(t) Revenue and other income

Revenue is recognised when control over a product or service is transferred to the customer, 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.

(i) AMR and other business

Revenue from the sale of goods is recognised at a point in time when the customer takes possession of and accept the products.

Revenue from the maintenance services is recognised at a point in time when the service is rendered and control over the service is transferred to the customers upon customer's acknowledgement of service rendered.

(ii) SMIA business

Revenue from the software licenses is recognised at the point in time when the license software is delivered and accepted by the customers. In cases where the Group allocates revenue to post-contract customer support, primarily because the support is provided at no additional charge, revenue is recognised as the support is provided, which is generally ratably over the service period of the related software.

Revenue from construction contracts is recognised in accordance with the policy set out in note 4(k) above.

Interest income is recognised on a time-proportion basis using the effective interest method.

Rental income under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term.

(u) Employee benefits

(i) Employee leave entitlements

Employee entitlements to annual leave and long service leave are recognised when they accrue to employees. A provision is made for the estimated liability for annual leave and long service leave as a result of services rendered by employees up to the end of the reporting period.

Employee entitlements to sick leave and maternity leave are not recognised until the time of leave.

The Group operates various post-employment schemes, including defined contribution pension plans.

(ii) Pension obligations

The Group contributes to defined contribution retirement schemes which are available to all employees. Contributions to the schemes by the Group and employees are calculated as a percentage of employees' basic salaries. The retirement benefit scheme cost charged to profit or loss represents contributions payable by the Group to the funds.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(u) Employee benefits *(Continued)*

(iii) Termination benefits

Termination benefits are recognised at the earlier of the dates when the Group can no longer withdraw the offer of those benefits, and when the Group recognises restructuring costs and involves the payment of termination benefits.

(v) Share-based payments

The Group issues equity-settled share-based payments to certain Directors and employees. Equity-settled share-based payments are measured at the fair value (excluding the effect of non-market based vesting conditions) of the equity instruments at the date of grant. The fair value determined at the grant date of the equity-settled share-based payments is expensed on a straight-line basis over the vesting period, based on the Group's estimate of shares that will eventually vest and adjusted for the effect of non-market based vesting conditions.

(w) Government grants

A government grant is recognised when there is reasonable assurance that the Group will comply with the conditions attaching to it and that the grant will be received.

Government grants relating to income are deferred and recognised in profit or loss over the period to match them with the costs they are intended to compensate.

Government grants that become receivable as compensation for expenses or losses already incurred or for the purpose of giving immediate financial support to the Group with no future related costs are recognised in profit or loss in the period in which they become receivable.

Government grants relating to the purchase of assets are recorded as deferred income and recognised in profit or loss on a straight-line basis over the useful lives of the related assets.

(x) Taxation

Income tax represents the sum of the current tax and deferred tax.

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit recognised in profit or loss because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

Deferred tax is recognised on differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognised for all taxable temporary differences and deferred tax assets are recognised to the extent that it is probable that taxable profits will be available against which deductible temporary differences, unused tax losses or unused tax credits can be utilised. Such assets and liabilities are not recognised if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognised for taxable temporary differences arising on investments in subsidiaries and associates, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(x) Taxation *(Continued)*

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised, based on tax rates that have been enacted or substantively enacted by the end of the reporting period. Deferred tax is recognised in profit or loss, except when it relates to items recognised in other comprehensive income or directly in equity, in which case the deferred tax is also recognised in other comprehensive income or directly in equity.

The measurement of deferred tax assets and liabilities reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

For the purposes of measuring deferred tax for leasing transactions in which the Group recognises the right-of-use assets and the related lease liabilities, the Group firstly determines whether the tax deductions are attributable to the right-of-use assets or the lease liabilities.

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 requirements to right-of-use assets and lease liabilities separately. Temporary differences relating to right-of-use assets and lease liabilities are not recognised at initial recognition and over the lease terms due to application of the initial recognition exemption.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied by the same taxation authority and the Group intends to settle its current tax assets and liabilities on a net basis.

(y) Impairment of non-financial assets

The carrying amounts of other non-financial assets are reviewed at each reporting date for indications of impairment and where an asset is impaired, it is written down as an expense through the consolidated statement of profit or loss and other comprehensive income to its estimated recoverable amount unless the relevant asset is carried at a revalued amount. The recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. If this is the case, recoverable amount is determined for the CGU to which the asset belongs. Recoverable amount is the higher of value in use and the fair value less costs of disposal of the individual asset or the CGU.

Value in use is the present value of the estimated future cash flows of the asset/CGU. Present values are computed using pre-tax discount rates that reflect the time value of money and the risks specific to the asset/CGU whose impairment is being measured.

Impairment losses for CGU are allocated first against the goodwill of the unit and then pro rata amongst the other assets of the CGU. Subsequent increases in the recoverable amount caused by changes in estimates are credited to profit or loss to the extent that they reverse the impairment.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(z) Impairment of financial assets

The Group recognises allowances for impairment for ECL on trade and bills receivables and other receivables. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition of the respective financial instrument.

The Group always recognises lifetime ECL for trade and bills receivables and assessed individually. The expected credit losses 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, general economic conditions and an assessment of both the current as well as the forecast direction of conditions at the reporting date, including time value of money where appropriate.

For all other financial instruments, the Group recognises lifetime ECL when there has been a significant increase in credit risk since initial recognition. However, if the credit risk on the financial instrument has not increased significantly since initial recognition, the Group measures the loss allowance for that financial instrument at an amount equal to 12-month ECL.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instruments. In contrast, 12-month ECL represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date.

Significant increase in credit risk

In assessing whether the credit risk on a financial instrument has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument at the reporting date with the risk of a default occurring on the financial instrument at the date of initial recognition. In making this assessment, 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. Forward-looking information considered includes the future prospects of the industries in which the Group's debtors operate, obtained from economic expert reports, financial analysts, governmental bodies, relevant think-tanks and other similar organisations, as well as consideration of various external sources of actual and forecast economic information that relate to the Group's core operations.

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

— an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;

— significant deterioration in external market indicators of credit risk for a particular financial instrument;

— existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;

— an actual or expected significant deterioration in the operating results of the debtor;

— significant increases in credit risk on other financial instruments of the same debtor; or

— an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(z) Impairment of financial assets *(Continued)*

Significant increase in credit risk *(Continued)*

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk on a financial asset has increased significantly since initial recognition when contractual payments are more than 90 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the foregoing, the Group assumes that the credit risk on a financial instrument has not increased significantly since initial recognition if the financial instrument is determined to have low credit risk at the reporting date. A financial instrument is determined to have low credit risk if:

(i) the financial instrument has a low risk of default;

(ii) the debtor has a strong capacity to meet its contractual cash flow obligations in the near term; or

(iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

The Group regularly monitors the effectiveness of the criteria used to identify whether there has been a significant increase in credit risk and revises them as appropriate to ensure that the criteria are capable of identifying significant increase in credit risk before the amount becomes past due.

Definition of default

The Group considers the following as constituting an event of default for internal credit risk management purposes as historical experience indicates that receivables that meet either of the following criteria are generally not recoverable:

— when there is a breach of financial covenants by the counterparty; or

— information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Credit-impaired financial assets

A financial asset is credit-impaired when one or more events that have a detrimental impact on the estimated future cash flows of that financial asset have occurred. Evidence that a financial asset is credit-impaired includes observable data about the following events:

— significant financial difficulties of the issuer or the counterparty;

— a breach of contract, such as a default or past due event;

— the lender(s) of the counterparty, for economic or contractual reasons relating to the counterparty's financial difficulty, having granted to the counterparty a concession(s) that the lender(s) would not otherwise consider;

— it is becoming probable that the counterparty will enter bankruptcy or other financial reorganisation; or

— the disappearance of an active market for that financial asset because of financial difficulties.

4. SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(z) Impairment of financial assets *(Continued)*

Write-off policy

The Group writes off a financial asset when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, including when the debtor has been placed under liquidation or has entered into bankruptcy proceedings. Financial assets written off may still be subject to enforcement activities under the Group's recovery procedures, taking into account legal advice where appropriate. Any recoveries made are recognised in profit or loss.

Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data adjusted by forward-looking information as described above. As for the exposure at default, for financial assets, this is represented by the assets' gross carrying amount at the reporting date.

For financial assets, the ECL is estimated as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the original effective interest rate.

If the Group has measured the loss allowance for a financial instrument at an amount equal to lifetime ECL in the previous reporting period, but determines at the current reporting date that the conditions for lifetime ECL are no longer met, the Group measures the loss allowance at an amount equal to 12-month ECL at the current reporting date, except for assets for which simplified approach was used.

The Group recognises an impairment loss or reversal of an impairment loss in profit or loss for all financial instruments with a corresponding adjustment to their carrying amounts through a loss allowance account.

(aa) Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Group has a present 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 expenditures expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be estimated reliably, the obligation is disclosed as a contingent liability, unless the probability of outflow 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 is remote.

(bb) Events after the reporting period

Events after the reporting period that provide additional information about the Group's position at the end of the reporting period are adjusting events and are reflected in the consolidated financial statements. Events after the reporting period that are not adjusting events are disclosed in the notes to the consolidated financial statements when material.

5. CRITICAL JUDGEMENTS AND KEY ESTIMATES

Critical judgements in applying accounting policies

In the process of applying the accounting policies, the Directors have made the following judgements that have the most significant effect on the amounts recognised in the consolidated financial statements (apart from those involving estimations, which are dealt with below).

(a) Going concern basis

These consolidated financial statements have been prepared on a going concern basis, the validity of which depends on successful outcome of the measures taken by management to improve the Group's liquidity as detailed in note 2 to the consolidated financial statements.

(b) Distinction between investment properties and owner-occupied properties

Some properties comprise a portion that is held to earn rentals and another portion that is held for use in the production of goods. If these portions can be sold separately (or leased out separately under a finance lease), the Group accounts for the portions separately. If the portions cannot be sold separately, the property is accounted for as investment property only if an insignificant portion is held for use in the production of goods. Judgement is applied in determining whether ancillary services are so significant that a property does not qualify as an investment property. The Group considers each property separately in making its judgement.

(c) Significant increase in credit risk

As explained in note 3, ECL are measured as an allowance equal to 12-month ECL for stage 1 assets, or lifetime ECL for stage 2 or stage 3 assets. An asset moves to stage 2 when its credit risk has increased significantly since initial recognition. HKFRS 9 does not define what constitutes a significant increase in credit risk. In assessing whether the credit risk of an asset has significantly increased the Group takes into account qualitative and quantitative reasonable and supportable forward looking information.

(d) Determining the lease term

In determining the lease term at the commencement date for leases that include renewal options exercisable by the Group, the Group evaluates the likelihood of exercising the renewal options taking into account all relevant facts and circumstances that create an economic incentive for the Group to exercise the option, including favourable terms, leasehold improvements undertaken and the importance of that underlying asset to the Group's operation.

Generally, periods covered by an extension option in other properties leases have not been included in the lease liability because the Group could replace the assets without significant cost or business disruption. See note 20 for further information.

The lease term is reassessed when there is a significant event or significant change in circumstance that is within the Group's control. During the current financial year, no lease term has been reassessed.

5. CRITICAL JUDGEMENTS AND KEY ESTIMATES *(Continued)*

Key sources of estimation uncertainty

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, are discussed below.

(a) Income taxes

The Group is subject to income taxes in several jurisdictions. Significant estimates are required in determining the provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions in the period in which such determination is made. During the year, RMB26,948,000 of income tax credit was recognised to profit or loss based on mainly the net effect of recognition of deferred tax asset and derecognition of deferred tax liability (2019: income tax credit of RMB13,812,000 was recognised to profit or loss based on mainly the net effect of recognition of deferred tax asset and derecognition of deferred tax liability).

(b) Revenue and profit recognition

As explained in policy notes 4(k) and 4(t), revenue from construction contract and from post-contract customer support service are recognised over time. Such revenue and profit recognition on uncompleted projects is dependent on estimating the total outcome of the contract, as well as the work done to date.

Based on the Group's recent experience and the nature of the services and construction activities undertaken by the Group, the Group has made estimates of the point at which it considered the work was sufficiently advanced such that the outcome of the contract can be reasonably measured. Until this point is reached the related contract costs disclosed in note 26 do not include profit which the Group might eventually realise from the work done to date. In addition, actual outcomes in terms of total cost or revenue may be higher or lower than estimated at the end of the reporting period, which would affect the revenue and profit recognised in future years as an adjustment to the amounts recorded to date.

During the year, RMB103,450,000 (2019: RMB11,007,000) of revenue from post-contract customer support service and construction contracts was recognised.

(c) Impairment of intangible assets, property, plant and equipment, and right-of-use assets

Intangible assets, property, plant and equipment, and right-of-use assets are stated at costs less accumulated amortisation and depreciation, and any impairment. In determining whether an asset is impaired, the Group has to exercise judgement and make estimation, particularly in assessing: (1) whether any events have occurred or any indicators that may affect the asset value; (2) whether the carrying value of an asset can be supported by the recoverable amount; and (3) the appropriate key assumptions to be applied in estimating the recoverable amounts. When it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the CGU to which the assets belongs. Changing the assumptions and estimates including the discount rates or the growth rate in the cash flow projections, could materially affect the recoverable amounts.

The carrying amount of intangible assets, property, plant and equipment, and right-of-use assets as at 31 December 2020 were RMB141,540,000 (2019: RMB180,452,000), RMB24,330,000 (2019: RMB28,539,000) and RMB14,218,000 (2019: RMB18,003,000) respectively.

5. CRITICAL JUDGEMENTS AND KEY ESTIMATES *(Continued)*

Key sources of estimation uncertainty *(Continued)*

(d) Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value in use of the cash-generating unit to which goodwill has been allocated. The value in use calculation requires the Group to estimate the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate the present value. Where the actual future cash flows are less than the expected, or change in facts and circumstances which results in downward revision of future cash flows or upward revision of discount rate, a material impairment loss or further impairment loss may arise.

The carrying amount of goodwill at the end of the reporting period was RMB20,718,000 (2019: RMB43,974,000) after an impairment loss of RMB23,256,000 (2019: RMB171,173,000) was recognised during the year. Details of the impairment loss calculation are provided in note 21 to the consolidated financial statements.

(e) Impairment of trade and other receivables

The management of the Group estimates the amount of impairment losses for ECL on trade and other receivables based on the credit risk of trade and other receivables. The amount of the impairment losses of trade and other receivables based on ECL model is measured as the difference between all contractual cash flows that are due to the Group in accordance with the contract and all the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition. Where the future cash flows are less than expected, or being revised downward due to changes in facts and circumstances, a material impairment loss may arise.

As at 31 December 2020, the carrying amount of trade and other receivables is RMB131,585,000 (net of allowance for impairment of RMB85,798,000) (2019: RMB126,216,000 (net of allowance for impairment of RMB57,901,000).

(f) Allowance for slow-moving inventories

Allowance for slow-moving inventories is made based on the ageing and estimated net realisable value of inventories. The assessment of the allowance amount involves judgement and estimates. Where the actual outcome in future is different from the original estimate, such difference will impact the carrying value of inventories and allowance charge/write-back in the period in which such estimate has been changed. Allowance of RMB1,296,000 for slow-moving inventories was made for the year ended 31 December 2020 (2019: RMB7,481,000)

(g) Warranty provisions

The Group makes provisions under the warranties it gives on sale of its products taking into account the Group's recent claim experience. As the Group is continually upgrading its product designs and launching new models, it is possible that the recent claim experience is not indicative of future claims that it will receive in respect of past sales. Any increase or decrease in the provision would affect profit or loss in future years.

6. FINANCIAL RISK MANAGEMENT

The Group's activities expose it to a variety of financial risks: foreign currency risk, price risk, credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance.

(a) Foreign currency risk

The Group has certain exposure to foreign currency risk as most of its business transactions, assets and liabilities are principally denominated in the functional currency, Hong Kong dollars and RMB, of the Group's entities. The Group currently does not have a foreign currency hedging policy in respect of foreign currency transactions, assets and liabilities. The Group monitors its foreign currency exposure closely and will consider hedging significant foreign currency exposure should the need arise. The currency giving rise to this risk is primarily United States Dollars ("**USD**").

At 31 December 2020, if the RMB had weakened 5 per cent against the USD with all other variables held constant, consolidated loss after tax for the year would have been RMB472,000 (2019: RMB901,000) higher, arising mainly as a result of the foreign exchange loss on cash and bank balances and trade and other payables denominated in USD. If the RMB had strengthened 5 per cent against USD with all other variables held constant, consolidated loss after tax for the year would have been RMB472,000 (2019: RMB901,000) lower, arising mainly as a result of the foreign exchange gain on cash and bank balances and trade and other payables denominated in USD.

(b) Interest rate risk

The Group's cash flow interest rate risk primarily relates to bank balances, acquisition consideration payables and convertible bonds. The Group's acquisition consideration payables and convertible bonds bear interests at fixed interest rates and therefore are subject to fair value interest rate risks.

The Group's exposure to interest-rate risk arises from its bank balances. These bank balances bear interests at variable rates that vary with the then prevailing market condition.

At 31 December 2020, if interest rates had been 100 basis points lower with all other variables held constant, consolidated loss after tax for the year would have been approximately RMB1,025,000 (2019: RMB1,226,000) lower, arising mainly as a result of lower interest income on bank balances. If interest rates had been 100 basis points higher, with all other variables held constant, consolidated loss after tax for the year would have been approximately RMB1,025,000 (2019: RMB1,226,000) higher, arising mainly as a result of higher interest income on bank deposits.

(c) Credit risk

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade and bills receivables) and from its financing activities, including deposits with banks. The Group's exposure to credit risk arising from cash and cash equivalents is limited because the counterparties are banks with high credit-rating assigned by international credit-rating agencies, for which the Group considers to have low credit risk.

Trade and other receivables

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer and therefore significant concentrations of credit risk primarily arise when the Group has significant exposure to individual customers. At the end of the reporting period, 30.56% (2019: 10.6%) and 51.68% (2019: 36.3%) of the total trade and other receivables was due from the Group's largest customer and the five largest customers respectively.

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

Customer credit risk is managed by each business unit subject to the Group's established policy, procedures and control relating to customer credit risk management. Individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are usually due within 180 days from the date of billing. Debtors with balances past due are requested to settle all outstanding balances before any further credit is granted. Normally, the Group does not obtain collateral from customers.

The Group measures allowance for impairment of trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience does not indicate significantly different loss patterns for different customer segments, the allowance for impairment of trade and bills receivables based on historical credit loss experience is not further distinguished between the Group's different customer bases.

The following table provides information about the Group's exposure to credit risk and ECLs for trade and bills receivables as at 31 December 2020:

	2020		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category I			
Within 6 months	3.0	5,350	161
After 6 months but within 1 year	10.0	440	44
After 1 year but within 2 years	25.0	529	132
After 2 years but within 3 years	50.0	244	122
After 3 years	100.0	337	337
Individually impaired	100.0	29,432	29,432
		36,332	30,228

	2020		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category II			
Within 6 months	3.0	1,082	32
After 6 months but within 1 year	10.0	446	45
After 1 year but within 2 years	50.0	2,239	1,119
After 2 years but within 3 years	90.0	1,107	997
After 3 years	100.0	613	613
Individually impaired	100.0	13,557	13,557
		19,044	16,363

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

	2020		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category III			
Within 6 months	5.0	5,495	274
After 6 months but within 1 year	10.0	1,438	144
After 1 year but within 2 years	35.0	2,343	820
After 2 years but within 3 years	90.0	5,624	5,062
After 3 years	100.0	2,110	2,110
Individually impaired	100.0	15,860	15,860
		32,870	24,270

	2020		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category IV			
Within 6 months	0.0	–	–
After 6 months but within 1 year	10.0	3,618	362
After 1 year but within 2 years	0.0	–	–
After 2 years but within 3 years	50.0	40	20
After 3 years	100.0	160	160
Individually impaired	100.0	4,469	4,469
		8,287	5,011

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

	2020		
	Expected loss rate %	**Gross carrying amount RMB'000**	**Allowance for impairment of trade and bills receivable RMB'000**
Risk Category V			
Within 6 months	**0.5**	**54,229**	**290**
After 6 months but within 1 year	**4.4**	**1,827**	**80**
After 1 year but within 2 years	**8.3**	**2,467**	**204**
After 2 years but within 3 years	**24.9**	**554**	**138**
After 3 years	**90.2**	**7,136**	**6,435**
Individually impaired	**100.0**	**379**	**379**
		66,592	**7,526**

The following table provides information about the Group's exposure to credit risk and ECLs for trade receivables as at 31 December 2019:

	2019		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category I			
Within 6 months	12.0	6,224	747
After 6 months but within 1 year	20.0	4,098	820
After 1 year but within 2 years	45.0	2,411	1,085
After 2 years but within 3 years	75.0	1,446	1,084
After 3 years	100.0	393	393
Individually impaired	100.0	305	305
		14,877	4,434

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

	2019		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category II			
Within 6 months	8.0	8,420	674
After 6 months but within 1 year	20.0	1,032	206
After 1 year but within 2 years	45.0	1,399	629
After 2 years but within 3 years	75.0	2,992	2,244
After 3 years	100.0	18	18
Individually impaired	100.0	8,658	8,658
		22,519	12,429

	2019		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category III			
Within 6 months	6.0	13,771	826
After 6 months but within 1 year	20.0	7,324	1,465
After 1 year but within 2 years	45.0	46,963	21,133
After 2 years but within 3 years	75.0	2,495	1,871
After 3 years	100.0	4,741	4,741
Individually impaired	100.0	2,235	2,235
		77,529	32,271

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

	2019		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category IV			
Within 6 months	0.0	–	–
After 6 months but within 1 year	0.0	–	–
After 1 year but within 2 years	0.0	–	–
After 2 years but within 3 years	50.0	160	80
After 3 years	0.0	–	–
Individually impaired	100.0	4,469	4,469
		4,629	4,549

	2019		
	Expected loss rate %	Gross carrying amount RMB'000	Allowance for impairment of trade and bills receivable RMB'000
Risk Category V			
Within 6 months	0.5	15,179	77
After 6 months but within 1 year	3.3	1,736	57
After 1 year but within 2 years	6.8	10,468	715
After 2 years but within 3 years	25.0	4,678	1,169
After 3 years	50.0	903	451
Individually impaired	100.0	16	16
		32,980	2,485

Expected loss rates are based on actual loss experience over the historical default data. These rates are adjusted to reflect differences between economic conditions during the year over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(c) Credit risk *(Continued)*

Trade and other receivables *(Continued)*

Movements in the allowance for impairment of trade receivables during the years are as follows:

	2020 RMB'000	2019 RMB'000
At 1 January	**56,168**	35,718
Allowances for impairment losses recognised for the year	**27,230**	20,450
At 31 December	**83,398**	56,168

Other receivables

	2020 RMB'000	2019 RMB'000
At 1 January	**1,733**	741
Impairment losses recognised for the year	**710**	992
Foreign currency exchange adjustment	**(43)**	–
At 31 December	**2,400**	1,733

6. FINANCIAL RISK MANAGEMENT *(Continued)*

(d) Liquidity risk

The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash to meet its liquidity requirements in the short and longer term.

The maturity analysis based on contractual undiscounted cash flows of the Group's non-derivative financial liabilities is as follows:

	Within 1 year or on demand RMB'000	Between 1 and 2 years RMB'000	Between 2 and 5 years RMB'000	Total RMB'000
At 31 December 2020				
Trade and other payables	**79,445**	**–**	**–**	**79,445**
Convertible bonds	**131,290**	**–**	**–**	**131,290**
Acquisition consideration note payables	**129,668**	**–**	**–**	**129,668**
Lease liabilities	**5,090**	**3,735**	**7,304**	**16,129**
	345,493	**3,735**	**7,304**	**356,532**
At 31 December 2019				
Trade and other payables	78,312	–	–	78,312
Convertible bonds	5,375	139,745	–	145,120
Acquisition consideration note payables	5,119	133,091	–	138,210
Lease liabilities	8,004	5,480	6,158	19,642
	96,810	278,316	6,158	381,284

(e) Categories of financial instruments at 31 December

	2020 RMB'000	2019 RMB'000
Financial assets:		
Financial assets measured at amortised cost	**216,956**	263,461
Financial liabilities:		
Financial liabilities at fair value through profit or loss	**119,076**	116,196
Financial liabilities measured at amortised cost	**212,154**	210,850

(f) Fair values

The carrying amounts of the Group's financial assets and financial liabilities as reflected in the consolidated statement of financial position approximate their respective fair values.

7. FAIR VALUE MEASUREMENTS

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following disclosures of fair value measurements use a fair value hierarchy that categorises into three levels the inputs to valuation techniques used to measure fair value:

Level 1 inputs: quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group can access at the measurement date.

Level 2 inputs: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs: unobservable inputs for the asset or liability.

During the years ended 31 December 2020 and 2019, there was no transfer between Level 2 and Level 3. The Group's policy is to recognise transfers into and transfers out of any of the three levels as of the date of the event or change in circumstances that caused the transfer.

The following table shows the carrying amounts and fair value of financial assets, including their levels in the fair value hierarchy. It does not include fair value information for financial assets not measured at fair value if the carrying amount is a reasonable approximation of fair value. Further, for the current period the fair value disclosure of lease liabilities is also not required.

(a) Disclosures of level in fair value hierarchy

Description	**Fair value measurements as at 31 December 2020 Level 3 RMB'000**
Recurring fair value measurements:	
Financial liabilities	
Convertible bonds	**119,076**

Description	Fair value measurements as at 31 December 2019 Level 3 RMB'000
Recurring fair value measurements:	
Financial liabilities	
Convertible bonds	116,196

7. FAIR VALUE MEASUREMENTS *(Continued)*

(b) Disclosure of valuation process used by the Group and valuation techniques and inputs used in fair value measurements at 31 December 2020:

The Group has a financial reporting team performing valuations for the financial instruments. The team reports directly to the financial director for these fair value measurements. Discussions of valuation processes and results are held between the financial director and the Board of Directors twice a year, to coincide with the reporting dates. The Group engages external valuation firms to perform valuations for its financial instruments where necessary.

For level 3 fair value measurement, the Group will normally engage external valuation experts with the recognised professional qualifications and recent experience to perform the valuations.

Level 3 fair value measurements

Description	Valuation technique	Unobservable inputs	Range 2020	2019	Effect on fair value for increase of inputs	Fair value 2020 RMB'000	2019 RMB'000
						Liabilities	
Convertible bonds	Option pricing model	Expected volatility	**44.4%**	50.3%	Increase	**119,076**	116,196
		Discounted rate	**17.5%**	19.2%	Increase		

During the two years, there were no changes in the valuation techniques used.

(c) Fair value (losses)/gains on financial instruments at fair value

	2020 RMB'000	2019 RMB'000
Change in fair value of contingent share consideration (note 32(a))	–	14,628
Change in fair value of contingent consideration notes payables (note 32(b))	–	(7,985)
Change in fair value of convertible bonds (note 33)	**(15,442)**	(1,008)
	(15,442)	5,635

8. REVENUE

The Group is principally engaged in the design, development and sale of power line communication ("**PLC**") products as well as the provision of relevant maintenance services in connection with the deployment and upgrades of AMR systems by power grid companies in the PRC and for a wide range of applications related to energy saving and environmental protection.

Upon the acquisition of Green Harmony Limited in August 2018, the Group is also engaged in the sale of software license, production safety products, construction contracts as well as the provision of software post-contract customer support services in connection with the SMIA applied in the area of maintenance and safety integrity system in the petroleum and petrochemicals industry.

8. REVENUE *(Continued)*

(a) Disaggregation of revenue

An analysis of the Group's revenue for the year is as follows:

	2020 RMB'000	2019 RMB'000
Revenue from contracts with customers within the scope of HKFRS 15 and recognised at a point in time		
Disaggregated by major products or service lines:		
AMR and other business		
— PLC Integrated circuits ("**ICs**")	**13,592**	32,224
— PLC Modules	**4,786**	27,164
— Collectors	**306**	1,818
— Other products	**20,400**	56,026
— AMR maintenance services	**15,614**	22,594
Sub-total of AMR and other business	**54,698**	139,826
SMIA business		
— Software license	**32,090**	41,205
— Production safety products	**22,496**	26,537
Sub-total of SMIA business	**54,586**	67,742
Revenue from contracts with customers within the scope of HKFRS 15 and recognised over time		
Disaggregated by major products or service lines:		
— Post-contract customer support service	**4,551**	11,007
— Construction contracts	**98,899**	–
Sub-total of SMIA business	**103,450**	11,007
Total	**212,734**	218,575

8. REVENUE (Continued)

(b) Transaction price allocated to the remaining performance obligation for contracts with customers

The transaction price allocated to the remaining performance obligations (unsatisfied or partially unsatisfied) as at 31 December 2020 and the expected timing of recognising revenue as follows:

	Software license		Post-contract customer support service	
	2020	2019	**2020**	2019
	RMB'000	RMB'000	**RMB'000**	RMB'000
Within one year	**22,766**	30,940	**2,668**	3,853
More than one year but not more than two years	**18,679**	22,766	**2,075**	2,668
More than two years	**15,566**	34,245	**1,730**	3,805
	57,011	87,951	**6,473**	10,326

The Group has applied the practical expedient in paragraph 121 of HKFRS 15 to its sales contracts for software license and post-contract customer support service such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the contracts for software license and post-contract customer support service that had an original expected duration of between one to four years.

9. OTHER INCOME, GAINS/(LOSSES)

	2020	2019
	RMB'000	RMB'000
Interest income from bank deposits	**2,523**	1,829
Government grant		
— Unconditional subsidies (note (a))	**2,811**	8,181
— Conditional subsidies (note 32) (note (b))	**2,005**	1,900
Loss on disposals of property, plant and equipment	**(45)**	(281)
Net foreign exchange gains/(loss)	**152**	(663)
Rental income	**211**	–
COVID-19 rental concession (note 20)	**248**	–
Gain on lease modification	**134**	–
Others	**13**	398
	8,052	11,364

Notes:

(a) Unconditional government grants mainly represent value-added tax ("**VAT**") refund on self-developed software embedded in AMR and smart energy management products in accordance with the relevant tax law in the PRC.

(b) During the year, the Group recognised government grants of approximately RMB156,000 (equivalent to HK$180,000) in respect of COVID-19 related subsidies, of which approximately RMB156,000 (equivalent to HK$180,000) relates to Employment Support Scheme provided by the Hong Kong government.

10. SEGMENT INFORMATION

The Group manages its businesses by business lines. Segmental information has been presented in a manner consistent with the way in which information is reported internally to the Group's most senior executive management for the purposes of resources allocation and performance assessment.

The Group has two reportable operating segments, which are (a) AMR and other business; and (b) SMIA business.

The Group's operating and reportable segments are as follows:

AMR and other business	This segment includes design, development and sale of power-line communication products, energy saving and environmental protection products and solutions used in streetlight control, building energy management, photovoltaic power management, etc. and providing maintenance services in connection with the deployment and upgrading of AMR systems by power grid companies in the PRC.
SMIA business	This segment includes sales of software license, production safety products, construction contracts as well as the provision of software post-contract customer support services in connection with the smart manufacturing and industrial automation system applied in the petroleum and petrochemicals industry.

The Group's reportable segments are strategic business units that offer different products and services. They are managed separately because each business requires different technology and marketing strategies.

The accounting policies of the operating segments are the same as those described in note 4 to the consolidated financial statements. Segment profits or losses do not include unallocated general and administrative expenses, share of result of an associate, other income, gains/(losses), fair value (losses)/gains on financial instruments at fair value, finance costs, allowance for impairment losses of financial assets, net and income tax credit.

No segment assets or liabilities information or other segment information is provided as the Group's most senior executive management does not review this information for the purpose of resource allocation and assessment of segment performance.

10. SEGMENT INFORMATION *(Continued)*

(a) Information about operating segment profit or loss

The segment information provided to the Group's most senior executive management for the reportable segments for the years ended 31 December 2020 and 2019 is as follows:

Year ended 31 December 2020	**AMR and other business RMB'000**	**SMIA business RMB'000**	**Total RMB'000**
Revenue	**54,698**	**158,036**	**212,734**
Cost of Sales	**(36,510)**	**(142,690)**	**(179,200)**
Sales and marketing expenses	**(10,967)**	**(8,164)**	**(19,131)**
Research and development expenses	**(18,119)**	**(3,593)**	**(21,712)**
Reportable segment results	**(10,898)**	**3,589**	**(7,309)**
Amortisation expenses of intangible assets identified in acquisitions	**5,342**	**27,174**	**32,516**
Impairment of intangible assets identified in acquisitions	**4,708**	**–**	**4,708**
Impairment losses of goodwill	**23,256**	**–**	**23,256**

Year ended 31 December 2019	AMR and other business RMB'000	SMIA business RMB'000	Total RMB'000
Revenue	139,826	78,749	218,575
Cost of Sales	(100,787)	(53,013)	(153,800)
Sales and marketing expenses	(23,268)	(7,879)	(31,147)
Research and development expenses	(22,118)	(9,521)	(31,639)
Reportable segment results	(6,347)	8,336	1,989
Amortisation expenses of intangible assets identified in acquisitions	5,342	30,561	35,903
Impairment losses of goodwill	14,680	156,493	171,173

10. SEGMENT INFORMATION (Continued)

(b) Reconciliations of segment revenue and profit or loss

	2020 RMB'000	2019 RMB'000
Reportable segment results	**(7,309)**	1,989
Other income, gains/(losses)	**8,052**	11,364
General and administrative expenses	**(77,184)**	(73,703)
Finance costs	**(9,928)**	(3,245)
Share of results of an associate	**25**	(50)
Allowance for impairment losses of financial assets, net	**(27,940)**	(21,442)
Impairment losses of goodwill	**(23,256)**	(171,173)
Fair value (losses)/gains on financial instruments at fair value	**(15,442)**	5,635
Loss before taxation	**(152,982)**	(250,625)

No geographical segment information is presented as all the sales and operating losses of the Group are derived within the PRC and all the operating assets of the Group are located in the PRC, which is considered as one geographic location with similar risks and returns.

(c) Revenue from major customers

Revenue from customers contributing over 10% of the total revenue of the Group is as follows:

	2020 RMB'000	2019 RMB'000
SMIA business		
— Customer A	**88,228**	–
— Customer B	**34,792**	41,947
	123,020	41,947

11. FINANCE COSTS

	2020 RMB'000	2019 RMB'000
Interest expenses on promissory notes (note 32)	**9,181**	2,456
Interest expenses on lease liabilities	**747**	726
Others	**–**	63
	9,928	3,245

12. INCOME TAX CREDIT

Income tax has been recognised in profit or loss as follows:

	2020 RMB'000	2019 RMB'000
Current tax		
Provision for the year	**1,238**	1,636
Over-provision in prior years	**(1,670)**	(605)
Reversal of provision for permanent establishment risk	**(3,586)**	(1,290)
	(4,018)	(259)
Deferred tax (note 36)	**(22,930)**	(13,553)
	(26,948)	(13,812)

Under the two-tiered Profits Tax regime, the first HK$2 million of profits of the qualifying group entity established in Hong Kong will be taxed at 8.25%, and profits above that amount will be subject to the tax rate of 16.5%. The profits of the group entities not qualifying for the two-tiered Profit Tax rate regime will continue to be taxed at a rate of 16.5%.

The Group's PRC subsidiaries are subject to the PRC corporate income tax rate of 25% except as follows. Risecomm Microelectronics (Shenzhen) Co., Ltd. ("**Risecomm WOFE**"), a PRC subsidiary of the Group, was entitled to the preferential tax rate of 15% from years 2019 to 2021, being accredited as a High and New Technology Enterprise according to the PRC Corporate Income Tax Law and its relevant regulations. As Risecomm WFOE has renewed the qualification of High and New Technology Enterprise and approved on 9 December 2019 with an effective period of three years starting from 2019, and therefore the tax rate used to recognise deferred tax assets and liabilities as at 31 December 2020 was 15%.

Pursuant to the rules and regulations of the Cayman Islands and Seychelles, the Group is not subject to any income tax in the Cayman Islands and Seychelles.

Under the PRC Corporate Income Tax Law and its relevant regulations, 75% additional tax deduction is allowed for qualified research and development costs for year 2020 (2019: 75%).

Tax charge on profits assessable elsewhere have been calculated at the rates of tax prevailing in the countries in which the Group operates, based on existing legislation, interpretation and practices in respect thereof.

12. INCOME TAX CREDIT *(Continued)*

The corporate income tax provision related to PRC permanent establishment tax risk arising was reversed as at 31 December 2020 as the related subsidiary of the Group has ceased to create a permanent establishment risk in the PRC and the relevant PRC permanent establishment tax risk has become remote. As a result, tax provision of RMB3,586,000 was released in the year end 31 December 2020 (2019: RMB1,290,000).

The reconciliation between the income tax credit and the product of loss before tax multiplied by the respective applicable tax rates is as follows:

	2020 **RMB'000**	2019 RMB'000
Loss before tax	**(152,982)**	(250,625)
Tax at the respective applicable tax rates	**(22,731)**	(19,319)
Tax effect of preferential tax rate	**2,829**	1,965
Tax effect of expenses that is not deductible	**661**	396
Additional deduction for qualified research and development costs	**(1,833)**	(2,245)
Tax effect of non-taxable incomes	**(26)**	–
Tax effect of other temporary differences not recognised	**582**	3,729
Tax effect of unrecognised tax losses utilised	**(154)**	(444)
Tax effect of unused tax losses not recognised in prior year	**(1,116)**	–
Tax effect of tax losses not recognised	**96**	1,630
Effect on deferred tax balance resulting from a change in tax rate	**-**	6,071
Over-provision in prior years	**(1,670)**	(605)
Reversal of withholding tax	**-**	(3,700)
Reversal of provision for permanent establishment tax risk	**(3,586)**	(1,290)
Income tax credit	**(26,948)**	(13,812)

13. LOSS FOR THE YEAR

The Group's loss for the year is stated after charging/(crediting) the following:

	2020 **RMB'000**	2019 RMB'000
Amortisation of intangible assets (note 22)	**34,204**	37,570
Cost of inventories sold	**41,476**	92,335
Cost of AMR maintenance services	**9,009**	16,385
Cost of software license sold	**26,424**	29,686
Cost of post-contract customer support	**3,323**	9,161
Cost of construction project	**96,849**	–
Depreciation of property, plant and equipment	**5,034**	6,035
Depreciation of right-of-use asset (note 20)	**7,414**	6,607
Loss on disposals of property, plant and equipment (note 9)	**45**	281
Gain on lease modification (note 9)	**(134)**	–
COVID-19 rental concession (note 9)	**(248)**	–
Staff costs (note 14)	**40,532**	49,533
— Salaries, bonuses and allowances	**36,881**	42,956
— Retirement benefit scheme contributions	**1,347**	3,199
— Share-based payments	**2,304**	3,378
Research and development expenses	**21,712**	31,639
Auditor's remuneration	**2,080**	3,468
Allowance for impairment losses of financial assets, net	**27,940**	21,442
Write-down of inventories	**2,119**	7,481
Impairment losses of goodwill (note 21)	**23,256**	171,173
Impairment losses of intangible assets (note 22)	**4,708**	–
Impairment losses of investments in an associate (note 24)	**379**	–

Cost of inventories sold includes staff costs, depreciation of property, plant and equipment, amortisation of intangible assets and operating lease charges of approximately RMB2,777,000 (2019: RMB3,570,000) which are included in the amounts disclosed separately.

Research and development expenses includes staff costs, professional fees, depreciation of property, plant and equipment, depreciation of right-of-use assets, amortisation of intangible assets and materials consumed of approximately RMB17,879,000 (2019: RMB28,713,000) which are included in the amounts disclosed separately.

14. EMPLOYEE BENEFITS EXPENSE

	2020 RMB'000	2019 RMB'000
Employee benefits expense:		
Salaries, bonuses and allowances	**36,881**	42,956
Retirement benefit scheme contributions	**1,347**	3,199
Share-based payments (note 39)	**2,304**	3,378
	40,532	49,533

(a) Five highest paid individuals

The five highest paid individuals in the Group during the year included three (2019: three) Directors whose Directors' emoluments are reflected in the analysis presented in note 15(a). The emoluments of the remaining two individual (2019: two) are set out below:

	2020 RMB'000	2019 RMB'000
Salaries and allowances	**1,019**	2,083
Discretionary bonuses	**600**	300
Share-based payments	**–**	102
Retirement benefit scheme contributions	**56**	81
	1,675	2,566

The emoluments fell within the following bands:

	Number of individuals 2020	 2019
HK$ nil to HK$1,000,000 (equivalent to RMB nil to RMB889,000)	**2**	1
HK$1,000,001 to HK$2,000,000 (equivalent to RMB889,001 to RMB1,779,000)	**–**	1
	2	2

During the years, no emoluments were paid by the Group to the five highest paid individuals as an inducement to join or upon joining the Group, or as compensation for loss of office, whether directly or indirectly, subsisting at the end of the year or any time during the year.

15. BENEFITS AND INTERESTS OF DIRECTORS

(a) Directors' emoluments

The emoluments of every Director is set out below:

	Emoluments paid or receivable in respect of a person's services as a Director, whether of the Company or its subsidiary undertaking					
	Fees RMB'000	Salaries and allowances RMB'000	Discretionary bonuses RMB'000	Employer's contribution to a retirement benefit scheme RMB'000	Equity-settled share option expenses RMB'000	Total RMB'000
Executive Directors						
Mr. Yue Jingxing	104	1,137	31	–	–	1,272
Mr. Lai Wai Leung, Alfred (note (a))	250	–	–	–	–	250
Mr. Tang Andong	104	628	400	28	–	1,160
Non-executive Directors						
Mr. Cheung Fan	625	–	–	–	–	625
Mr. Zhou, Francis Bingrong (note (b))	104	–	–	–	–	104
Mr. Wang Shiguang	104	971	–	4	–	1,079
Ms. Pan Hong (note (c))	54	–	–	–	–	54
Independent Non-executive Directors						
Mr. Ong King Keung	208	–	–	–	–	208
Ms. Lo Wan Man	104	–	–	–	–	104
Mr. Zou Heqiang	104	–	–	–	–	104
Total for the year ended 31 December 2020	1,761	2,736	431	32	–	4,960

15. BENEFITS AND INTERESTS OF DIRECTORS *(Continued)*

(a) Directors' emoluments *(Continued)*

	Emoluments paid or receivable in respect of a person's services as a Director, whether of the Company or its subsidiary undertaking					
	Fees RMB'000	Salaries and allowances RMB'000	Discretionary bonuses RMB'000	Employer's contribution to a retirement benefit scheme RMB'000	Equity-settled share option expenses RMB'000	Total RMB'000
Executive Directors						
Mr. Yue Jingxing	106	1,157	–	–	–	1263
Mr. Lau Wai Leung, Alfred (note (a))	509	–	–	–	–	509
Mr. Tang Andong (note (d))	44	707	523	192	–	1,466
Mr. Zhang Youyun (note (e))	62	316	–	19	–	397
Non-executive Directors						
Mr. Wang Shiguang	106	938	–	26	–	1,070
Mr. Cheung Fan	225	–	–	–	–	225
Mr. Zhou, Francis Bingrong (note (b))	84	–	–	–	–	84
Mr. Yang Luokui (note (f))	45	–	–	–	–	45
Independent Non-executive Directors						
Mr. Ong King Keung	213	–	–	–	–	213
Ms. Lo Wan Man (note (g))	62	–	–	–	–	62
Mr. Zou Heqiang (note (g))	62	–	–	–	–	62
Mr. Chen Yong (note (h))	89	–	–	–	–	89
Mr. Pan Song (note (h))	89	–	–	–	–	89
Total for the year ended 31 December 2019	1,696	3,118	523	237	–	5,574

Notes:

(a) Mr. Lau Wai Leung, Alfred was a Non-Executive Director during the year 2018 and the period from 1 January 2019 to 20 January 2019. On 21 January 2019, Mr. Lau Wai Leung, Alfred was re-designated as an Executive Director. The remuneration of Mr. Lau Wai Leung, Alfred represented his capacity as both Executive Director and Non-Executive Director of the Company during the year ended 31 December 2019. Mr. Lau Wai Leung, Alfred was resigned as an Executive Directors on 24 June 2020 and appointed as an Executive Directors on 19 January 2021.

(b) Mr. Zhou, Francis Bingrong was an Executive Director during the period from 21 August 2018 to 7 January 2019. On 8 January 2019, Mr. Zhou, Francis Bingrong was re-designated as a Non-Executive Director and then resigned on 10 June 2019. On 12 November 2019, Mr. Zhou, Francis Bingrong was re-appointed as a Non-Executive Director by the Company. Mr. Zhou, Francis Bingrong resigned as an Non-executive Directors on 19 January 2021.

(c) Ms. Pan Hong was appointed as an Non-executive Directors on 24 June 2020.

(d) Mr. Tang Andong was appointed as an Executive Director on 31 July 2019.

(e) Mr. Zhang Youyun was resigned as an Executive Director on 31 July 2019.

(f) Mr. Yang Luokui was appointed and resigned as Non-executive Directors on 10 June 2019 and 12 November 2019 respectively.

(g) Ms. Lo Wan Man and Mr. Zou Heqiang were appointed as Independent Non-executive Directors on 29 May 2019.

(h) Mr. Chen Yong and Mr. Pan Song were retired as Independent Non-executive Directors on 23 May 2019.

15. BENEFITS AND INTERESTS OF DIRECTORS *(Continued)*

(a) Directors' emoluments *(Continued)*

During the years, no emoluments were paid by the Group to the Directors as an inducement to join or upon joining the Group, or as compensation for loss of office, whether directly or indirectly, subsisting at the end of the year or any time during the year.

Neither the chief executive nor any of the directors waived any emoluments during the year (2019: RMB nil).

(b) Directors' material interests in transactions, arrangements or contracts

No significant transactions, arrangements and contracts in relation to the Group's business to which the Company was a party and in which a director of the Company and the director's connected party had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year.

16. RETIREMENT BENEFIT SCHEMES CONTRIBUTIONS

The Group operates a mandatory provident fund scheme (the "**MPF Scheme**") under the Hong Kong Mandatory Provident Fund Schemes Ordinance for all qualifying employees in Hong Kong. The Group's contributions to the MPF Scheme are calculated at 5% of the salaries and wages subject to a monthly maximum amount of contribution of HK$1,500 per employee and vest fully with employees when contributed into the MPF Scheme.

The employees of the Group's subsidiaries established in the PRC are members of a central pension scheme operated by the local municipal government. These subsidiaries are required to contribute certain percentage of the employees' basic salaries and wages to the central pension scheme to fund the retirement benefits. The local municipal government undertakes to assume the retirement benefits obligations of all existing and future retired employees of these subsidiaries. The only obligation of these subsidiaries with respect to the central pension scheme is to meet the required contributions under the scheme.

17. DIVIDENDS

The Board of Directors does not recommend the payment of any dividend in respect of the years ended 31 December 2020 and 2019.

18. LOSS PER SHARE

The calculation of the basic and diluted loss per share is based on the following:

	2020 **RMB'000**	2019 RMB'000
Loss		
Loss for the year for the purpose of calculating basic and diluted loss per share	**(126,034)**	(236,813)

	2020 **'000**	2019 '000
Number of shares		
Weighted average number of ordinary shares for the purpose of calculating basic and diluted loss per share	**986,619**	859,319

18. LOSS PER SHARE *(Continued)*

The effect of all potential ordinary shares are anti-dilutive for the years ended 31 December 2020 and 2019 due to loss making for the years ended 31 December 2020 and 2019.

The computation of diluted loss per share for the year ended 31 December 2020 does not assume the conversion of the Company's convertible bonds since its exercise had anti-dilutive effect that would result in a decrease in loss per share for the year ended 31 December 2020.

The computation of diluted loss per share did not assume the exercise of the Company's outstanding share options as the exercise price of those share options was higher than the average market price for shares for the years ended 31 December 2020 and 2019.

The weighted average numbers of ordinary shares used as denominators in calculating the basic and diluted loss per share are the same.

19. PROPERTY, PLANT AND EQUIPMENT

	Plant and buildings RMB'000	Machinery and equipment RMB'000	Office and other equipment RMB'000	Motor vehicles RMB'000	Leasehold improvements RMB'000	Construction in process RMB'000	Total RMB'000
Cost							
At 1 January 2019	20,755	21,365	7,377	1,360	3,296	622	54,775
Additions	–	355	413	982	2,339	–	4,089
Disposals	–	(263)	(1,428)	–	–	–	(1,691)
Reclassification	–	–	–	–	622	(622)	–
At 31 December 2019 and 1 January 2020	**20,755**	**21,457**	**6,362**	**2,342**	**6,257**	**–**	**57,173**
Additions	**–**	**401**	**220**	**174**	**186**	**–**	**981**
Disposals	**–**	**(8,133)**	**(418)**	**(265)**	**(2,207)**	**–**	**(11,023)**
At 31 December 2020	**20,755**	**13,725**	**6,164**	**2,251**	**4,236**	**–**	**47,131**
Accumulated depreciation							
At 1 January 2019	2,104	14,647	3,890	686	2,571	–	23,898
Charge for the year	986	2,286	1,212	205	1,346	–	6,035
Disposals	–	(160)	(1,139)	–	–	–	(1,299)
At 31 December 2019 and 1 January 2020	**3,090**	**16,773**	**3,963**	**891**	**3,917**	**–**	**28,634**
Charge for the year	**986**	**2,047**	**981**	**406**	**614**	**–**	**5,034**
Disposals	**–**	**(8,132)**	**(386)**	**(214)**	**(2,135)**	**–**	**(10,867)**
At 31 December 2020	**4,076**	**10,688**	**4,558**	**1,083**	**2,396**	**–**	**22,801**
Carrying amount							
At 31 December 2020	**16,679**	**3,037**	**1,606**	**1,168**	**1,840**	**–**	**24,330**
At 31 December 2019	17,665	4,684	2,399	1,451	2,340	–	28,539

20. RIGHT-OF-USE ASSETS

	Leased properties	
	2020	2019
	RMB'000	RMB'000
At 1 January	**18,003**	12,606
Addition for the year	**6,456**	12,028
Depreciation for the year	**(7,414)**	(6,607)
Exchange differences	**(164)**	(24)
Disposal for the year	**(2,663)**	–
At 31 December	**14,218**	18,003

During the year ended 31 December 2020, the Group disposed of a right-of-use asset under an early termination of a lease for an office premise in the PRC, with a net carrying value of RMB2,663,000. (2019: RMB nil).

Lease liabilities of RMB14,726,000 (2019: RMB18,157,000) are recognised with related right-of-use assets of RMB14,218,000 as at 31 December 2020 (2019: RMB18,003,000). The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor. Leased assets may not be used as security for borrowing purposes.

	2020	2019
	RMB'000	RMB'000
Depreciation expenses on right-of-use assets	**7,414**	6,607
Interest expense on lease liabilities (included in finance cost)	**747**	726
Expenses relating to short-term lease (included in selling and marketing expenses, general and administrative expenses, research and development expenses and cost of sales)	**1,984**	3,203
COVID-19 Related rent concessions received	**(248)**	–
Gain on lease modification	**(134)**	–

Details of total cash outflow for leases is set out in note 40(b).

As disclosed in note 3(a), the Group has early adopted the Amendments to HKFRS 16: COVID-19 Related Rent Concessions, and applied the practical expedient introduced by the Amendments to all eligible rent concessions received by the Group during the period.

Lease arrangements of office premises were negotiated on an individual basis and contain a wide range of different terms and conditions including lease terms ranging from 1 to 5 years. In determining the lease terms 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.

In addition, the Group owns several industrial buildings where its manufacturing facilities are primarily located and office buildings. The Group is the registered owner of these property interests, including the underlying leasehold lands. Lump sum payments were made upfront to acquire these property interests.

21. GOODWILL

	2020 RMB'000	2019 RMB'000
Cost		
At 1 January and 31 December	**215,147**	215,147
Accumulated impairment losses		
At 1 January	**(171,173)**	–
Impairment losses recognised for the year	**(23,256)**	(171,173)
At 31 December	**(194,429)**	(171,173)
Carrying amount		
At 31 December	**20,718**	43,974

Goodwill acquired in a business combination is allocated, at acquisition, to the CGUs that are expected to benefit from that business combination. The net carrying amount of goodwill is allocated as follows:

	2020 RMB'000	2019 RMB'000
AMR and other business (note (a))	**–**	23,256
SMIA business (note (b))	**20,718**	20,718
	20,718	43,974

In addition to goodwill, property, plant and equipment, right-of-use assets and other intangible assets that generate cash flows together with the related goodwill are also included in the respective CGU for the purpose of impairment assessment.

(a) AMR and other business

As at 31 December 2020, the recoverable amount has been determined based on value-in-use calculation. Due to the unexpected delay in obtaining the registration certificate of broadband technology, the revenue and profit of AMR and other business segment has decreased significantly, the Group has revised its cash flow forecasts for this CGU. The calculation of value-in-use used cash flow projections based on financial budgets approved by the Board of Directors covering a four-year period. Cash flows beyond the four-year period are extrapolated using estimated weighted average growth rate of 2.6% (2019: 3%) which does not exceed the long-term average growth rate for the business in which the respective CGU operate. The cash flows are discounted using pre-tax discount rate of 20.44% (2019: 20.16%), which reflect specific risks relating to the relevant business. Other key assumptions for the value-in-use calculation relate to the expected timing and amount of revenue and gross profit margin to be generated from the Group's PLC based broadband AMR products for the four-year budget period, which are based on the Group's historical market share and adjusted by recent market development based on available external sources of information.

As a result, impairment losses of RMB23,256,000 (2019:RMB14,680,000) for goodwill has been recorded during the year, and the carrying amount of the CGU in relation to AMR and other business has been reduced to its recoverable amount of RMB161,883,000 (2019: RMB243,751,000). Any adverse change in the assumptions used in the calculation of the recoverable amount would result in further impairment losses.

21. GOODWILL (Continued)

(b) SMIA business

As at 31 December 2020, the recoverable amount has been determined based on value-in-use calculation. The calculation of value-in-use used cash flow projections based on financial budgets approved by the Board of Directors covering a five-year period. Cash flows beyond the five-year period are extrapolated using estimated weighted average growth rate of 2.6% (2019: 3%) which does not exceed the long-term average growth rate for the business in which the CGU operate. The cash flows are discounted using pre-tax discount rate of 23.04% (2019: 23.96%), which reflect specific risks relating to the relevant business. Other key assumptions for the value-in-use calculation relate to revenue growth rate and gross profit margin for the five-year budget period, which take into account the CGU's historical performance, existing backlog contracts, pipelines and the management's business development plan built upon industry trends.

As a result, impairment losses of RMB nil (2019: RMB156,493,000) for goodwill has been recorded during the year, and the carrying amount of the CGU in relation to SMIA business has been reduced to its recoverable amount of RMB232,338,000 (2019: RMB208,428,000).

In SMIA business segment, the recoverable amount calculated based on value in use exceeded carrying value by approximately RMB19,647,000. The pre-tax rates used to discount the forecast cash flows of SMIA CGU change from 23.04% to 25.00%, would remove the remaining headroom.

22. INTANGIBLE ASSETS

	Software and others RMB'000	Capitalised development costs RMB'000	Customer relationships RMB'000	Non-compete undertakings RMB'000	Unfulfilled contracts RMB'000	Total RMB'000
Cost						
At 1 January 2019	10,907	9,323	99,380	100,147	22,264	242,021
Additions	953	1,706	–	–	–	2,659
At 31 December 2019 and 1 January 2020 and 31 December 2020	**11,860**	**11,029**	**99,380**	**100,147**	**22,264**	**244,680**
Accumulated amortisation and impairment losses						
At 1 January 2019	6,235	–	5,875	5,949	8,599	26,658
Amortisation for the year	1,667	–	12,652	14,726	8,525	37,570
At 31 December 2019 and 1 January 2020	**7,902**	**–**	**18,527**	**20,675**	**17,124**	**64,228**
Amortisation for the year	**1,688**	**–**	**12,651**	**14,725**	**5,140**	**34,204**
Impairment losses for the year	**–**	**–**	**1,292**	**3,416**	**–**	**4,708**
At 31 December 2020	**9,590**	**–**	**32,470**	**38,816**	**22,264**	**103,140**
Carrying amount						
At 31 December 2020	**2,270**	**11,029**	**66,910**	**61,331**	**–**	**141,540**
At 31 December 2019	3,958	11,029	80,853	79,472	5,140	180,452

22. INTANGIBLE ASSETS *(Continued)*

The average remaining amortisation periods of the software and others, customer relationships,non-compete undertakings and unfulfilled contracts are nil to 9 years (2019: nil to 10 years), nil to 8 years (2019: nil to 9 years), 2 to 5 years (2019: 3 to 6 years) and nil year (2019: 1 year) respectively.

The Group carried out reviews of the recoverable amount of its customer relationships and non-compete undertakings in 2020, having regard to the market conditions of the Group's products. These assets are used in the Group's AMR and other business segment. The review led to the recognition of an impairment losses of RMB1,292,000 and RMB3,416,000 for customer relationships and non-compete undertakings respectively, and have been recognised in profit or loss. The recoverable amount of AMR and other business is disclosed in note 21 to the consolidated financial statement.

23. INVESTMENTS IN SUBSIDIARIES

Particulars of the Group's major subsidiaries at 31 December 2020 and 2019 are set out as follows:

Name	Place of incorporation or registration/Type of legal entity	Particular of issued share capital	Percentage of ownership interest/ voting power/profit sharing 2020	2019	Principal activities/ Place of operation
Directly held by the Company					
Risecomm Co. Ltd.	Cayman Islands/ Limited liability company	Ordinary shares US$18,128.22	**100%**	100%	Dormant
Harvest Year Global Limited	Seychelles/Limited liability company	Ordinary shares US$1	**100%**	100%	Investment holding/ Hong Kong
Prime Key Holdings Limited	Seychelles/Limited liability company	Ordinary shares US$1	**100%**	100%	Investment holding/ Hong Kong
Green Harmony Limited	Seychelles/Limited liability company	Ordinary shares US$1	**100%**	100%	Investment holding/ Seychelles
Indirectly held by the Company					
Risecomm (HK) Technology Co. Limited	Hong Kong/Limited liability company	Ordinary shares HK$1	**100%**	100%	Trading and research and development/ Hong Kong
Risecomm (HK) Holding Co. Limited	Hong Kong/Limited liability company	Ordinary shares HK$1	**100%**	100%	Investment holding/ Hong Kong
Risecomm Microelectronics (Shenzhen) Co., Ltd.*	the PRC/wholly foreign owned enterprise	Ordinary shares US$17,500,000	**100%**	100%	Manufacturing and sales of AMR products/the PRC

23. INVESTMENTS IN SUBSIDIARIES *(Continued)*

Name	Place of incorporation or registration/Type of legal entity	Particular of issued share capital	Percentage of ownership interest/voting power/profit sharing 2020	2019	Principal activities/ Place of operation
Indirectly held by the Company *(Continued)*					
Beijing Risecomm Communication Technology Company Limited*	the PRC/Limited liability company	Ordinary shares RMB3,000,000	**100%**	100%	Sales and marketing/ the PRC
Wuxi Risecomm Communication Technology Company Limited*	the PRC/Limited liability company	Ordinary shares RMB3,100,000	**100%**	100%	Research and development/ the PRC
North Mountain Information Technology Company Limited	Hong Kong/Limited liability company	Ordinary shares HK$10,000	**100%**	100%	Investment holding/ Hong Kong
North Mountain Power Technology (Beijing) Co., Ltd*	the PRC/wholly foreign owned enterprise	Ordinary shares RMB50,000,000	**100%**	100%	Sales and marketing/ the PRC
Hongten Technology Limited	Hong Kong/Limited liability company	Ordinary shares HK$10,000	**100%**	100%	Investment holding/ Hong Kong
Beijing Hongteng Weitong Technology Co.,Ltd*	the PRC/wholly foreign owned enterprise	Ordinary shares RMB32,244,307.16	**100%**	100%	SMIA business and construction/ the PRC
Beijing Jiangxinchuangda Technology Co.,Ltd*	the PRC/Limited liability company	Ordinary shares RMB2,000,000	**100%**	100%	SMIA business/ the PRC
Beijing Tongyong Chuangweishi Technology Development Co.,Ltd*	the PRC/Limited liability company	Ordinary shares RMB10,010,000	**100%**	100%	Dormant

Notes:

* The official name of the company is in Chinese. The English translation of the company name is for reference only.

24. INVESTMENTS IN AN ASSOCIATE

	2020 RMB'000	2019 RMB'000
Unlisted investments:		
Share of net assets	**421**	396
Accumulated impairment losses	**(379)**	–
	42	396

Details of the Group's associate at 31 December 2020 and 2019 are as follows:

Name	Place of incorporation/ registration	Particular of issued share capital	Percentage of ownership interest/ voting power/ profit sharing 2020	2019	Principal activities
Risecomm (Beijing) Technology Company Limited.* ("**Risecomm BTCL**")	The PRC	RMB2,000,000	**50%**	50%	Research and development

Notes:

* The official name of the company is in Chinese. The English translation of the company name is for reference only.

The Group holds 50% of the voting power of Risecomm BTCL. However, under a shareholders' agreement, the other shareholder controls the composition of the board of directors of Risecomm BTCL and has control over Risecomm BTCL. The directors of the Company consider that the Group does have significant influence over Risecomm BTCL and it is therefore classified as an associate of the Group.

The following table shows information on the associate that is immaterial to the Group and accounted for using the equity method in the consolidated financial statements.

	2020 RMB'000	2019 RMB'000
At 31 December:		
Carrying amounts of interests	**42**	396
Year ended 31 December:		
Total comprehensive income/(loss)	**25**	(50)
Impairment losses of investment in an associate	**(379)**	–

As at 31 December 2020, the cash and cash equivalents of the Group's associate in the PRC denominated in RMB amounted to RMB37,000 (2019:RMB22,000). Conversion of RMB into foreign currencies is subject to the PRC's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations.

The Group recognised impairment loss of approximately RMB379,000 for the year ended 31 December 2020 on its interests in an associate.

25. INVENTORIES

	2020 RMB'000	2019 RMB'000
Raw materials	**22,429**	17,370
Work in progress	**1,530**	2,233
Finished goods	**21,334**	27,590
	45,293	47,193
Allowance for impairment of inventories	**(22,792)**	(21,496)
	22,501	25,697

26. CONTRACT COSTS

Contract costs capitalised as at 31 December 2020 and 2019 relate to the costs to fulfil a contract with a customer. Contract costs are recognised as part of "cost of sales" in the statement of profit or loss in the period in which revenue is recognised.

The amount of capitalised contract costs recognised in profit or loss during the year was RMB29,120,000 (2019: RMB7,548,000). The amount of capitalised contract costs is expected to be recovered within one year.

27. TRADE AND OTHER RECEIVABLES

	2020 RMB'000	2019 RMB'000
Trade receivables	**163,125**	152,534
Bills receivable	**9,211**	9,951
Allowance for impairment losses of trade receivables	**(83,398)**	(56,168)
	88,938	106,317
Prepayments	**36,055**	7,949
Income tax recoverable	**243**	242
Other receivables	**8,749**	13,441
Allowance for impairment losses of other receivables	**(2,400)**	(1,733)
	42,647	19,899
Total trade and other receivables	**131,585**	126,216

The Group generally allows an average credit period of 180 days (2019: 180 days) for its customers. Each customer has a maximum credit limit. The Group seeks to maintain strict control over its outstanding receivables. Overdue balances are reviewed regularly by the Directors.

27. TRADE AND OTHER RECEIVABLES (Continued)

The aging analysis of trade and bills receivables, net of allowance for impairment of trade and bills receivables, presented based on the invoice dates is as follows:

	2020 **RMB'000**	2019 RMB'000
Within 6 months	**74,610**	51,221
After 6 months but within 1 year	**7,094**	11,642
Over 1 year	**7,234**	43,454
	88,938	106,317

The carrying amounts of the Group's trade receivables are mainly denominated in RMB.

28. BANK AND CASH BALANCES

Bank and cash balances comprise cash held by the Group and short-term deposits with an original maturity of three months or less. The balances are mainly denominated in RMB.

The Group's restricted cash represented guarantee deposit pledged to tenderer to secure the submission of tender. The pledged as at 31 December 2020 amounted to RMB nil (2019: RMB326,000).

As at 31 December 2020, the bank and cash balances of the Group denominated in RMB amounted to RMB117,268,000 (2019: RMB127,477,000). Conversion of RMB into foreign currencies is subject to the PRC's Foreign Exchange Control Regulations and Administration of Settlement, Sale and Payment of Foreign Exchange Regulations.

29. SHARE CAPITAL

	2020		2019	
	Number of shares '000	**HK$'000**	Number of shares '000	HK$'000
Authorised:				
Ordinary shares of HK$0.0001 each At 31 December	**10,000,000**	**1,000**	10,000,000	1,000
Ordinary shares, issued and fully paid:				
At 1 January	**986,619**	**99**	811,247	81
Shares issued under share option scheme (note (a))	**–**	**–**	11,437	1
Shares issued for share consideration payment (note (b))	**–**	**–**	16,435	2
Placing of shares (note (c))	**–**	**–**	147,500	15
At 31 December	**986,619**	**99**	986,619	99
RMB equivalent (RMB'000)		**86**		86

29. SHARE CAPITAL *(Continued)*

Notes:

(a) On 15 January 2019, the Company allotted and issued 11,436,824 ordinary shares pursuant to exercise of share options by 12 grantees under pre-IPO share option scheme adopted on 25 August 2016 at the exercise price of USD0.0003 per share.

(b) On 14 June 2019, the Company issued 16,434,826 ordinary shares to the vendor of NM Technology for settlement of contingent share consideration pursuant to the terms of the conditional sales and purchase agreement to acquire North Mountain Information Technology Company Limited ("NM SPA").

(c) On 31 October 2019, the Company issued 147,500,000 ordinary shares through placing to independent third parties at the placing price of HK$0.40 each, pursuant to the general mandate approved by the shareholders of the Company at the annual general meeting of the Company held on 23 May 2019.

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern and to maximise the return to the shareholders through the optimisation of the debt and equity balance.

The Group sets the amount of capital in proportion to risk. The Group manages the capital structure and makes adjustments to it in the light of changes in economic conditions and the risk characteristics of the underlying assets. In order to maintain or adjust the capital structure, the Group may adjust the payment of dividends, issue new shares, buy-back shares, raise new debts, redeem existing debts or sell assets to reduce debts.

The Group monitors capital on the basis of the debt-to-adjusted capital ratio. This ratio is calculated as net debt divided by total equity. Net debt comprises the acquisition consideration notes payables, convertible bonds and lease liabilities. Total equity comprises all components of equity (i.e. share capital, retained profits and other reserves).

The debt-to-equity ratios at 31 December 2020 and at 31 December 2019 were as follows:

	2020 **RMB'000**	2019 RMB'000
Total debt	**254,322**	253,167
Less: cash and cash equivalents	**(121,669)**	(145,110)
Net debt	**132,653**	108,057
Total equity	**114,341**	225,145
Debt-to-equity ratio	**116%**	48%

The increase in the debt-to-equity ratio during 2020 resulted primarily from decrease of cash and cash equivalents and decrease of total equity arising from the loss for the year.

The externally imposed capital requirement for the Group is to have a public float of at least 25% of the shares in order to maintain its listing on the Stock Exchange.

The Group receives a report from the share registrars weekly on substantial share interests showing the non-public float and it demonstrates continuing compliance with the 25% limit throughout the year. As at 31 December 2020, 48.00% (2019: 32.15%) of the shares were in public hands.

30. STATEMENT OF FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY

(a) Statement of financial position of the Company

	2020 RMB'000	2019 RMB'000
Non-current assets		
Investments in subsidiaries	**205,419**	367,213
Current assets		
Deposits and prepayments	**79**	1,438
Amounts due from subsidiaries	**65,323**	67,609
Cash and cash equivalents	**165**	884
	65,567	69,931
TOTAL ASSETS	**270,986**	437,144
Capital and reserves		
Share capital	**86**	86
Reserves	**28,626**	201,382
	28,712	201,468
Non-current liabilities		
Acquisition consideration payables	**–**	118,814
Convertible bonds	**–**	116,196
	–	235,010
Current liabilities		
Acquisition consideration payables	**120,520**	–
Convertible bonds	**119,076**	–
Other payables	**2,678**	666
	242,274	666
TOTAL EQUITY AND LIABILITIES	**270,986**	437,144

Approved by the Board of Directors on 29 March 2021 and are signed on its behalf by:

Yue Jingxing *Director*	**Lau Wai Leung, Alfred** *Director*

30. STATEMENT OF FINANCIAL POSITION AND RESERVE MOVEMENT OF THE COMPANY *(Continued)*

(b) Reserve movement of the Company

	Share premium RMB'000 (note 31(b)(i))	Capital reserve RMB'000 (note 31(b)(ii))	Exchange reserve RMB'000 (note 31(b)(iii))	Accumulated losses RMB'000 (note 31(b)(iv))	Total RMB'000
At 1 January 2019	167,037	159,452	12,371	(37,443)	301,417
Total comprehensive income for the year	–	–	(3,070)	(161,802)	(164,872)
Equity-settled share-based payments (note 39)	–	3,378	–	–	3,378
Issue of ordinary shares under share option plan (note 29)	2,889	(2,866)	–	–	23
Issue of ordinary shares for share consideration payment (note 29)	8,803	–	–	–	8,803
Placing of shares (note 29)	52,633	–	–	–	52,633
At 31 December 2019 and 1 January 2020	**231,362**	**159,964**	**9,301**	**(199,245)**	**201,382**
Total comprehensive income for the year	**–**	**–**	**10,179**	**(185,239)**	**(175,060)**
Equity-settled share-based payments (note 39)	**–**	**2,304**	**–**	**–**	**2,304**
Share option forfeited (note 39)	**–**	**(1,745)**	**–**	**1,745**	**–**
At 31 December 2020	**231,362**	**160,523**	**19,480**	**(382,739)**	**28,626**

31. RESERVES

(a) Group

The amounts of the Group's reserves and movements therein are presented in the consolidated statement of profit or loss and other comprehensive income and consolidated statement of changes in equity.

(b) Nature and purpose of reserves

(i) Share premium

Under the Companies Law of the Cayman Islands, the share premium account is available for distribution to shareholders of the Company, provided that immediately following the date on which the dividend is proposed to be distributed, the Company is in a position to pay off its debts as they fall due in the ordinary course of business of the Company.

31. RESERVES *(Continued)*

(b) Nature and purpose of reserves *(Continued)*

(ii) Capital reserve

Capital reserve comprised the followings:

— the fair value of unexercised share options (see note 39);

— the difference between fair value of the preference shares and the warrant and the issued amount, upon the waiver of the terms of convertible redeemable preference shares and the warrant in March 2014, and capitalization of the outstanding cumulative dividends payable due to preference shareholders upon waiver in March 2014, and;

— upon completion of a group reorganization in February 2016, the share premium of Risecomm Co. Ltd., which was the then holding company of the Group, was deducted from the share premium presented in the consolidated statement of changes in equity with a corresponding credit to capital reserve and retained earnings.

— the difference between the cost of the additional investment and the carrying amount of the net assets acquired at 10 August 2018 (the date of exchange) when acquiring the non-controlling interest in a subsidiary, Changsha Risecomm Communication Technology Company Limited.

(iii) PRC statutory reserve

Pursuant to the relevant laws and regulations for business enterprises in the PRC, a portion of the profits of the entities which are registered in the PRC has been transferred to the statutory reserve which is restricted as to use. When the balance of such reserve reaches 50% of the capital of that entity, any further appropriation is optional. The statutory surplus reserve can be used to make up for prior year losses, if any, and can be applied in conversion into capital by means of a capitalisation issue. However, when converting the statutory surplus reserve of the PRC subsidiaries into capital, the remaining balance of such reserve must not be less than 25% of the registered capital of the relevant PRC subsidiaries.

(iv) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations. The reserve is dealt with in accordance with the accounting policies set out in note 4(d) to the consolidated financial statements.

32. ACQUISITION CONSIDERATION PAYABLES

	2020 RMB'000	2019 RMB'000
Acquisition of NM Technology (note(a))		
— Promissory note payable	–	–
— Contingent share consideration payable	–	–
Acquisition of Green Harmony (note(b))		
— Promissory note payable	**120,520**	118,814
	120,520	118,814

(a) Acquisition of NM Technology

	2020 RMB'000	2019 RMB'000
Balance at 1 January	–	32,200
Payment of the Promissory note (note (i))	–	(9,000)
Interest expense on Promissory note (note (i))	–	125
Issue of shares for settlement of contingent share consideration payable (note (ii))	–	(8,804)
Fair value gains arising from contingent share consideration payable	–	(14,628)
Foreign currency exchange adjustment	–	107
Balance at 31 December	–	–

Notes:

(i) On 30 April 2018, the Group issued an unsecured, non-interest bearing promissory note with payment due date of 12 months from 30 April 2018 (the "**NM Acquisition Date**"). The face value and fair value of the promissory note at the NM Acquisition Date was RMB9,000,000 and RMB8,625,000, respectively. The promissory note was measured at amortised cost.

On 21 May 2019, the Group settled the promissory note in cash of RMB9,000,000 to the vendor of NM Technology and a finance cost of RMB125,000 was recognized in profit or loss for the current period accordingly.

(ii) The decrease in the balance of contingent share consideration payables during the year ended 31 December 2019 was attributable to the issuance of 16,343,826 ordinary shares of the Company to the vendor of NM Technology as the final settlement payment of the consideration according to the sales and purchase agreement at a fair value of RMB8,804,000, and a gain of RMB14,628,000 was recorded as change in fair value of contingent share consideration.

32. ACQUISITION CONSIDERATION PAYABLES *(Continued)*

(b) Acquisition of Green Harmony

	2020 RMB'000	2019 RMB'000
Balance at 1 January	**118,814**	284,335
Partial principal redemption of the "First Promissory note" (Note (a))	**–**	(157,776)
Payment for interest on promissory notes	**–**	(20,395)
Changes in fair value of contingent consideration recognised in the profit or loss	**–**	7,985
Finance cost recognised in the profit or loss	**9,181**	2,331
Foreign currency exchange adjustment	**(7,475)**	2,334
Balance at 31 December	**120,520**	118,814

Notes:

(a) According to the sales and purchase agreement (the "**SPA**"), the Group issued an unsecured promissory note (the "**First Promissory Note**") with a coupon interest rate of 8% per annum and payment due date of 12 months from the issuance date of 15 August 2018 (the "**GH Acquisition Date**") (i.e. 14 August 2020) to Sailen IOT (formerly known as Tiger Resort, Leisure and Entertainment, Inc.). The face value of the "First Promissory Note" on the GH Acquisition Date is HK$200,000,000. During the year ended 31 December 2019, the Group partially redeemed HK$180,000,000 principal (equivalent to RMB157,776,000) of the First Promissory Note by cash. Interest paid for the redeemed principal was calculated for the period from 15 August 2018 to actual payment date in 2019.

On 25 November 2019, the Group has entered into a supplemental agreement to the SPA with Sailen IOT, the vendor of Green Harmony, based on which, the payment due date of the remaining HK$20,000,000 principal of the First Promissory Note was extended to 14 August 2021. Coupon interest rate on the remaining principal balance was revised to 4% per annum. As at 31 December 2020, the outstanding principal amount of the First Promissory Note was HK$20,000,000.

(b) According to the SPA, the Group was required to issue another unsecured promissory note (the "**Second Promissory Note**") on or before 31 December 2018 to Sailen IOT, with a coupon interest rate of 8% per annum payable on an annual basis with a term of 2 years. The maximum face value of the "Second Promissory Note" from the issuance date was HK$200,000,000. The Second Promissory note was issued on 31 December 2018 and with an original payment due date on 30 December 2020.

On 29 August 2019, the face value of the Second Promissory Note has been agreed by the Company and the vendor of Green Harmony as HK$123,000,000 based on actual financial performance of Green Harmony for the year ended 31 December 2018. As at 31 December 2020, the outstanding principal amount of the Second Promissory Note was HK$122,857,407.80.

According to the supplemental agreement signed on 25 November 2019, the payment due date of the Second Promissory Note was extended to 30 December 2021 and was therefore reclassified to non-current liabilities. Coupon interest rate on the principal amount was revised to 4% per annum.

33. CONVERTIBLE BONDS

	2020 **RMB'000**	2019 RMB'000
Balance at 1 January	**116,196**	120,502
Payment for interest on convertible bonds	**(5,185)**	(5,314)
Re-measurement on convertible bonds	**15,442**	1,008
Foreign currency exchange adjustment	**(7,377)**	–
Balance at 31 December	**119,076**	116,196

On 13 August 2018 ("**Issue Date**"), the Group issued convertible bonds to an independent third party (the "**Holder**") with principal amount of HK$150,000,000 (equivalent to approximately RMB131,130,000) with a maturity period of two years to 13 August 2020 ("**Maturity Date**"). The Maturity Date may be extended to the date falling 36 months from the Issue Date at the request of the Group ("**the Extended Maturity Date**"). In 2019, the Group has exercised the extension right by serving an extension notice to the Holder in accordance with terms and conditions of the convertible bonds. As a result, the Maturity Date has been changed to 13 August 2021.

The convertible bonds bear interest at a coupon rate of 4% per annum, payable semi-annually in arrears in the sixth month after the Issue Date and in every sixth month thereafter to and including the Maturity Date or the Extended Maturity Date as the case may be.

On 13 August 2020, the conversion price of the convertible bonds adjusted from HK$2.5 to HK$0.8 per share. The convertible bonds can be converted into ordinary shares of the Company at the holder's option at an conversion price of HK$0.80 per share subject to adjustment for, among other matters, sub-division, consolidation and reclassification of shares, issue of shares in lieu of the whole or any part of a specifically declared cash dividend, capital distributions, issue of convertible securities, issue of new shares in discount, consideration issues and other dilutive events.

The entire convertible bonds are designated as financial liabilities at FVTPL since inception date.

Fair value of the Group's convertible bonds was determined by an independent professional valuation firm by using lattice model with the following key inputs:

	31 December 2020	31 December 2019	Date of issue
Risk free rates	**0.08%**	1.77%	1.87%
Discount rate	**17.47%**	19.18%	18.40%
Dividend yield	**0.79%**	0.58%	0.95%
Expected volatility	**44.40%**	50.29%	57.28%

34. DEFERRED INCOME

Deferred income represents conditional government subsidies for encouragement of research and development projects, which is recognised in profit or loss in accordance with the accounting policy adopted for government grants set out in note 4(w).

35. LEASE LIABILITIES

	Minimum lease payments		Present value of minimum lease payments	
	2020	2019	**2020**	2019
	RMB'000	RMB'000	**RMB'000**	RMB'000
Within 1 year	**5,090**	8,004	**4,488**	7,797
Between 1 and 2 years	**3,735**	5,480	**3,311**	5,115
Between 2 and 5 years	**7,304**	6,158	**6,927**	5,245
	16,129	19,642	**14,726**	18,157
Less: total future interest expenses	**(1,403)**	(1,485)	**N/A**	N/A
Present value of lease liabilities	**14,726**	18,157	**14,726**	18,157
Less: Amount due for settlement within 12 months (shown under current liabilities)			**(4,488)**	(7,797)
Amount due for settlement after 12 months			**10,238**	10,360

The weighted average incremental borrowing rate applied was 4.75% (2019: 4.75%). The commencement date of the respective lease liabilities are 1 October 2018, 1 September 2019 and 16 August 2020. The maturity date of the respective lease liabilities are 30 September 2021, 31 August 2024 and 15 August 2025.

The carrying amounts of lease liabilities are mainly denominated in RMB.

36. DEFERRED TAX

Movement of each component of deferred tax assets/(liabilities) recognised in the consolidated statement of financial position and the movements during the year are as follows:

Deferred tax arising from:	Tax losses	Impairment losses on receivables and inventories	Unrealised profit due to Intra-group transactions	Accrued expense and other payables	Deferred income	Intangible assets	Withholding tax on distributable profits	Intangible assets identified in business combination	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
At 1 January 2019	5,401	11,038	1,212	1,213	1,684	(735)	(3,700)	(50,343)	(34,230)
(Charged)/credited to profit or loss	2,985	5,103	(501)	(557)	(285)	205	3,700	8,974	19,624
Credited/(charged) to profit or loss due to a change in tax rate	(2,160)	(2,706)	(485)	(340)	(674)	294	–	–	(6,071)
At 31 December 2019 and 1 January 2020	**6,226**	**13,435**	**226**	**316**	**725**	**(236)**	**–**	**(41,369)**	**(20,677)**
Credited/(charged) to profit or loss	**8,927**	**4,838**	**78**	**1,421**	**(277)**	**(1,365)**	**–**	**9,308**	**22,930**
At 31 December 2020	**15,153**	**18,273**	**304**	**1,737**	**448**	**(1,601)**	**–**	**(32,061)**	**2,253**

36. DEFERRED TAX *(Continued)*

The following is the analysis of the deferred tax balances (after offset) for the consolidated statement of financial position purposes:

	2020 **RMB'000**	2019 RMB'000
Deferred tax assets	**35,915**	20,692
Deferred tax liabilities	**(33,662)**	(41,369)
	2,253	(20,677)

At the end of the reporting period, the Group has estimated unused tax losses of approximately RMB133,450,000 (2019: RMB91,186,000) available for offset against future profits. A deferred tax asset has been recognised in respect of approximately RMB15,153,000 (2019: RMB6,226,000) of such losses. It is not probable that future taxable profits against which the tax losses can be utilised will be available in the relevant tax jurisdiction before they expire, the Group has not recognised deferred tax assets in respect of cumulative tax losses of RMB54,303,000 (2019: RMB53,797,000) of certain subsidiaries. For the year ended 31 December 2020, included in unrecognised tax losses are losses of approximately RMB506,000, RMB6,463,000, RMB33,042,000 and RMB14,292,000 that will expire in 2025, 2024, 2023 and 2022 respectively. Other tax losses may be carried forward indefinitely.

Under the Corporate Income Tax Law of the PRC, withholding tax is imposed on dividends declared in respect of profits earned by PRC subsidiaries from 1 January 2008 onwards. Deferred taxation has not been provided for in the consolidated financial statements in respect of temporary differences attributable to retained profits of the PRC subsidiaries of RMB10,622,000 as at 31 December 2020 (2019: RMB14,099,000) as the Group is able to control the timing of the reversal of the temporary differences and it is probable that the temporary differences will not reverse in the foreseeable future.

37. TRADE AND OTHER PAYABLES

	2020 **RMB'000**	2019 RMB'000
Trade payables (note (a))	**66,624**	66,594
Product warranty provision (note (b))	**684**	1,701
Other payables and accruals	**12,137**	10,017
	79,445	78,312

37. TRADE AND OTHER PAYABLES *(Continued)*

(a) Trade payables

Trade payables comprised amounts due to suppliers for purchase of goods or services used in regular course of business. Trade payables are non-interest bearing and generally due upon demand. The aging analysis of trade payables based on the invoice dates is as follows:

	2020 RMB'000	2019 RMB'000
Within 3 months	**38,040**	51,428
After 3 months but within 6 months	**12,331**	3,059
After 6 months but within 1 year	**3,361**	5,819
Over 1 year but within 2 years	**9,553**	6,288
Over 2 years	**3,339**	–
	66,624	66,594

The carrying amounts of the Group's trade payables are mainly denominated in RMB.

(b) Product warranty provision

	2020 RMB'000	2019 RMB'000
Balance at 1 January	**1,701**	3,474
Additional provisions made	**349**	656
Provision utilised	**–**	(47)
Provision reversed	**(1,366)**	(2,382)
Balance at 31 December	**684**	1,701

38. CONTRACT LIABILITIES

Contract liabilities

	2020 RMB'000	2019 RMB'000
Billings in advance of performance obligation		
— Billings in advance of performance (note (a))	**7,240**	7,472
— Deferred post-contact customer support income (note (b))	**2,322**	2,184
— Construction contracts (note (c))	**21,571**	–
	31,133	9,656

38. CONTRACT LIABILITIES *(Continued)*

Contract liabilities *(Continued)*

Movements in contract liabilities:

	2020 RMB'000	2019 RMB'000
Balance at 1 January	**9,656**	23,700
Decrease in contract liabilities as a result of recognising revenue during the year was included in the contract liabilities at the beginning of the period	**(9,656)**	(23,700)
Increase in contract liabilities as a result of billing in advance of manufacturing activities	**7,240**	7,472
Increase in contract liabilities as a result of billing in advance of post-contract support activities	**2,322**	2,184
Increase in contract liabilities as a result of billing in advance of construction contracts	**21,571**	–
Balance at 31 December	**31,133**	9,656

No billings in advance of performance received that is expected to be recognised as income after more than one year (2019: RMB nil).

Notes:

(a) When the Group receives a deposit before the production activity commences this will give rise to contract liabilities at the start of a contract, until the revenue recognised when control over a product transferred to the customers. The Group typically receives a deposit on acceptance of orders from customers, the amount of the deposit, if any, is negotiated on a case by case basis with customers.

(b) Deferred post-contract customer support income primarily consists of unamortised revenue from sales of software license, where there is still an implied service performance obligation to be provided by the Group over time.

(c) When the Group receives a deposit before the construction activity commences this will give rise to contract liabilities, until the revenue recognised when the outcome of a construction contract can be reasonably measured. The Group typically receives a deposit on acceptance of orders from customers, the amount of the deposit, if any, is negotiated on a case by case basis with customers.

39. SHARE-BASED PAYMENTS

Equity-settled share option scheme

The Company operates share option scheme for the purpose of providing incentives and rewards to eligible participants who contribute to the success of the Group's operations. Eligible participants include the full-time and part-time employees, executives, officers, directors, business consultants, agents, legal and financial advisers of the Company and the Company's subsidiaries. The Scheme became effective on 25 August 2016 and 3 September 2018 and, unless otherwise cancelled or amended, will remain in force for 10 and 8 years from that date respectively.

The maximum number of unexercised share options currently permitted to be granted under the Scheme is an amount equivalent, upon their exercise, to 30% of the shares of the Company in issue at any time. The maximum number of shares issuable under share options to each eligible participant in the Scheme within any 12-month period is limited to 1% of the shares of the Company in issue at any time. Any further grant of shares options in excess of this limit is subject to shareholders' approval in a general meeting.

Share options granted to a director, chief executive or substantial shareholder of the Company, or to any of their associates, are subject to approval in advance by the independent non-executive directors. In addition, any share options granted to a substantial shareholder or an independent non-executive director of the Company, or to any of their associates, in excess of 0.1% of the shares of the Company in issue at any time or with an aggregate value (based on the price of the Company's shares at the date of the grant) in excess of HK$5 million, within any 12-month period, are subject to shareholders' approval in advance in a general meeting.

The offer of a grant of share options may be accepted within 21 days from the date of the offer, upon payment of a nominal consideration of HK$1 in total by the grantee. The exercise period of the share options granted is determinable by the directors, and commences after a certain vesting period and ends on a date which is not later than five years from the date of the offer of the share options or the expiry date of the Scheme, if earlier.

The exercise price of the share options is determinable by the directors, but may not be less than the highest of (i) the Stock Exchange closing price of the Company's shares on the date of the offer of the share options; (ii) the average Stock Exchange closing price of the Company's shares for the five trading days immediately preceding the date of the offer; and (iii) the nominal value of the Company's shares on the date of the offer, when applicable.

Share options do not confer rights on the holder to dividends or to vote at shareholders' meetings.

39. SHARE-BASED PAYMENTS

Equity-settled share option scheme *(Continued)*

(a) The terms and conditions of the grants are as follows:

	Number of instrument	Vesting conditions	Contractual life of options
Options granted to employees			
— On 1 February 2007	731,334	25% of total shares vested on year anniversary of the grant date, the rest vested in 36 substantially equal monthly instalments from year anniversary of the grant date	10 years
— On 21 April 2011	200,000		10 years
— On 26 March 2014	503,858		10 years
— On 3 September 2018	1,500,000	75% of total shares vested immediately on grant date, the rest vested in 3 equal yearly instalments from the second year anniversary of the grant date	8 years
— On 3 September 2018	14,000,000	Vested in 3 equal yearly instalments from the second year anniversary of the grant date	8 years
Options granted to non-executive directors			
— On 1 February 2007	200,000	Vested immediately on grant date	10 years
— On 26 March 2014	26,799		10 years
Options granted to SAIF			
— On 21 April 2011	168,666	Vested immediately on grant date	10 years
— On 26 March 2014	136,000		10 years
Total share options granted	17,466,657		

39. SHARE-BASED PAYMENTS *(Continued)*

Equity-settled share option scheme *(Continued)*

(b) The number and weighted average exercise prices of share options are as follows:

	At 31 December 2020		At 31 December 2019	
	Weighted Average exercise price	**Number of options**	Weighted Average exercise price	Number of options
Outstanding at the beginning of the year	**USD0.0003**	**863,587**	USD0.0003	12,300,411
Outstanding at the beginning of the year	**HK$1.71**	**13,730,000**	HK$1.71	15,500,000
Exercised during the year (note 29)	**–**	**–**	USD0.0003	(11,436,824)
Forfeited during the year	**HK$1.71**	**(3,900,000)**	HK$1.71	(1,770,000)
Outstanding at the end of the year	**USD0.0003**	**863,587**	USD0.0003	863,587
Outstanding at the end of the year	**HK$1.71**	**9,830,000**	HK$1.71	13,730,000
Exercisable at the end of the year	**USD0.0003**	**863,587**	USD0.0003	863,587
Exercisable at the end of the year	**HK$1.71**	**3,276,667**	HK$1.71	1,125,000

The weighted average share price at the date of exercise for shares options exercised during the year was HK$ nil (2019: HK$1.67).

The options outstanding at 31 December 2020 had an exercise price of USD0.0003 or HK$1.71 (2019: USD0.0003 or HK$1.71) and a weighted average remaining contractual life of 5.15 years (2019: 5.66 years).

3,900,000 share options has been forfeited during the year ended 31 December 2020.

39. SHARE-BASED PAYMENTS *(Continued)*

Equity-settled share option scheme *(Continued)*

(c) Fair value of share options and assumptions

The fair value of services received in return for share options granted is measured by reference to the fair value of share options granted. The fair value of the share options granted is measured based on a binomial option pricing model. The contractual life of the share option is used as an input into this model. Expectations of early exercise are incorporated into the binomial option pricing model.

	Share options issued in			
	February 2007	**April 2011**	**March 2014**	**September 2018**
Fair value of share options and assumptions				
Fair value at measurement date	USD746,428	USD420,228	USD809,779	HK$13,574,844
Share price	USD0.80	USD1.14	USD1.23	HK$1.71
Exercise price (note)	USD0.01	USD0.01	HK$0.01	HK$1.71
Expected volatility	51.90%	50.15%	46.15%	58.25%
Option life	10 years	10 years	10years	8 years
Suboptimal exercise factor	2.86 to 3.3422	2.86 to 3.3422	2.86 to 3.3422	2.86
Expected dividend yield	0%	0%	0%	0.95%
Risk-free interest rate	4.14%	2.72%	2.29%	2.15%

The expected volatility is based on the historic volatility (calculated based on the weighted average remaining life of the share options), adjusted for any expected changes to future volatility based on publicly available information. 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.

Note:

The exercise price of the tranches of share options granted in February 2007, April 2011 and March 2014 was changed to USD0.0003 per share upon a capitalisation issue prior to the Company's Initial Public Offering in June 2017.

40. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS

(a) 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 future cash flows will be, classified in the Group's consolidated statement of cash flows as cash flows from financing activities.

	Lease liabilities (note 35) RMB'000	Acquisition consideration payable (note 32) RMB'000	Convertible bonds (note 33) RMB'000	Total RMB'000
At 1 January 2020	18,157	118,814	116,196	253,167
Changes from cash flows:				
Payment for interest on convertible bonds	–	–	(5,185)	(5,185)
Capital element of lease rentals paid	(7,066)	–	–	(7,066)
Interest element of lease rentals paid	(747)	–	–	(747)
Total changes from cash flows	(7,813)	–	(5,185)	(12,998)
Other changes:				
Finance cost of acquisition consideration payable recognised in the profit or loss	–	9,181	–	9,181
Increase in lease liabilities from entering into new leases during the year	6,456	–	–	6,456
Disposal of lease liabilities during the year	(2,797)	–	–	(2,797)
Interest expense	747	–	–	747
Changes in fair value of convertible bonds	–	–	15,442	15,442
Foreign currency exchange adjustments	(24)	(7,475)	(7,377)	(14,876)
Total other changes	4,382	1,706	8,065	14,153
At 31 December 2020	14,726	120,520	119,076	254,322

40. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS *(Continued)*

(a) Reconciliation of liabilities arising from financing activities *(Continued)*

	Lease liabilities (note 35) RMB'000	Acquisition consideration payable (note 32) RMB'000	Convertible bonds (note 33) RMB'000	Total RMB'000
At 1 January 2019	12,606	284,335	120,502	417,443
Changes from cash flows:				
Payment of principal of Green Harmony acquisition promissory notes payable	–	(157,776)	–	(157,776)
Payment for interest on Green Harmony acquisition promissory notes payable	–	(20,395)	–	(20,395)
Payment for interest on convertible bonds	–	–	(5,314)	(5,314)
Capital element of lease rentals paid	(6,453)	–	–	(6,453)
Interest element of lease rentals paid	(726)	–	–	(726)
Total changes from cash flows	(7,179)	(178,171)	(5,314)	(190,664)
Other changes:				
Changes in fair value of contingent consideration notes payable recognised in the profit or loss	–	7,985	–	7,985
Finance cost of acquisition consideration payable recognised in the profit or loss	–	2,331	–	2,331
Increase in lease liabilities from entering into new leases during the year	12,028	–	–	12,028
Interest expense	726	–	–	726
Changes in fair value of convertible bonds	–	–	1,008	1,008
Foreign currency exchange adjustments	(24)	2,334	–	2,310
Total other changes	12,730	12,650	1,008	26,388
At 31 December 2019	18,157	118,814	116,196	253,167

40. NOTES TO THE CONSOLIDATED STATEMENT OF CASH FLOWS *(Continued)*

(b) Total cash outflow for leases

Amounts included in the cash flow statements for leases comprise the following:

	2020 RMB'000	2019 RMB'000
Within operating cash flows	2,731	3,929
Within financing cash flows	7,066	6,453
	9,797	10,382

These amounts relate to the following:

	2020 RMB'000	2019 RMB'000
Lease rental paid	1,984	3,203
Interest on lease liabilities	747	726
Principal element of lease payment	7,066	6,453
	9,797	10,382

41. CONTINGENT LIABILITY

As at 31 December 2020, the Group did not have any significant contingent liabilities (2019: RMB nil).

42. RELATED PARTY TRANSACTIONS

(a) In addition to those related party transactions and balances disclosed elsewhere in the consolidated financial statements, the Group had the following transactions with its related parties during the year:

Related party transactions

	2020 RMB'000	2019 RMB'000
Office premises rental expenses paid to Wang Shiguang (note (a))	724	716
Goods sold to a related company (note (b))	13	–
	737	716

Notes:

(a) Mr. Wang Shiguang was one of the Non-Executive Director of the Group.

(b) The related company was an associate of the Group.

As at 31 December 2020, the Group had RMB nil balance with related parties (2019: RMB nil).

42. RELATED PARTY TRANSACTIONS *(Continued)*

(b) The remuneration of Directors and other members of key management during the year were as follows:

	2020 RMB'000	2019 RMB'000
Short-term employee benefits	**9,011**	9,738
Post-employee benefits	**63**	385
Equity-settled share-based payments	**–**	102
	9,074	10,225

43. EVENTS AFTER THE REPORTING PERIOD

(a) Subscription of new shares by a connected person

On 25 January 2021, the Company entered into a Subscription agreement with Sailen IOT that Sailen IOT conditionally agreed to subscribe for and the Company conditionally agreed to allot and issue 403,000,000 shares at the subscription price at HK$0.24 for an aggregate amount of approximately HK$96,000,000 after deducting the professional fees and other related expenses. The amount will be off set against the outstanding principal of the promissory notes relating to the acquisition of Green Harmony as disclosed in note 32 to the consolidated financial statements.

(b) Placing of new shares under specific mandate

On 25 January 2021, the Company entered into a conditional placing agreement with Kingkey that Kingkey has conditionally agreed to procure not less than six independent placees to subscribe for up to 347,000,000 shares at a price of HK$0.24 for an aggregate amount of approximately HK$82,500,000 after deducting professional fees and other related expenses. The proceeds intended to be partially used for full settlement of the remaining outstanding principal of the promissory notes to the vendor of Green Harmony as disclosed in note 32 to the consolidated financial statements and the remaining part will be used for general working capital purpose.

44. COMPARATIVE FIGURES

The presentation in the consolidated statement of profit or loss and other comprehensive income and consolidated statement of financial position have been changed from the classification by nature to classification by function as the directors consider that the new presentation is more appropriate to the consolidated financial statements.

Five-Year Financial Summary

A summary of the results and of the assets, liabilities and non-controlling interests of the Group for the last five financial years, as extracted from the published audited financial statements.

FINANCIAL HIGHLIGHTS

	2016 RMB'000	2017 RMB'000	2018 RMB'000	2019 RMB'000	**2020** **RMB'000**
Revenue	390,210	317,333	475,793	218,575	**212,734**
Gross profit	195,263	145,727	159,534	64,775	**33,534**
Net profit/(loss)	57,603	12,851	4,195	(236,813)	**(126,034)**
Profit/(loss) attributable to equity shareholders of the Company	57,743	12,670	4,204	(236,813)	**(126,034)**
Total assets	355,134	482,355	1,058,857	618,525	**518,349**
Total liabilities	134,425	90,974	658,071	393,380	**404,008**
	220,709	391,381	400,786	225,145	**114,341**
Equity attributable to:					
— Equity shareholders of the Company	220,707	391,198	400,786	225,145	**114,341**
— Non-controlling interests	2	183	–	–	**–**
	220,709	391,381	400,786	225,145	**114,341**
Gross profit margin[1]	50.0%	45.9%	33.5%	29.6%	**15.8%**
Net profit margin[2]	14.8%	4.0%	0.9%	(108.3)%	**(59.2)%**
Current ratio[3]	2.67	5.23	1.55	3.21	**0.79**
Quick ratio[4]	2.26	4.32	1.46	2.95	**0.73**
Net debt to equity ratio[5]	N/A	N/A	34.4%	48.0%	**116.0%**

1. Gross profit margin is calculated by dividing gross profit by revenue.
2. Net profit margin is calculated by dividing net profit by revenue.
3. Current ratio is calculated by dividing total current assets by total current liabilities.
4. Quick ratio is calculated by dividing total current assets less inventories by total current liabilities.
5. Net debt to equity ratio is calculated by dividing interest-bearing liabilities less cash and equivalents by total equity.