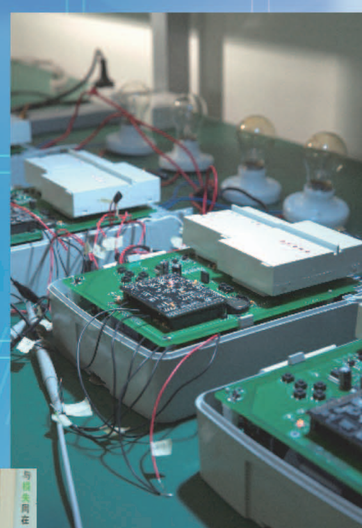
RISECOMM
瑞斯康

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

2019 Annual Report

Risecomm Group Product Assembly Hub



Product Assembly Hubs located in Changsha, Hunan, the PRC

Contents

Corporate Information

EXECUTIVE DIRECTORS

Mr. Yue Jingxing *(Chief Executive Officer)*
Mr. Lau Wai Leung, Alfred
(redesignated as executive director on January 21, 2019)
Mr. Tang Andong
(appointed on July 31, 2019)
Mr. Zhang Youyun
(resigned on July 31, 2019)

NON-EXECUTIVE DIRECTORS

Mr. Cheung Fan *(Chairman)*
(redesignated as Chairman on June 10, 2019)
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong
(redesignated as non-executive director on January 8, 2019, resigned on June 10, 2019 and appointed on November 19, 2019)
Mr. Yang Luokui
(appointed on June 10, 2019 and resigned on November 12, 2019)

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Ong King Keung
Ms. Lo Wan Man
(appointed on May 29, 2019)
Mr. Zou Heqiang
(appointed on May 29, 2019)
Mr. Chen Yong
(retired on May 23, 2019)
Mr. Pan Song
(retired on May 23, 2019)

COMPANY SECRETARY

Mr. Leung Ka Lok *(HKICPA, FCCA, MBA)*

AUTHORIZED REPRESENTATIVES

(for the purpose of the Listing Rules)

Mr. Yue Jingxing
Mr. Leung Ka Lok *(HKICPA, FCCA, MBA)*

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

KPMG
Public Interest Entity Auditor registered in accordance with the Financial Reporting Council Ordinance
8th Floor, Prince's Building
10 Chater Road
Central, 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

Skyworth Building C501
Hi-tech Industrial Park
Shenzhen
PRC

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, 2019.

The Group had been facing extremely challenging years under the ongoing economic conflict between the world's two largest national economies, China and the United States in 2019 and 2020 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. For our core business segment in automated meter reading ("**AMR**") products, the Group's PLC based broadband AMR products had not yet passed through the final approval process run by the State Grid Corporation of China ("**State Grid**") in the year 2019, the Group was not able to catch up the expected mass procurement of PLC based broadband AMR products from the upgrade of AMR system conducted by the State Grid in 2019. However, fortunately, the Group was informed by China Electric Power Research Institute (中國電力科學研究院) on March 2, 2020 that the Group's PLC broadband chipsets has passed all the functional tests set out by the Institute.

Despite the delay in our PLC based broadband AMR products in 2019, the Group is still of confident to launch out its PLC based broadband AMR products to the market in second half of 2020 and use its best endeavor to catch up the continuous demand for the deployment of ungraded AMR system by the State Grid.

Furthermore, in SMIA business segment, although the Group experienced some delays on the commencement of certain projects in the petroleum and petrochemicals industry ("**PPC industry**") and hindered the contract conclusion during 2019, it can still bring in some non-AMR revenue contribution to lessen our exposure to the inherent risk of reliance on China's power grid ecosystem to achieve a more balanced revenue composition . The Group is confident that its operations in petroleum industry can foster a steady growth in its revenue stream and further diversify its customer base with persistent marketing efforts. The Group strongly believes that the newly acquired subsidiary in Beijing holds core technology competency within the field of industrial automation systems, particularly in the area of maintenance and safety integrity system ("**MSI**") for the PPC industry in SMIA business segment by utilizing the core technologies and intellectual property rights. The Group will persistently explore the direct access to co-service customers in the industry and gain invaluable technical and project experience to expedite its research & development ("**R&D**") of PLC based communications solutions tailored for wider industrial applications.

However, in the first quarter of 2020, the Pandemic may bring short-term challenges to the Group as almost all provinces and municipalities in the People's Republic of China (the "**PRC**") have taken various emergency public health measures and actions, including travel and transportation restrictions in various cities in the PRC, to prevent the spread of the Pandemic. Such measures have led to extensive disruption to the normal operation of some of the businesses in the PRC, as a result of, among others, a shortage of workforce and disruption to the logistics network in some areas of the PRC in early 2020. At the date of this report, the Group resumed full operation and production with the continuous weakening of the Pandemic in the PRC.

Facing further hamper and uncertainties on Chinese economy caused by ad hoc Pandemic as well as the changing landscape in the demand on domestic broadband PLC products, the Group has to maintain a lean-cost strategy in so as to reduce the operating cost, especially the workforces in the sales and R&D aspects, to respond to the pressure in less revenue generated. The Group already streamlined its sales channels and research team by down scaling to achieve cost effectiveness. 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 & Non-Executive Director

Hong Kong, May 7, 2020

Management Discussion and Analysis

MARKET REVIEW

With the continuous improvement on the Strong Smart Grid (堅強智能電網) by State Grid Corporation of China ("**State Grid"**), State Grid formally adopted a new unified industry standard (the "**New Standard**") for broadband Power Line Communication ("**PLC**") in mid-2017 and then continuously revisited the technical specifications by extending two more frequency bands within the existing communication protocols in July 2018 to reach a further enhancement in the New Standard (the "**Enhanced New Standard**"). After a temporary slow-down in the procurement of smart meters conducted by State Grid during 2017 and 2018 due to the unified industry standard, a turnaround in demand was proved by the increase in the bidding volume of State Grid's centralized biddings on smart meters and other terminals to approximately 77.2 million units in 2019 (2018: 52.8 million units) according to an independent market research. The market expected that there is an ongoing mass procurement of the broadband PLC products by State Grid starting in 2020 and onwards. Under current Sino-American trade tension, more state-owned enterprises ("**SOE**") and sizeable technology-based companies tapped in 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 as it is foreseeable that a significant portion of the PLC market shares will be retained by SOE, in general. Hence, the competition among domestic PLC market participants are even more intense in the upcoming years although the overall market demand in PLC remains promising. In the Group's automated meter reading ("**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 and adversely affect financial performance of the Group's AMR and other business segment.

On the other hand, during the year under review, the Group's Smart Manufacturing & Industrial Automation ("**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 a 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 reached RMB156 billion in 2018, while further expecting to exceed RMB238 billion by 2020. This is a tremendous market which allows the market players to explore in various aspects in the smart manufacturing area.

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 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 provision of software post-contract customer support services applied in the area of MSI in the petroleum and petrochemicals industry.

During the year under review, the Group recorded revenue of approximately RMB218.6 million (2018: approximately RMB475.8 million), representing a decrease of 54.1%.

The Group's AMR and other business segment recorded a revenue of approximately RMB139.8 million (2018: approximately RMB347.4 million), representing a decrease of approximately 59.8%. Revenue from AMR and other business segment for the year under review accounted for approximately 64.0% (2018: 73.0%) 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 State Grid and (b) an unexpected further delay in debut of the Group's broadband AMR products in 2019. Such unexpected further delay in debut of broadband AMR products led to a significant decrease in revenue generated from the Group's AMR products under the centralized biddings conducted by State Grid and customers under State Grid local biddings and trading sales for the year ended December 31, 2019 as compared to that of the corresponding period in 2018. Fortunately, the Group was informed by China Electric Power Research Institute (中國電力科學研究院) on March 2, 2020 that the Group's PLC broadband chipsets has passed all the functional tests set out by the Institute. Based on the currently available information, the Directors can reasonably expect that China Electric Power Research Institute will officially issue the certificate letter to endorse our PLC broadband chipsets and modules which meet the protocol standards of broadband system-on-chip IC promulgated by the State Grid in the near future.

During the year under review, the Group's SMIA business segment recorded a revenue of approximately RMB78.7 million (2018: approximately RMB128.4 million), representing a decrease of approximately 38.7%. Revenue from SMIA business segment for the year under review accounted for approximately 36.0% (2018: 27.0%) of the Group's total revenue.

There is significant decrease in the Group's revenue and gross profit from SMIA business segment for the year ended December 31, 2019 as compared to that of the corresponding period in 2018 which is primarily attributable to an unexpected delay in delivery/implementation of certain major contracts held as of December 31, 2019. Such delay is mainly attributable to the revision of corporate resources planning and implementation schedule conducted by the customers under SMIA business segment and hence has led to delay in revenue recognition by the Group.

The Group recorded a loss attributable to equity shareholders of the Company for the year under review of approximately RMB236.8 million (2018: profit attributable to equity shareholders of the Company of approximately RMB4.2 million).

The loss attributable to the equity shareholders of the Company, apart from the direct effect of significant decrease in revenue from both the AMR and other business segment and SMIA segment, were then mainly attributable to (i) a significant increase in general and administrative expenses for the year under review as compared to that of the corresponding period in 2018 which was primarily attributable to (a) an increase in amortisation expenses for the year ended December 31, 2019, which are incurred largely on the intangible assets arising from the acquisition of Green Harmony Limited ("**Green Harmony**") by the Group in August 2018. The commencement date of the amortisation of related intangible assets was August 2018 and therefore a proportional difference in such amortisation expenses was resulted between the year ended December 31, 2019 and the corresponding period in 2018; and (b) an increase in impairment loss on trade receivables which were long aged and required more loss allowance according to the Group's provision matrix; and (ii) the recognition of impairment losses of goodwill during the year under review.

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 are focused 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.

The Group had been actively participating in the discussion and formulation of the technical standard for broadband PLC for State Grids for several years whereas the Group heavily invested in the research and development project in relation to the Group's PLC based broadband AMR product to be applied in the State Grid.

As at December 31, 2019, the research and development team of the Group consisted of 67 employees (as at December 31, 2018: 101 employees), representing approximately 30% (as at December 31, 2018: approximately 28%) 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, 2019, the Group held a significant intellectual property portfolio, comprising 17 patents, 106 computer software copyrights and 8 IC layout designs registered, with 10 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 RMB475.8 million for the corresponding period in 2018 to approximately RMB218.6 million for the year under review, or by approximately 54.1%. This decrease was mainly attributable to (i) a decrease in demand for the Group's PLC based narrowband AMR products by State Grid and an unexpected further delay in debut of the Group's broadband AMR products in 2019. Such unexpected further delay in debut of broadband AMR products led to a significant decrease in revenue generated from the Group's AMR products under the centralized biddings conducted by State Grid and customers under State Grid local biddings and trading sales for the year ended December 31, 2019 as compared to that of the corresponding period in 2018, and; (ii) an unexpected delay in delivery/implementation of certain major contracts held as of December 31, 2019 for SMIA business segment. Such delay is mainly attributable to the revision of corporate resources planning and implementation schedule conducted by the customers under SMIA business segment and hence has led to delay in revenue recognition by the Group.

Gross profit

Gross profit decreased by approximately 59.4% to approximately RMB64.8 million for the year under review from approximately RMB159.5 million for the corresponding period in 2018.

Gross profit margin was approximately 29.6% for the year under review and decreased by approximately 3.9 percentage points as compared with approximately 33.5% for the corresponding period in 2018. The decrease in gross profit margin of the Group was mainly attributable to a decrease in revenue from sales of PLC products to customers under State Grid centralized biddings (which earned a relatively higher gross profit margin in general) for the year under review.

Other income

Other income increased by approximately 1.8% to approximately RMB11.4 million for the year under review from approximately RMB11.2 million for the corresponding period in 2018. The increase was mainly attributable to the increase in interest income from bank deposits and the decrease in net exchange loss for the year under review.

Sales and marketing expenses

Sales and marketing expenses decreased by approximately 41.1% to approximately RMB31.1 million for the year under review from approximately RMB52.8 million for the corresponding period in 2018. This decrease was mainly attributable to an implementation of tightened cost control measures by the Group on sales and marketing expenses whereas a significant decrease in customer service expenses, marketing expenses and travelling expenses were resulted for the year under review.

General and administrative expenses

General and administrative expenses increased by approximately 12.9% to approximately RMB95.1 million for the year under review from approximately RMB84.2 million for the corresponding period in 2018. This increase was mainly attributable to (i) an increase in amortisation expenses for the year ended December 31, 2019, which are incurred largely on the intangible assets arising from the acquisition of Green Harmony by the Group in August 2018. The commencement date of the amortisation of related intangible assets was August 2018 and therefore a proportional difference in such amortisation expenses was resulted between the year ended December 31, 2019 and the corresponding period in 2018; and (ii) an increase in impairment loss on trade receivables which were long aged and required more loss allowance according to the Group's provision matrix.

Research and development expenses

Research and development expenses decreased by approximately 14.6% to approximately RMB31.6 million for the year under review from approximately RMB37.0 million for the corresponding period in 2018. The decrease was mainly attributable to a decrease in staff costs incurred during the year under review since the headcount of Group's research and development team reduced to 67 employees as of December 31, 2019 (December 31, 2018: 101 employees). During the year under review, the Group had strategically retained the resources on the development of our core PLC technology and the expansion of software application in the SMIA business segment while reducing the resources on field application engineering in the AMR and other business segment.

Fair value gains on financial instruments at fair value

During the year under review, the Group recorded fair value gains on financial instruments at fair value of approximately RMB5.6 million (2018: approximately RMB10.4 million) which was attributable to changes in fair value of financial instruments including the Convertible Bonds (as defined below), the Consideration Shares (as defined below) and the Consideration Notes Payables (as defined below).

Income tax credit

Income tax credit increased by approximately 2,200.0% to approximately RMB13.8 million for the year under review from approximately RMB0.6 million for the corresponding period in 2018. The increase was mainly attributable to (i) reversing deferred tax liability regarding withholding tax due to loss making of PRC entities; and (ii) decrease of deferred tax liability due to amortization of intangible assets, which are identified in business acquisitions.

Impairment of goodwill

Impairment test 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 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 RMB14.7 million and RMB156.5 million respectively for the year ended December 31, 2019, after which, carrying amount of two CGUs have been reduced to recoverable amount calculated based on discounted cashflow forecast method.

AMR and other business segment

As mentioned above in the "Business review", in 2019, the Group experienced an unexpected delay in debut of the Group's PLC based broadband AMR product. This has postponed the Group's participation in certain centralized biddings to be conducted by State Grid as well as certain local biddings in 2019 and 2020, and hence has led to a potential loss of market share which could hamper the financial performance of the Group's AMR and other business in the short run. The delay in debut of the Group's PLC based broadband AMR product and potential loss of market share could negatively impact the expected future cashflow and the recoverable amount of the CGU.

SMIA business segment

In 2019, there was a significant decrease in revenue and gross profit of the SMIA business segment as compared to that of 2018 which was primarily attributable to an unexpected delay in delivery/implementation of certain major contracts held as of December 31, 2019. Such delay was mainly attributable to the revision of corporate resources planning and implementation schedule conducted by the customers under SMIA business segment and hence has led to delay in revenue recognition by the Group. Given the financial performance of the SMIA business segment for the year ended December 31, 2019 had not achieved the 2019 financial budgets approved by the Board, the Board has revisited the strategic plan of the SMIA business, assessed the project progress and reasonableness of the timing of revenue recognition of the backlog contracts of the SMIA business held as of December 31, 2019, reassessed the sale pipelines forecast prepared by the management of the SMIA business in light of the recent expectation of market development in the short and medium run etc.

(Loss)/Profit 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 RMB236.8 million (2018: profit attributable to equity shareholders of the Company of approximately RMB4.2 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, 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 on June 9, 2017, funds from Convertible Bonds (as defined below) issued and the net proceeds derived from the Placing (as defined below). The Board believes that the Group's liquidity needs will be satisfied.

As of December 31, 2019, the Group's current assets amounted to approximately RMB326.5 million (as at December 31, 2018: approximately RMB577.2 million), with cash and cash equivalents totaling approximately RMB145.1 million (as at December 31, 2018: approximately RMB267.0 million). The cash and cash equivalents of the Group are principally held in RMB and USD.

As of December 31, 2019, the Group's total interest-bearing liabilities amounted to RMB 253.2 million (as of December 31, 2018: RMB404.8 million), representing lease liabilities, issued Convertible Bonds (as defined below) and promissory notes issued to the vendor in relation to acquisition of Green Harmony. All interest-bearing liabilities will be due repayable after one year but within five years (except for current portion of lease liabilities of approximately RMB7.8 million which is payable within one year) 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 48.0% as of December 31, 2019 (as of December 31, 2018: 34.4%).

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., 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. 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. 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 "**Shares**") with an initial conversion price of HKD2.50 per share (the "**Initial Conversion Price**") which is subject to anti-dilutive adjustments arising from such events. Based on the Initial Conversion Price and assuming full conversion of the Convertible Bonds at the Initial Conversion Price, the Convertible Bonds will be convertible into 60,000,000 Shares (with an aggregate nominal value of HKD6,000). The Initial Conversion Price represents (i) a premium of approximately 28.21% to the closing price of HKD1.950 per Share as quoted on the Stock Exchange on July 31, 2018 (the "**Last Trading Day**"); (ii) a premium of approximately 28.34% to the average closing price of HKD1.948 per Share as quoted on the Stock Exchange for the five trading days prior to and including the Last Trading Day; and (iii) a premium of approximately 28.14% to the average of closing price of HKD1.951 per Share as quoted on the Stock Exchange for the ten trading days prior to and including the Last Trading Day. Please refer to the announcements of the Company dated July 31, 2018 and August 13, 2018 for further details.

During the year under review, the Company has extended the maturity date of the Convertible Bonds to the date falling 36 months from the Issue Date, i.e. August 13, 2021 by serving an extension notice to Software Research Associates, Inc. in accordance with the terms and conditions of the Convertible Bonds.

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 2018, 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, 2019, 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, 2018: Nil).

Contingent Liabilities

As at December 31, 2019, the Group had no contingent liabilities (as at December 31, 2018: Nil).

Charge on Assets

As at December 31, 2019, the Group had no charge on assets (as at December 31, 2018: Nil).

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.

Acquisition of NM Technology

In March 2018, Harvest Year Global Limited ("**Harvest Year**"), a direct wholly owned subsidiary of the Company, entered into a conditional sales and purchase agreement (the "**NM SPA**") to acquire North Mountain Information Technology Company Limited ("**NM Technology**"), which directly holds the entire equity interest of a company established in China, which is principally engaged in sales and distribution of electronic components, in particular for IC and related products in China (the "**Acquisition of NM Technology**"). The Acquisition of NM Technology was completed on April 30, 2018.

Pursuant to the NM SPA, the final payment of the consideration for the Acquisition of NM Technology (subject to adjustment and deduction) will be determined and settled by the allotment and issue of consideration shares (the "**Consideration Shares**") by the Company to the vendor of NM Technology (the "**NM Vendor**") pursuant to the terms of the NM SPA.

According to the adjustment mechanism stipulated in the NM SPA and with reference to the financial information of NM Technology and its subsidiaries for the year ended December 31, 2018, no adjustment to the consideration was required. On June 14, 2019, the Company issued 16,434,826 Consideration Shares to the NM Vendor as settlement of the final payment of the consideration.

Please refer to the announcements of the Company dated March 15, 2018, April 30, 2018, July 20, 2018 and June 14, 2019 for further details.

Acquisition of Green Harmony

In December 2017, the Company entered into a conditional sale and purchase agreement (the "**GH SPA**") to acquire Green Harmony, which indirectly holds the entire equity interest of a group of companies established in China with principal activities of provision of MSI for the petroleum and petrochemicals industry (the "**Acquisition of Green Harmony**"). The Acquisition of Green Harmony was completed on August 15, 2018.

On August 15, 2018, the Company issued an unsecured promissory note (the "**First Promissory Note**") with a face value of HKD200 million, with a coupon interest rate of 8% per annum and be repayable on August 14, 2019, to Sailen International IOT Limited (the "**GH Vendor**"). On December 31, 2018, the Company further issued an unsecured promissory note (the "**Second Promissory Note**") with a face value of HKD200 million, with a coupon interest rate of 8% per annum and be repayable on December 30, 2020, to the GH Vendor. On March 15, 2019, the repayment due date of the First Promissory Note was extended to August 14, 2020.

On March 18, 2019, the Company redeemed from the GH Vendor the principal amount of HKD100 million of the First Promissory Note, together with payment of the accrued interest.

According to the adjustment mechanism stipulated in the GH SPA and with reference to the financial information of the Green Harmony and its subsidiaries for the year ended December 31, 2018, adjustment to the consideration was made. The final consideration of the Acquisition of Green Harmony was determined to be approximately HKD423 million.

On November 25, 2019, the Company and the GH Vendor entered into a supplemental agreement, pursuant to which, (i) the face value of the First Promissory Note was reduced to HKD20 million as the Company has redeemed the principal amount of HKD80 million of the First Promissory Note and the face value of the Second Promissory Note was reduced to approximately HKD123 million due to the adjustment of the consideration pursuant to the adjustment mechanism under GH SPA; (ii) the maturity date of the First Promissory Note and the Second Promissory Note was further extended to August 14, 2021 and December 30, 2021, respectively; and (iii) the coupon rates of the First Promissory Note and Second Promissory Note were reduced to 4% per annum, respectively, from the date of such supplemental agreement (i.e. November 25, 2019).

As of the date of this report, the remaining principal amount of the First Promissory Note and Second Promissory Note (collectively referred as to the "**Consideration Notes Payables**") are HKD20 million and approximately HKD123 million, respectively.

Please refer to the announcements of the Company dated December 1, 2017, December 28, 2017, January 3, 2018, January 10, 2018, February 12, 2018, March 23, 2018, May 31, 2018, August 15, 2018, March 15, 2019 and November 25, 2019 for further details.

PROSPECTS

According to an independent market research, the procurement of AMR products by State Grid is further expected to be approximately 87.7 million units per annum by 2021 as smart meters and other terminals in China had entered a new phase of upgrades (including upgrades to broadband PLC protocols) since 2018 and the bidding volume of smart meters and other terminals conducted by State Grid and Southern Grid is expected to grow at a compound annual growth rate of 11.5% from years 2017 to 2021, in accordance with the independent market research. In conjunction to the centralised biddings conducted by the State Grid every year, a decentralised bidding system were carried out by individual provincial and local power grid companies under State Grid in view of speeding up the local needs and progress of the upgrade and replacement of broadband AMR products in each geographical area. Also, broadband AMR products are relatively substitutable under unified standard of communication protocols with the major feature i.e. interconnection and intercommunication (互聯互通), as the costs of supply chain management are low to the customers; market participants have to compete in terms of, such as, timely delivery, competitive pricing, product reliability and effectiveness to increase product recognition, brand awareness and market share. This fundamental change created a much fiercer and more intense market competition in the broadband AMR market in State Grid.

As mentioned in the "Business Review", the Group experienced an unexpected delay in debut of the Group's PLC based broadband AMR product in 2019. It has postponed the Group's participation in certain centralized biddings to be conducted by State Grid as well as certain local biddings in 2019 and 2020, and hence has lead to a potential loss of market share which could hamper the financial performance of the Group's AMR and other business in the short run. Fortunately, the Group was informed by China Electric Power Research Institute on March 2, 2020 that the Group's PLC broadband chipsets has passed all the functional tests set out by the Institute. Based on the currently available information, the Directors can reasonably expect that China Electric Power Research Institute will officially issue the certificate letter to endorse our PLC broadband chipsets and modules which meet the protocol standards of broadband system-on-chip IC promulgated by the State Grid in the near future. The Group will use its best endeavor to expedite the release of PLC based broadband products to the market as early as possible and to regain our competitiveness in the AMR industry in China. Unfortunately, the recent outbreak of the Pandemic in the PRC may bring certain operational and financial risks encountered by the Group in the first half of 2020 but the Directors still expect an official launch of these products in the State Grid market in second half of 2020.

For the Group's SMIA business the Group believes that the growth of China industrial automation market would continue to be healthy given its relatively lower penetration rate and the rising cost of labor at present. Petrochemical enterprises are the pioneer of the manufacturing sector in China, major market participants are building smart oil fields, smart pipelines and smart factories. The Group will continue to opt for 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 utilising 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 alliance and cooperation with internationally renowned system integrators to provide existing and potential customers with value-adding solutions on 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 intelligent factory integrated solutions in petroleum refining and pipeline construction. At the same time, the Group will utilise its own research and development resources with the co-development with external expertise to further develop self-owned intellectual property rights on application program interface and visual integrated management platform for the intelligent factory as well as the integration of the online and core applications over 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 62, 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.

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 (currently known as Hughes), a company in the United States 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 the United States in May 1991.

As of December 31, 2019, 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 39, is an executive Director. He was appointed as a non-executive Director on November 22, 2017 and was re-designated as an executive director on January 21, 2019. Mr. Lau is responsible for overall corporate finance, capital management and strategic planning of the Group.

Mr. Lau has over 15 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 of Hong Kong Limited (the "**Stock Exchange**") (stock code: 8200) since December 2016.

Tang Andong (唐安東) ("Mr. Tang"), aged 56, was appointed as an executive Director on July 31, 2019.

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 GH Vendor. The Group acquired Green Harmony Limited (翠和有限公司) 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.

As of December 31, 2019, Mr. Tang 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.

NON-EXECUTIVE DIRECTORS

Cheung Fan (張帆) ("Mr. Cheung"), aged 48, 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).

Wang Shiguang (王世光) ("Mr. Wang"), aged 48, 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 more than 15 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, 2019, 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.

Zhou Francis Bingrong (周冰融) ("Mr. Zhou"), aged 35, has been appointed as a non-executive Director with effect from November 19, 2019. Mr. Zhou was an executive Director from August 21, 2018 to January 7, 2019 and was re-designated as a non-executive Director on January 8, 2019. Mr. Zhou subsequently resigned as a non-executive Director on June 10, 2019.

Mr. Zhou was an executive director and the chief executive officer of Madison Holdings Group Limited ("**Madison**"), a company listed on the GEM board of the Stock Exchange (stock code: 8057) from January 7, 2019 to October 3, 2019 and was an executive director and the deputy chairman of Madison from April 17, 2018 to August 24, 2018. Mr. Zhou was the president of Silk Road Energy Services Group Limited ("**Silk Road**"), a company listed on the GEM board of the Stock Exchange (stock code: 8250) from January 22, 2018 to December 19, 2018 and was the vice chairman and an executive director of Silk Road from March 11, 2016 to January 22, 2018. In addition, he was the vice chairman and an executive director of Value Convergence Holdings Limited ("**Value Convergence**"), a company listed on the Main board of the Stock Exchange (stock code: 821), from January 22, 2018 to April 16, 2018. Mr. Zhou also held senior equity research positions with prominent regional and China-based investment banks, such as China International Capital Corporation (Hong Kong) Limited and Daiwa Capital Markets Hong Kong Limited. He also served as vice president of Financial Planning & Analysis for Galaxy Entertainment Group.

Mr. Zhou has extensive experience in corporate finance and strategy, financial analysis and the capital markets. He started his career as an M&A Analyst with a boutique investment bank. He holds a Bachelor of Arts degree in Economics and Asian Studies from Bowdoin College in Brunswick, Maine, United States.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Zou Heqiang (鄒合強) ("Mr. Zou"), aged 51, 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 45, 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 44, 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 is currently a director of a professional audit firm in Hong Kong. He has over 15 years of experience in auditing and accounting industry.

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). In addition, Mr. Ong is currently the company secretary of listed companies listed on Main board in Hong Kong.

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; Koala Financial Group Limited (listed on GEM board in Hong Kong, stock code: 8226) for the period from February 2017 to September 2017; China Candy Holdings Limited (listed on GEM board in Hong Kong, stock code: 8182 (cancellation of Listing with effect from December 31, 2019)) for the period from February 2016 to September 2017; 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 (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.

SENIOR MANAGEMENT OF THE GROUP

Leung Ka Lok (梁家樂) ("Mr. Leung"), aged 49, was appointed as the chief financial officer and company secretary of the Company on May 16, 2016. Mr. Leung has been a director of each of Harvest Year and Prime Key since March 2016.

Mr. Leung has joined the Group since January 2016 and has over 25 years of experience in auditing and accounting industry. Mr. Leung was admitted as a fellow of The Association of Chartered Certified Accountants in January 2001. He has also been an associate of The Chartered Association of Certified Accountants (currently known as The Association of Chartered Certified Accountants) since January 1996 and a member of Hong Kong Society of Accountants (currently known as Hong Kong Institute of Certified Public Accountants) since January 1996. He obtained a bachelor's degree in Accountancy from the City Polytechnic of Hong Kong (currently known as City University of Hong Kong) in Hong Kong in November 1992 and a master's degree in Business Administration (distance learning course) from The University of Manchester in the United Kingdom in June 2007.

Chen Junling (陳俊玲) ("Ms. Chen"), aged 47, 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 over 15 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.

Zhang Baojun (張保軍) ("Mr. Zhang BJ"), aged 52, is the vice president and chief engineer of Risecomm WFOE responsible for product research and development and promotion of the AMR business. He has joined the Group as the vice president and chief engineer of Risecomm WFOE since June 2012. Mr. Zhang BJ has over 30 years of experience in the electricity industry. Mr. Zhang BJ commenced his career in Harbin Electrical Instruments Research Institute, an institute engaged in, among others, development of instruments and automation measurement and control systems in 1989 as an engineer until 1995. From 1995 to 2005, he worked as a research and development manager, assistant general manager and chief engineer, respectively at Heilongjiang Longdian Electric Co., Ltd., a company engaged in, among others, the development of mechatronics instruments and automatic control technology and related products. From July 2005 to May 2012, Mr. Zhang BJ worked as the chief engineer in Shenzhen RMS Technology. He was also a shareholder, executive director and general manager of Shenzhen RMS Technology prior to joining the Group in June 2012.

Mr. Zhang BJ obtained a bachelor's degree in Engineering from Harbin Institute of Electrical Engineering (currently known as Harbin University of Science and Technology) in the PRC in July 1989.

Liu Ming (劉明) ("Mr. Liu"), aged 49, 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 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 45, is the 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 also been a director of Risecomm WFOE since May 2018.

Ms. Chen SY has over 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 60, 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) Technology Company Limited ("**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, 2019.

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 14 and 15 to the consolidated financial statements, respectively.

SHARE CAPITAL

As of December 31, 2019, 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.

On January 15, 2019, certain employees of the Company exercised options to subscribe for 11,436,824 ordinary shares at the exercise price of US$0.0003 per share. On June 14, 2019, 16,434,826 ordinary shares were issued to the NM Vendor pursuant to the NM SPA, at the issue price of HKD3.40 per share, as settlement of the final payment of the consideration. On October 31, 2019, an aggregate of 147,500,000 Placing (as defined below) shares were allotted and issued under the general mandate to not less than six placees who are independent from the Company at the Placing price of HKD0.40 each pursuant to the terms and conditions of the Placing agreement entered into by the parties on October 15, 2019. The net proceeds derived from the Placing are approximately HKD58.5 million and was fully utilized for partial settlement of the outstanding principal of the First Promissory Notes during the year under review.

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 30 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 environmental management system certifications, which are valid to June 2021 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 insurance, 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 OHSAS18001:2007 certifications for occupational health and safety management system, which are valid to June 2021 and March 2021 respectively and subject to renewal. The Group has implemented safety measures at its product assembly hubs 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, while the Group's SMIA business was affected by the unexpected delay in delivery/implementation of certain major contracts held as of December 31, 2019. 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 changing as it is foreseeable that a portion of the PLC market shares will be retained by SOE, in general. Hence, the competition among domestic PLC market participants are even more intense in the upcoming years although the overall market demand in PLC remains strong and promising. The Group also had an unexpected further delay in debut of the Group's PLC based broadband AMR products, which is subject to the final approval process run by the State Grid. This has postponed the Group's participation in certain centralized biddings to be conducted by State Grid as well as certain local biddings, and hence lead to a potential loss of market share which may hamper the financial performance of the Group's AMR and other business in the short run.

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. The Group will also launch its PLC based broadband AMR products to the market as soon as practicable.

SMIA business

The ongoing economic conflict between the world's two largest national economies, China and the United States 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, 2019 comprised the share premium and accumulated losses of RMB32,117,000 (2018: RMB129,594,000).

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 *(Chief Executive Officer)*
Mr. Lau Wai Leung, Alfred
(redesignated from non-executive Director to executive Director on January 21, 2019)
Mr. Tang Andong *(appointed on July 31, 2019)*
Mr. Zhang Youyun *(resigned on July 31, 2019)*

Non-executive directors:

Mr. Cheung Fan *(Chairman) (redesignated as Chairman on June 10, 2019)*
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong
(redesignated as non-executive Director on January 8, 2019, resigned on June 10, 2019 and appointed on November 19, 2019)
Mr. Yang Luokui *(appointed on June 10, 2019 and resigned on November 12, 2019)*

Independent non-executive directors:

Mr. Ong King Keung
Ms. Lo Wan Man *(appointed on May 29, 2019)*
Mr. Zou Heqiang *(appointed on May 29, 2019)*
Mr. Chen Yong *(retired on May 23, 2019)*
Mr. Pan Song *(retired on May 23, 2019)*

DIRECTORS' PROFILES

Directors' profiles are set out on page 14 to 17 of this report.

Pursuant to Article 83(3) of the Articles, Mr. Tang Andong, Mr. Zhou, Francis Bingrong, Ms. Lo Wan Man and Mr. Zou Heqiang (the "**Retiring Directors**") will retire at the forthcoming annual general meeting ("**2020 AGM**"). All Retiring Directors, being eligible, will offer themselves for re-election at the 2020 AGM.

Pursuant to Article 84(1) of the Articles, Mr. Wang Shiguang and Mr. Ong King Keung will retire at the 2020 AGM, and being eligible, will offer themselves for election at the 2020 AGM.

CHANGE IN DIRECTORS' BIOGRAPHICAL DETAILS

Change in Director's biographical details since the date of the Interim Report 2019 and up to the date of this report, which are required to be disclosed pursuant to rule 13.51B(1) of the Rules Governing the Listing of Securities on the Stock Exchange ("**Listing Rules**") are set out below:

Name of Director	Details of Change
Mr. Yue Jingxing	Mr. Yue resigned as the director and authorized representative of Risecomm Beijing Comm with effect from August 20, 2019 due to job reallocation. As Shenzhen Risecomm Software Technology Company Limited was deregistered with effect from November 5, 2019, therefore Mr. Yue ceased to act as the director and authorized representative. Risecomm Beijing Comm and Shenzhen Risecomm Software Technology Company Limited were the subsidiaries of the Company.
Mr. Tang Andong	Mr. Tang has been appointed as the director and authorized representative of Risecomm Beijing Comm with effect from August 20, 2019.
Mr. Cheung Fan	The annual director's fee of Mr. Cheung was adjusted from HKD360,000 to HKD720,000 per annum with effect from January 1, 2020.
Mr. Zhou, Francis Bingrong	Mr. Zhou has been appointed as a non-executive Director on November 19, 2019 for an initial term of three years and the annual director's fee of Mr. Zhou was HKD120,000. Mr. Zhou was resigned as executive director and the chief executive officer of Madison (HK stock code: 8057) on October 3, 2019.
Mr. Yang Luokui	Mr. Yang resigned as non-executive Director due to his other work commitments with effect from November 12, 2019.
Mr. Ong King Keung	Mr. Ong was resigned as independent non-executive director, and member of the audit committee and remuneration committee of China Water Affairs Group Limited (HK stock code: 855) with effect from November 22, 2019. Mr. Ong resigned as company secretary of China Kangda Food Company Limited (HK stock code: 834) (SGX stock code: P74) in November 2019.

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. Tang Andong, an executive Director, entered into a service agreement with the Company for an initial term of three years from July 31, 2019, and the term of the service agreement shall be renewed and extended automatically for successive terms of one year upon expiry of the then current term, until terminated either by Mr. Tang 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' notice in writing served by either party on the other.

Each of the non-executive Directors (including independent non-executive Directors), except for Mr. Wang Shiguang, entered into a letter of appointment with the Company for an initial term of three years until terminated by not less than three months' notice in writing 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 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 32(b) 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 11 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, 2019, 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%
Mr. Tang Andong	The Company	Interest in a controlled corporation (Note 4)	30,212,500 (L)	3.06%

* The percentage represents the number of shares/underlying shares involved divided by the number of the issued Shares as of December 31, 2019.

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 Jingxing 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 GH Vendor is owned as to 50% by Mr. Tang, which holds 30,212,500 Shares. By virtue of the SFO, Mr. Tang is deemed to be interested in the Shares in which the GH Vendor is interested.

(5) As at December 31, 2019, the total issued shares of the Company were 986,619,071.

Save as disclosed above, as of December 31, 2019, 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, 2019, 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 9)	20.00%
SAIF II GP L.P.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 9)	20.00%
SAIF Partners II L.P.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 9)	20.00%
SAIF II GP Capital Ltd.	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 9)	20.00%
Mr. Andrew Y. Yan	Interest in a controlled corporation (Note 3)	197,340,537 (L) (Note 9)	20.00%
Cisco System, Inc	Interest in a controlled corporation (Note 4)	197,340,537 (L) (Note 9)	20.00%
Spitzer Fund VI L.P.	Beneficial owner	155,575,000 (L) (Note 7)	15.77%
Software Research Associates, Inc. ("**SRA**")	Beneficial owner (Notes 5 & 6)	60,000,000 (L) (Note 7)	6.08%
SRA Holdings, Inc. ("**SRA Holdings**")	Interest in a controlled corporation (Notes 5 & 6)	60,000,000 (L) (Notes 7)	6.08%

* The percentage represents the number of Shares/underlying Shares involved divided by the number of the issued Shares as of December 31, 2019.

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 60,000,000 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 HKD150,000,000 at the Initial Conversion Price of HKD2.50 per 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, 2019.

Save as disclosed above, as of December 31, 2019, 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, the Placing agreement, the NM SPA 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 24(a) 25, and 26 to the consolidated financial statements for further information about the Convertible Bonds, the Placing agreement, the NM SPA 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 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 Director's Report, the total number of Shares available for issue under the Share Option Scheme was 80,000,000 Shares, representing about 8.11% 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	Number of shares granted	Exercise Price per Share HKD	During the period under review: Granted	Exercised	Cancelled	Lapsed	Outstanding as at December 31, 2019
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	4,791,669	1.71	–	–	–	(590,000)	4,201,669
September 3, 2018	From September 3, 2021 to September 2, 2026	4,791,669	1.71	–	–	–	(590,000)	4,201,669
September 3, 2018	From September 3, 2022 to September 2, 2026	4,791,662	1.71	–	–	–	(590,000)	4,201,662
Total		**15,500,000**		**–**	**–**	**–**	**(1,770,000)**	**13,730,000**

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. 1,770,000 share options were lapsed as the associate (i.e. employee) resigned during the exercisable period as specified.

As at December 31, 2019, the total number of shares available for issue under the Share Option Scheme was 66,270,000, representing approximately 6.72% of the Company's issued share capital at December 31, 2019, and the remaining life of the Share Option Scheme was approximately 7 years.

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 year under review are as follows:

Directors

Name of Directors	Date of grant	Exercisable period	Outstanding as at December 31, 2018	Exercise Price per Share (Note 1) USD	During the year under review Granted	Exercised	Cancelled	Lapsed	Outstanding as at December 31, 2019
Mr. Yue Jingxing	August 25, 2016	From August 25, 2016 to March 25, 2024	863,587	0.0003	–	–	–	–	863,587
Mr. Zhang Youyun	August 25, 2016	From August 25, 2016 to March 25, 2024	1,841,423	0.0003	–	(1,841,423) (Note 2)	–	–	–
	Sub-total		**2,705,010**		**–**	**(1,841,423)**	**–**	**–**	**863,587**

Employees

Date of grant	Exercisable period	Outstanding as at December 31, 2018	Exercise Price per Share (Note 1) USD	During the year under review Granted	Exercised	Cancelled	Lapsed	Outstanding as at December 31, 2019
August 25, 2016	From August 25, 2016 to March 25, 2024	9,595,401	0.0003	–	(9,595,401) (Note 2)	–	–	–
	Sub-total	**9,595,401**	**0.0003**	**–**	**(9,595,401)**	**–**	**–**	**–**
	Total	**12,300,411**		**–**	**(11,436,824)**	**–**	**–**	**863,587**

Notes:

(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.

(2) The closing price of Company's shares of the immediately preceding business day on which the options were exercised on January 15, 2019 was HKD1.67.

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 5(b) (i) 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 32 to the consolidated financial statements. Transaction as set out in note 32(b) 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

Reference is made to the announcements of the Company dated October 15, and October 31, 2019. On October 31, 2019, the Company has placed 147,500,000 Ordinary Shares of HKD0.0001 each to not less than six independent placees, who were professional, institutional or other investors, at the placing price of HKD0.40 each ("**Placing**"). The aggregate nominal value of the Shares allotted and issued under the Placing was HKD14,750. The closing price of the Share as quoted on the Stock Exchange on October 15, 2019 (being the date of the placing agreement in relation to the Placing) was HKD0.45 per Share. The Shares were allotted and issued under the general mandate granted to the Directors by a resolution passed by the then shareholders of the Company at the annual general meeting of the Company held on May 23, 2019. The gross proceeds raised from the Placing were approximately HKD59.0 million and the net proceeds derived from the Placing (after deduction of the relevant expenses) were approximately HKD58.5 million, which were used by the Company for partial settlement of the outstanding principal of the First Promissory Note during the year under review. The net price of each of the Placing Shares was approximately HKD0.40 per Placing Share. Save as disclosed, 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.

The Directors are of the view that the Placing represents an opportunity for the Company to strengthen its capital base and financial position without any interest burden, within a relatively short time frame and at lower costs when compared with other means of fund raising, as well as to broaden its shareholder base.

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 19.2% (2018: approximately 19.1%) and the aggregated revenue attributable to the five largest customers accounted for approximately 43.3% (2018: approximately 40.1%) of the total revenue of the Group.

During the year under review, the Group's largest supplier (including outsourced service provider) accounted for approximately 23.0% (2018: approximately 25.1%) and the aggregated purchases (including outsourced service fees) attributable to the Group's five largest suppliers (including outsourced service providers) accounted for approximately 63.5% (2018: approximately 50.3%) of the total purchases (including outsourced service fees) of the Group.

None of the directors, their 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

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 of the Company dated May 29, 2017 (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 unutilized net proceeds (the "**Re-allocation**"). For details of the Reallocation, 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 as well as 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, 2019 HKD'million	Unutilized net proceeds as at December 31, 2019 HKD'million
Research and development of the PLC technology	95.7	(37.8)	40.1	17.8
Sales and marketing	32.0	(6.9)	10.2	14.9
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	21.7	23.0
	158.2	–	102.5	55.7

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 use of proceeds was 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, 2019 are expected to be fully utilized on or before December 31, 2021.

From Issue of the Convertible Bonds

References are made to the announcements of the Company dated July 31, 2018 and August 13, 2018 and the paragraph headed "Management Discussion and Analysis — Financial Review — Issue of convertible bonds" of this report. The aggregated net proceeds from the issue of the Convertible Bonds was approximately HKD146.0 million.

During the year under review, the net proceeds had been applied for as follows:

	Actual Net proceeds HKD'million	Amount utilized as at December 31, 2019 HKD'million	Unutilized net proceeds as at December 31, 2019 HKD'million
Settle consideration for the acquisition of Green Harmony	146.0	146.0	–

As at December 31, 2019, the net proceeds from issue of Convertible Bonds were fully utilized in accordance with the intentions as disclosed in the announcement of the Company dated 31 July 2018.

From Issue of the Placing Shares

References are made to the announcements of the Company dated October 15, 2019 and October 31, 2019 and the paragraph headed "Directors's Report — Purchase, Redemption or Sale of the Listed Securities of the Company" of this report. The aggregated net proceeds derived from the Placing (after deduction of the relevant expenses) were approximately HKD58.5 million.

During the year under review, the net proceeds had been applied for as follows:

	Actual Net proceeds HKD'million	Amount utilized as at December 31, 2019 HKD'million	Unutilized net proceeds as at December 31, 2019 HKD'million
Partial settlement of the outstanding principal of the First Promissory Note	58.5	58.5	–

As at December 31, 2019, the net proceeds from the Placing were fully utilized in accordance with the intentions as disclosed in the announcement of the Company dated October 15, 2019.

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, 2019, the Group had an aggregate of 221 employees (as at December 31, 2018: 355 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 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. 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 2020 AGM

The register of members of the Company will be closed from Wednesday, June 10, 2020 to Monday, June 15, 2020 (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 Monday, June 15, 2020 (the "**2020 AGM**") or any adjournment thereof. In order to be qualified for attending and voting at the 2020 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 Tuesday, June 9, 2020.

EVENTS 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 34 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 162 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.

AUDITOR

A resolution will be submitted to the 2020 AGM to re-appoint KPMG as auditor of the Company.

On behalf of the Board

Yue Jingxing
Chief Executive Officer and Executive Director

Hong Kong, May 7, 2020

Corporate Governance Report

CORPORATE GOVERNANCE PRACTICES

The board of directors (the "**Board**") of the Company 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.

The Board is of the view that throughout the year under review, the Company has complied with all the code provisions as set out in the CG Code.

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 as set out in the Model Code as set out in Appendix 10 to the Listing Rules.

Specific enquiry has been made to all the Directors and the Directors have confirmed that they have complied with the Model Code and the Company's Code throughout the year under review.

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 of the Company currently comprises the following Directors:

Executive Directors

Mr. Yue Jingxing *(Chief Executive Officer and Member of Remuneration Committee)*
Mr. Lau Wai Leung, Alfred
Mr. Tang Andong

Non-executive Directors

Mr. Cheung Fan *(Chairman and Chairman of Nomination Committee)*
Mr. Wang Shiguang
Mr. Zhou, Francis Bingrong

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 14 to 19 of this report.

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

Chairman and Chief Executive Officer

The positions of Chairman and Chief Executive Officer are held by Mr. Cheung Fan and Mr. Yue Jingxing, respectively. The Chairman provides leadership and is responsible for the effective functioning and leadership of the Board. The Chief Executive Officer focuses on the Company's business development and daily management and operations generally.

Independent Non-executive Directors

Save for the period between May 23 to May 28, 2019, throughout the year under review and up to the date of this report, the Company has complied with the requirements under Rules 3.10(1) and 3.10A of the Listing Rules. Please refer to the announcement of the Company dated May 23 and May 28, 2019 for further details. The Company requires at least three independent non-executive directors and that at least one of the independent non-executive directors must have appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each of the independent non-executive Directors in respect of his independence in accordance with the independence guidelines set out in Rule 3.13 of the Listing Rules. The Company is of the view that all independent non-executive Directors are independent.

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 Company's 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. Lau Wai Leung, Alfred	A
Mr. Tang Andong	A&B
Non-Executive Directors	
Mr. Cheung Fan	A
Mr. Wang Shiguang	A&B
Mr. Zhou, Francis Bingrong	B
Independent Non-Executive Directors	
Mr. Ong King Keung	A&B
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. Save for the period between May 23 to May 28, 2019, throughout the year under review and up to the date of this report, the Company has complied with the requirements under Rule 3.21 of the Listing Rules. Please refer to the announcement of the Company dated May 23 and May 28, 2019 for further details. 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 three 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, and arrangements for employees to raise concerns about possible improprieties.

The Audit Committee also met the external auditor once 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. Save for the period between May 23 to May 28, 2019, throughout the year under review and up to the date of this report, the Company has complied with the requirements under Rule 3.25 of the Listing Rules. Please refer to the announcement of the Company dated May 23 and May 28, 2019 for further details. 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 six meetings 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	2
HKD500,001–HKD1,000,000	3
HKD1,000,001–HKD1,500,000	–
HKD1,500,001–HKD2,000,000	1

Details of the remuneration of each Director for the year under review are set out in note 7 to the consolidated financial statements.

The Remuneration Committee also made recommendations to the Board on the terms of service contract or letter of appointment of each new executive Director and non-executive Directors appointed/redesignated 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. Save for the deviation from the Code Provision A.5.1 of the CG Code during the period between May 23 and May 28, 2019, whereby the number of independent non-executive director at the material time does not represent a majority of the Nomination Committee, throughout the year under review, the Company has complied with the requirements under Code Provision A.5.1. Please refer to the announcement of the Company dated May 23 and May 28, 2019 for further details.

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 four meetings 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 and to consider and recommend to the Board on the appointment of executive Director and non-executive Director.

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

Regular Board meetings should be held at least four times a year involving active participation, either in person or through electronic means of communication, of a majority of Directors.

Apart from regular 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 these meetings is set out in the table below:

	Attendance/Number of Meetings				
Name of Director	Board	Audit Committee	Remuneration Committee	Nomination Committee	2019 AGM
Mr. Yue Jingxing	16/20	N/A	5/6	N/A	1/1
Mr. Lau Wai Leung, Alfred	16/20	N/A	N/A	N/A	1/1
Mr. Tang Andong *(appointed on July 31, 2019)*	6/9	N/A	N/A	N/A	N/A
Mr. Zhang Youyun *(resigned on July 31, 2019)*	11/11	N/A	N/A	N/A	1/1
Mr. Cheung Fan	10/20	N/A	N/A	0/1	0/1
Mr. Wang Shiguang	15/20	N/A	N/A	2/3	1/1
Mr. Zhou, Francis Bingrong *(resigned on June 10, 2019 and appointed on November 19, 2019)*	3/11	N/A	N/A	N/A	0/1
Mr. Yang Luokui *(appointed on June 10, 2019 and resigned on November 12, 2019)*	6/7	N/A	N/A	N/A	N/A
Mr. Ong King Keung	18/20	3/3	6/6	4/4	1/1
Ms. Lo Wan Man *(appointed on May 29, 2019)*	10/12	2/2	3/3	2/2	N/A
Mr. Zou Heqiang *(appointed on May 29, 2019),*	9/12	2/2	N/A	N/A	N/A
Mr. Chen Yong *(retired on May 23, 2019)*	7/7	1/1	2/2	2/2	1/1
Mr. Pan Song *(retired on May 23, 2019)*	7/7	1/1	N/A	N/A	0/1

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 Directors are not aware of any material uncertainties relating to events or conditions that may cast significant doubt upon the Company's ability to continue as a going concern.

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 72 to 78.

AUDITOR REMUNERATION

The remuneration paid to the external auditor of the Company, KPMG, in respect of audit and non-audit services provided to the Group during the year under review was analyzed below:

Service Category	Fees paid/ payable RMB
Audit services	3,468,000
Non-audit services	–
	3,468,000

COMPANY SECRETARY

Mr. Leung Ka Lok, the Chief Financial Officer of the Company, has been appointed as the company secretary of the Company since May, 2016.

During the year under review, Mr. Leung 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 2019 AGM held on May 23, 2019, 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 2019.

REPORTING PERIOD AND SCOPE

Information contained in this Report covers the period from January 1, 2019 to December 31, 2019, which is consistent with the financial year covered by the Group's Annual Report 2019. Its main business operation areas include its headquarters in Nanshan, Shenzhen, the PRC, and its offices in Beijing, Wuxi, Changsha 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 welcome 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, Changsha and Hong Kong, the PRC. The Group's production, R&D and sales businesses are carried out by its various subsidiaries, namely Risecomm WFOE, Risecomm Beijing Comm, Risecomm Wuxi and Changsha Risecomm Communication Technology Company Limited ("**Risecomm Changsha**"). 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 PLC technology, the Group provides: (i) AMR business (including provision of PLC-related system-on-chip ("**SOC**") IC, PLC modules and other AMR products), which has maintained a leading position in market application of State Grid Corporation of China over the years; and (ii) Smart Energy Management ("**SEM**") business (including streetlight control, building energy management and photovoltaic power management) which has been widely used in the market. In particular, the Group ranked high in terms of market share in the market of PLC technology adopted in smart streetlight remote control system, while the application of other smart management solutions also grow steadily. Secondly, the Group has expanded its business to Smart Manufacturing In Automotive business, further providing software authorization, producing safety products, and software after-sales customer support services for maintenance and safety integrity systems applied in the petroleum and petrochemical industries.

In the future, the Group will continue to uphold the idea of upgrading industrial informatization through SEM research and the industrial Internet of Things so as to facilitate interconnection, intercommunication and inter-control among different SEM products in different industries and enterprises. Also, by applying PLC technology which seamlessly connects SEM business to the industrial Internet of Things through power line, the Group aims to achieve further extension of industrial network, thereby allowing the omnipresent industrial Internet of Things to contribute to the smart and integrated development of China's industry.

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 last year's stakeholder survey, the Group conducted several communications with various stakeholder representatives in 2019, 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			✓
	Sunshine 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.

In 2019, 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 engage 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, 2019, 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.

In 2019, in order to strengthen the control on operating cost, the Group took up the originally outsourced after-sales maintenance services on its own, resulting in an increase in vehicle utilization rate as compared with 2018. This resulted in direct GHG emissions (Scope 1) caused by fuel consumption from vehicles increased from 43.22 tCO_2e in 2018 to 102.59 tCO_2e in 2019 by approximately 137%.

Although direct GHG emissions (Scope 1) have increased due to the increase in vehicle usage in the Group, the total GHG emissions have decreased by approximately 5% from about 236.37 tCO_2e in 2018 to approximately 224.74 tCO_2e in 2019. This is mainly due to the decrease in indirect GHG emissions from purchased electricity of the Group from about 193.15 tCO_2e in 2018 to approximately 122.15 tCO_2e in 2019 by approximately 37%. The reasons for decreased indirect GHG emissions from purchased electricity of the Group were as follows:

1. In 2019, the demand for the Group's PLC products of the narrow-band AMR system provided by the State Grid fell; and the Group unexpectedly delayed the launch of broadband AMR products, so the production volume of Hunan Changsha Product Assembly Center has decreased significantly;

2. The Group and its subsidiaries have adopted a streamlined structure in the context of a slowdown in the overall growth rate of the industry, thereby improving internal operation efficiency, reducing electricity usage; and

3. Since June 2018, the Group operation of the Product Assembly Hub in Yantian Shenzhen has been closed, hence was not included in the purchased electricity of the Group in 2019.

GHG Emissions Indicator[1]	Unit	2019	2018
Direct GHG emissions (Scope 1)[2]	tCO_2e	**102.59**	43.22
Indirect GHG emissions (Scope 2)[2]	tCO_2e	**122.15**	193.15
Total GHG emissions (Scope 1 and 2)[2]	tCO_2e	**224.74**	236.37
Intensity[3]	tCO_2e/turnover (RMB'000)	**0.0010**	0.0005

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 II: Reporting Guidance on Environmental KPIs" issued by the Hong Kong Stock Exchange, latest released emission factors of China's regional power grid basis, the emission factor released by the Hong Kong Electric Investments in 2018 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, 2019, the Group's turnover was about RMB 218.6 million.

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 Changsha, 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 increased compared to 2018, and data related to vehicle exhaust gases emissions have increased. For the year ended December 31, 2019, the performance of vehicle exhaust gases emissions was as follow:

Types of Emission	Unit	2019	2018
Sulphur oxides	Tonnes	**0.0006**	0.0002
Nitrogen oxides	Tonnes	**0.1167**	0.0269
Particulate Matters	Tonnes	**0.0083**	0.0023

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, 2019, the performance of sewage reduction was as follows:

Types of Sewage	Unit	2019	2018
Domestic sewage	Cubic meters	**2,343.70**	4,988.74
Intensity	Cubic meters/turnover (RMB'000)	**0.011**	0.010

The overall domestic sewage reduction of the Group decreased by approximately 53% from approximately 4,988.74 cubic meters in 2018 to approximately 2,343.70 cubic meters in 2019. The main reasons are:

1. In 2019, 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 production volume of Hunan Changsha Product Assembly Center has decreased significantly;

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;

3. Since June 2018, the Group operation of the Product Assembly Hub in Yantian Shenzhen has been closed, therefore the Group will not have this part of sewage discharge in 2019.

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. In 2018, 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 2019, the Group further increased the company's process basics to declare and approve on the OA system. Most of the internal approval processes have paperless implemented, which has significantly reduced office paper use by approximately 36%. For the year ended December 31, 2019, the Group's non-hazardous waste discharge performance is summarized as follows:

Types of Wastes	Unit	2019	2018
Total amount of non-hazardous wastes	Tonnes	**0.96**	1.50
Intensity	Tonnes/turnover (RMB'000)	**0.000004**	0.000003

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-sales maintenance services by the Group. Therefore, the Group 's vehicle utilization rate has continued to increase, resulting in an increase in overall gasoline consumption compared to 2018. Conversely, other power consumption is the power required for general operations, coupled with the reasons described in the section on 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 increased significantly by approximately 20% from approximately 474,352.08 kWh in 2018 to approximately 571,532.45 kWh in 2019. The Group's energy consumption for the year ended December 31, 2019 is as follows:

Types of Energy	Unit	2019	2018
Petrol[4]	kWh	**373,832.81**	151,528.64
Purchased electricity	kWh	**197,699.64**	322,823.44
Total	kWh	**571,532.45**	474,352.08
Intensity	kWh/turnover (RMB'000)	**2.61**	1.00

Note:

4. Actual gasoline consumption in 2019 and 2018 is approximately 38,573.80 liters and approximately 16,248.23 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 2019, 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.

Example of application

Location:	Risecomm WFOE 5th floor, Skyworth Building, Shenzhen
Year:	At the beginning of 2019
Program:	Since the installation of this system on the 5th floor of Risecomm WFOE in 2018, the energy-saving effect is beginning to show. This year, it has been extended to the Finance Department. The system allows the pre-setting of office temperature according to seasonal climate changes. Through energy-saving monitoring and control platform, parameters such as office environmental conditions, utilisation and power consumption can be collected for analysis. Remote batch management enables air conditioners to operate under an intelligent planned mode and temperature, facilitating centralized management of power consumption of air conditioners.
Effect:	It has yield satisfactory energy saving effect as compared with 2018.

The Group strives to save energy, improve energy efficiency and reduce the pressure on the environment caused by the use of energy, and works on energy conservation and emission reduction from three aspects, including management, technology and structure. The Group also performs energy-saving technological upgrade for certain customers.

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's 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 53% from approximately 4,988.74 cubic meters in 2018 to approximately 2,343.70 cubic meters in 2019.

Water Consumption	Unit	2019	2018
Water consumption	Cubic meters	**2,343.70**	4,988.74
Intensity	Cubic meters/turnover (RMB'000)	**0.011**	0.010

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 2019, 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 Hunan Changsha s in PE plastic bag, Paper cotton and Pearl cotton has been decreased significantly. Packing materials used by the Group for the year ended December 31, 2019 are as follows:

Types of Packaging Material	Unit	2019	2018
PE plastic bag	Tonnes	**0.006**	3.53
Paper carton	Tonnes	**1.76**	15.48
Pearl cotton	Tonnes	**0.06**	0.86

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 2019, 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 2019, 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, 2019, 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.

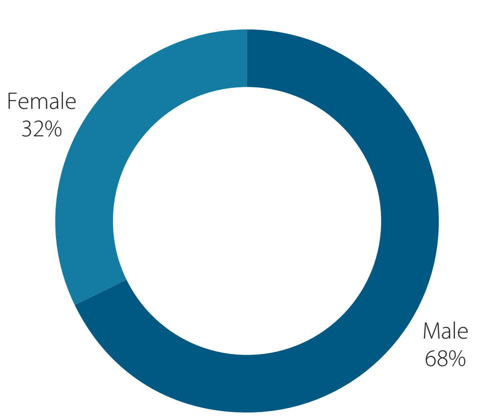
Analysis of human resources

As at December 31, 2019, the Group and its subsidiaries had total of 221 employees, 151 of whom were male and 70 were female, representing 68% and 32% of the total number of employees respectively. Among all employees, 13 employees held doctorate and postgraduate degree, 106 employees held university degree and 102 employees were below degree level, representing 6%, 48% and 46% of the total number of employees respectively.

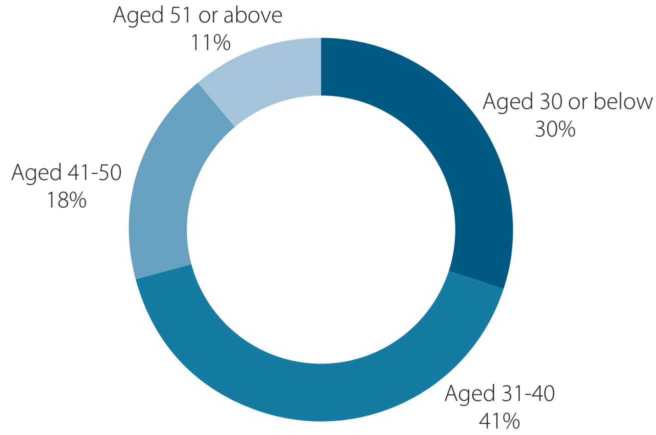
Breakdowns of the employees by gender, age group and employee category as at December 31, 2019 are set out below:

Type of Employees	2019 Number of employees	2019 Approximate percentage of the total number	2018 Number of employees	2018 Approximate percentage of the total number
By gender				
Male	**151**	**68**	251	71
Female	**70**	**32**	104	29
Total	**221**	**100**	355	100
By age group				
Aged 30 or below	**67**	**30**	163	46
Aged 31-40	**90**	**41**	130	37
Aged 41-50	**40**	**18**	42	12
Aged 51 or above	**24**	**11**	20	5
Total	**221**	**100**	355	100
By employee category				
General	**126**	**57**	240	67
Middle Management	**78**	**35**	98	28
Senior Management	**17**	**8**	17	5
Total	**221**	**100**	355	100

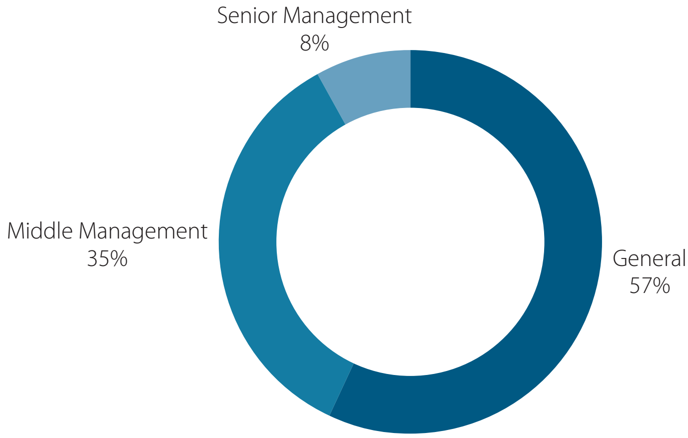
2019 Employees Gender



2019 Employees Age Group



2019 Employee Category



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 not only about the daily work of employees, but also their families. The Company presents warm gifts and expresses its concern for employees during birthdays, marriages, next of kin deaths and traditional festivals. Also, the Group cares about the family members of employees. "Family Day Picnic" and "Family Open Day" have been its signature projects of employee care. It has organised "Family Day Picnic" for 14 times since 2006. According to the wish of employees, the Company may arrange their family members to visit Risecomm working place on a specific day each year and find out more about the nature and scope of work of the employees. Through family days, employees and their family members may gather together in the warm big family of the Group, which enhances employees' sense of identity and belonging to the Group.

For the year ended December 31, 2019, 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.

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

The Group has a designated team especially responsible for organizing various types of training for employees, and also organizing health lectures, occupational safety training and drills from time to time, so as to continuously improve the safety responsibility consciousness of employees.

On November 8, 2019, the Group organized and arranged fire drills, which improved the ability of workers to prevent and resist disasters in emergencies.

Occupational health training

In April and September of 2019, the Group organized the company's security management personnel to participate in the professional training of the Guangdong Provincial Construction Engineering Quality and Safety Supervision and Inspection Station. The number of trainees was 8 and all of them took the professional examination organized by the organizer with a passing rate of 100%.

On August 16, 2019, the Group invited a professional fire safety training instructor to provide professional fire safety training for the employees of the Group with 24 participants. Through the training, they learned the importance of fire safety and the usage of fire safety equipment, which helps to prevent fire and reinforce their own fire safety awareness. During the training, there was a random quiz for the staff and 100% pass rate was achieved.

On October 10-20, 2019, the Group has organized personnel to participate in the professional training conducted by Safety Production Management Personnel from Production Operation Unit from the Safety Training Centre in Nanshan District of Shenzhen, to enhance self-awareness on safety management. The trainees has participated in the examination on October 25, 2019 and obtained relevant certificates.

In October and mid-December 2019, the Group invited professional training instructors from the Guangdong Energy Association to conduct professional training on the company's technical professional positions for occupational theory and skills practice. The number of participants was 21, and after the training, they participated in the national Safety Supervision Bureau's professional vocational qualification examination and obtained relevant certificates, with passing rate of 100%, and strengthen the safety operation awareness of each technical post.

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.

For the year ended December 31, 2019, 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:

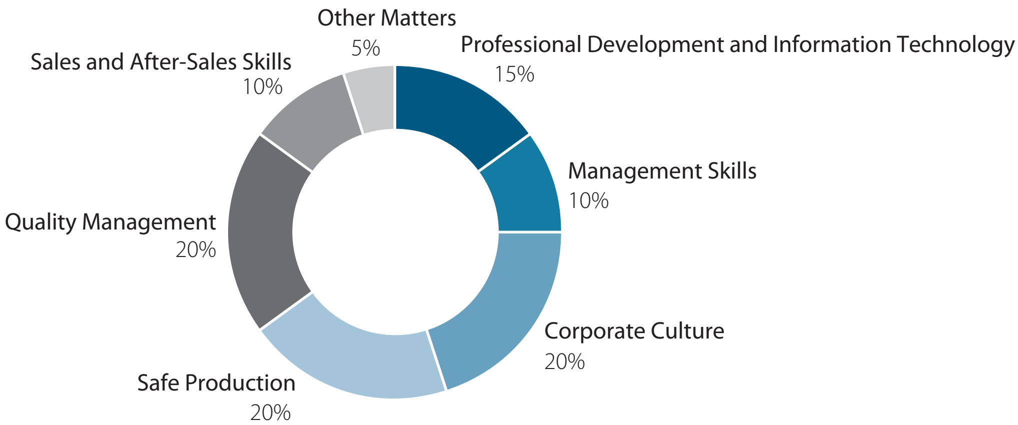
Analysing training needs → Designing training methods and courses → Training → Results evaluation and review

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.

Training in 2019



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, 2019, 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 following table shows the distribution of the Group's suppliers for the year ended December 31, 2019:

Distribution Area	Number of suppliers
The PRC (including Hong Kong)	259
Overseas	1

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.

Sunshine procurement

In respect of supply chain management and procurement, the Group has adhered to the philosophy of "sunshine 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 "sunshine 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, 2019, the Group did not find any major violation against the health and safety, advertising, labelling and privacy of the products and services provided, and had strictly complying 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 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 pass rates required for quality inspection. The Group conducts internal checks on the raw materials received from its suppliers and deliver 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 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.

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 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, 2019, the Group held an important intellectual property portfolio comprising 16 patents, 83 computer software copyrights and 8 registered IC layout designs, and 12 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 implement the "Accounting Standards for Business Enterprises" and strengthen random financial audit to prevent financial risks. Also, the Group has made clear its anti-corruption management requirements, 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.

Supply 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, 2019, 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. It has invested resources in various fields to provide funding and resource support to the disadvantaged, the disabled and other groups. It hopes that the Group will bring positive influence to more people in the community. As of the end of 2019, the Group has carried out a series of activities, focusing on themes such as "Love and Care" and "Thanks for you, Tomorrow for us", and achieved the desired result. These practical actions have satisfied the needs of certain disadvantaged groups. The Group has fulfilled its social responsibility through continuous social investment and established a good corporate image. At the same time, the Group is able to enhance its integration with society, deliver care and concern, and actively give back to the community.

The Group bears in mind its social responsibility, actively building up good relationship with the neighboring communities where it operates, and participates in the promotion of exchanges among enterprises in high-tech parks. In 2019, its employees actively participated in the weekly regular badminton and basketball activities arranged by the Group in Nanshan District Cultural and Sports Center of Shenzhen (深圳南山區文體中心), which enhanced their interaction with other scientific research enterprises in the park and enriched their leisure life.

KPMG

to the shareholders of Risecomm Group Holdings Limited

(Incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of Risecomm Group Holdings Limited ("the Company") and its subsidiaries ("the Group") set out on pages 79 to 161, which comprise the consolidated statement of financial position as at December 31, 2019, the consolidated statement of profit or loss, the consolidated statement of profit or loss and other comprehensive income, the consolidated statement of changes in equity and the consolidated cash flow statement for the year then ended and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at December 31, 2019 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

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

KEY AUDIT MATTERS

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

Revenue recognition

Refer to note 3 to the consolidated financial statements and the accounting policy note 1(w).

The Key Audit Matter	How the matter was addressed in our audit
The Group's revenue principally comprises • income from the sale of power-line-communication ("PLC") products, • income from the provision of maintenance services in connection with the deployment and upgrade of Auto Meter Reading ("AMR") systems by power grid companies in Mainland China, • income from the sale of production safety products, • income from sale of software license, and • income from the provision of software post-contract support services. The Group recognises revenue when or as the Group satisfies its performance obligations by transferring the promised goods or delivering the promised services to the customer. Management evaluates the terms of individual contracts in order to determine the appropriate timing for revenue recognition in accordance with the prevailing accounting standards. Depending on those contractual terms, revenue is recognised at the specific point in time when control over the promised goods or service is transferred, or over a period of time as and when the customer consumes and benefits from the services delivered by the Group. We identified recognition of revenue as a key audit matter because revenue is one of the key performance indicators of the Group and therefore there is an inherent risk of manipulation of the timing of recognition of revenue by management to meet specific targets or expectations.	Our audit procedures to assess the recognition of revenue included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of key internal controls over revenue recognition; • inspecting customer contracts, on a sample basis, to identify terms and conditions relating to the customers' acceptance of the goods and services provided by the Group and assessing the Group's timing of recognition of revenue with reference to the requirements of the prevailing accounting standards; • comparing revenue transactions, on a sample basis, recorded at the point in time during the current year with invoices, sales contracts and delivery documents with the customers' acknowledgement of acceptance of the goods and services provided by the Group to assess whether the related revenue was recognised in accordance with the Group's revenue recognition accounting policies; • comparing, on a sample basis, revenue transactions recorded at the point in time before and after the reporting date with underlying delivery documents with the customers' acknowledgement of acceptance of the goods and services provided by the Group and other relevant documentation to determine whether the related revenue had been recognised in the appropriate financial period; • comparing, on a sample basis, revenue recorded over time during the current year with relevant contract terms to assess whether the related revenue was recognised in accordance with the Group's revenue recognition accounting policies; and • inspecting underlying documentation for manual journal entries relating to revenue raised during the year which met specific risk-based criteria.

Loss allowance for trade receivables

Refer to notes 18 and 30(a) to the consolidated financial statements and the accounting policy notes 1(m) and 1(o).

The Key Audit Matter	How the matter was addressed in our audit
As at December 31, 2019, the Group's gross trade receivables amounted to RMB152,534,000, against which loss allowance of RMB56,168,000 was recorded. Management measures loss allowance at an amount equal to lifetime expected credit loss based on estimated loss rates for each category of receivables. The estimated loss rates take into account the ageing of trade receivable balances, the repayment history of the Group's customers of different risk characteristics, current market conditions and customer-specific conditions, all of which involve a significant degree of management judgement. We identified the loss allowance for trade receivables as a key audit matter because determining the level of loss allowance requires the exercise of significant management judgement which is inherently subjective.	Our audit procedures to assess the loss allowance for trade receivables included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of key internal controls relating to credit control, debt collection and estimating the credit loss allowance; • evaluating the Group's policy for estimating the credit loss allowance with reference to the requirements of the prevailing accounting standards; • assessing whether items were correctly categorised in the trade receivables ageing report by comparing individual items therein with sales invoices and other relevant underlying documentation, on a sample basis; • obtaining an understanding on the key parameters and assumptions of the expected credit loss model adopted by the management, including the basis of segmentation of the accounts receivable based on credit risk characteristics of customers and the historical default data in management's estimated loss rates; • assessing the reasonableness of management's loss allowance estimates by examining the information used by management to form such judgements including testing the accuracy of the historical default data and evaluating whether the historical loss rates are appropriately adjusted based on current economic conditions and forward-looking information; • re-performing the calculation of loss allowance as at December 31, 2019 based on the Group's credit loss allowance policies; and • inspecting, on a sample basis, cash receipts from debtors subsequent to the reporting date relating to trade receivable balances as at December 31, 2019.

Assessing potential impairment of goodwill and other intangible assets

Refer to notes 12 and 13 to the consolidated financial statements and the accounting policy notes 1(k), 1(g) and 1(m).

The Key Audit Matter	How the matter was addressed in our audit
As at December 31, 2019, goodwill amounting to RMB177,211,000 and RMB37,936,000 arising from the acquisition of Green Harmony in August 2018 and the acquisition of NM Technology in March 2018, respectively, were allocated to the SMIA Cash Generating Unit ("CGU") and the AMR and Others CGU respectively. The carrying amount of the SMIA CGU and the AMR and Others CGU also include the intangible assets arising from the respective acquisitions and capitalized development cost for AMR business (collectively "other intangible assets"). As at December 31, 2019, management engaged an independent valuation firm to perform an impairment assessment of the goodwill and other intangible assets by comparing the carrying values of the CGUs with their respective recoverable amounts using discounted cash flow forecasts to determine if any impairment is required. As a result of the impairment tests, impairment losses of goodwill amounting to RMB156,493,000 and RMB14,680,000 were recognized during the year ended December 31, 2019 for SMIA CGU and AMR and Others CGU, respectively (2018: nil, nil) to reduce the carrying amounts of the respective CGUs to their recoverable amounts. The assessment of the recoverable amount of goodwill and other intangible assets involves significant management estimation and judgment, in particular, as to determine the key assumptions adopted in the cash flow forecasts, which include future revenue growth rates, future profit margins and the discount rates applied. We identified assessing potential impairment of goodwill and other intangible assets as a key audit matter because of its significance to the consolidated financial statements and because of the inherent uncertainty involved in forecasting and discounting future cash flows which involves the exercise of significant management judgment and could be subject to management bias.	Our audit procedures to assess impairment of goodwill and other intangible assets included the following: • reading the reports of external valuation firm on which management's impairment assessment is based on; • assessing the external valuation firm's qualifications, experience, expertise and considering its objectivity and independence; • assessing management's identification of the CGUs, the allocation of assets and liabilities to the identified CGUs and the valuation methodology with reference to the requirements of the prevailing accounting standards; • engaging our internal valuation specialists to assist us in evaluating the discount rates adopted by management in the preparation of the discounted cash flow forecasts by benchmarking against those of comparable companies in the same industry; • assessing, with the assistance of our internal valuation specialists, the key assumptions adopted in the discounted cash flow forecast by comparing the most significant inputs including future revenue growth rates and gross profit margin for SMIA CGU, expected timing and amount of revenue to be generated from the Group's PLC based broadband AMR products and gross profit margin for AMR and Others CGU with the latest financial budgets approved by Board of Directors, historical performance of the CGUs, future business plans, backlog contracts, sales pipelines and observable industry data; • performing sensitivity analyses of the key assumptions adopted in the discounted cash flow forecasts, including the discount rates, future revenue growth rates and future profit margins, and considering the resulting impact of changes in the key assumptions to the conclusion reached in the impairment assessment and whether there were any indicators of management bias; and • assessing the disclosures in the consolidated financial statements in respect of impairment of goodwill with reference to the requirements of the prevailing accounting standards.

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

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

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

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

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

RESPONSIBILITIES OF THE DIRECTORS FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

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

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

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

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

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

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

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

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

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

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

The engagement partner on the audit resulting in this independent auditor's report is Alex M.K. Shum.

KPMG
Certified Public Accountants

8th Floor, Prince's Building
10 Chater Road
Central
Hong Kong
May 7, 2020

Consolidated Statement of Profit or Loss

For the year ended December 31, 2019 (Expressed in Renminbi)

	NOTE	2019 RMB'000	2018 (Note) RMB'000
Revenue	3	**218,575**	475,793
Cost of sales		**(153,800)**	(316,259)
Gross profit		**64,775**	159,534
Other income	4	**11,364**	11,215
Sales and marketing expenses		**(31,147)**	(52,790)
General and administrative expenses		**(95,145)**	(84,163)
Research and development expenses	5(d)	**(31,639)**	(36,954)
Loss from operations		**(81,792)**	(3,158)
Impairment losses of goodwill	13	**(171,173)**	–
Finance costs	5(a)	**(3,245)**	(3,539)
Share of loss of associate		**(50)**	(110)
Fair value gains on financial instruments at fair value	5(c)	**5,635**	10,424
(Loss)/profit before taxation	5	**(250,625)**	3,617
Income tax credit	6	**13,812**	578
(Loss)/profit for the year		**(236,813)**	4,195
Attributable to:			
— Equity shareholders of the Company		**(236,813)**	4,204
— Non-controlling interests		**–**	(9)
(Loss)/profit for the year		**(236,813)**	4,195
(Loss)/earnings per share	9		
Basic (RMB cents)		**(27.56)**	0.51
Diluted (RMB cents)		**(27.56)**	(1.72)

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended December 31, 2019 (Expressed in Renminbi)

	2019 RMB'000	2018 (Note) RMB'000
(Loss)/profit for the year	**(236,813)**	4,195
Other comprehensive (loss)/income for the year (after tax and reclassification adjustments)		
Item that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of financial statements of entities outside mainland China	**(3,680)**	4,877
Total comprehensive (loss)/income for the year	**(240,493)**	9,072
Attributable to:		
— Equity shareholders of the Company	**(240,493)**	9,081
— Non-controlling interests	**–**	(9)
Total comprehensive (loss)/income for the year	**(240,493)**	9,072

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Statement of Financial Position

At December 31, 2019 (Expressed in Renminbi)

	NOTE	2019 RMB'000	2018 (Note) RMB'000
Non-current assets			
Property, plant and equipment	11	**28,539**	30,877
Intangible assets	12	**180,452**	215,363
Right of use assets	10	**18,003**	–
Goodwill	13	**43,974**	215,147
Interest in associate	15	**396**	446
Deferred tax assets	27(b)	**20,692**	19,813
		292,056	481,646
Current assets			
Inventories	16	**25,697**	33,225
Contract costs	17	**29,120**	7,548
Trade and other receivables	18	**126,216**	259,253
Restricted bank deposits		**326**	148
Financial investments at fair value through profit or loss	19	**–**	10,000
Cash and cash equivalents	20	**145,110**	267,037
		326,469	577,211
Current liabilities			
Trade and other payables	21	**78,312**	124,006
Contract liabilities	23	**9,656**	23,700
Lease liabilities	22	**7,797**	–
Acquisition consideration payables	24	**–**	211,280
Income tax payable	27(a)	**6,042**	12,551
		101,807	371,537
Net current assets		**224,662**	205,674
Total assets less current liabilities		**516,718**	687,320

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Statement of Financial Position *(continued)*

At December 31, 2019 (Expressed in Renminbi)

	NOTE	2019 RMB'000	2018 (Note) RMB'000
Non-current liabilities			
Acquisition consideration payables	24	**118,814**	105,255
Convertible bonds	25	**116,196**	120,502
Lease liabilities	22	**10,360**	–
Deferred tax liabilities	27(b)	**41,369**	54,043
Deferred income	28	**4,834**	6,734
		291,573	286,534
Net assets		**225,145**	400,786
Capital and reserves			
Share capital	29	**86**	71
Reserves	29	**225,059**	400,715
Total equity		**225,145**	400,786

Approved and authorized for issue by the Board of Directors on May 7, 2020.

Yue Jingxing
Executive Director

Lau Wai Leung, Alfred
Executive Director

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Statement of Changes in Equity

For the year ended December 31, 2019 (Expressed in Renminbi)

	Attributable to equity shareholders of the Company								
	Share capital Note 29(c) RMB'000	Share premium Note 29(d) RMB'000	Capital reserve Note 29(e) RMB'000	PRC statutory reserves Note 29(f) RMB'000	Exchange reserve Note 29(g) RMB'000	Retained earnings RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at December 31, 2017	71	166,943	129,999	17,781	7,346	69,058	391,198	183	391,381
Impact on initial application of HKFRS 9	–	–	–	–	–	(1,690)	(1,690)	–	(1,690)
Balance at January 1, 2018	71	166,943	129,999	17,781	7,346	67,368	389,508	183	389,691
Changes in equity for 2018:									
Profit for the year	–	–	–	–	–	4,204	4,204	(9)	4,195
Other comprehensive income	–	–	–	–	4,877	–	4,877	–	4,877
Total comprehensive income	–	–	–	–	4,877	4,204	9,081	(9)	9,072
Equity-settled share-based payments	–	–	2,022	–	–	–	2,022	–	2,022
Appropriation to reserves	–	–	–	4,054	–	(4,054)	–	–	–
Issue of ordinary shares under share option plan	–	94	(93)	–	–	–	1	–	1
Acquisition of non-controlling interest in a subsidiary	–	–	174	–	–	–	174	(174)	–
Balance at December 31, 2018	71	167,037	132,102	21,835	12,223	67,518	400,786	–	400,786

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Statement of Changes in Equity *(continued)*

For the year ended December 31, 2019 (Expressed in Renminbi)

	Attributable to equity shareholders of the Company						
	Share capital Note 29(c) RMB'000	Share premium Note 29(d) RMB'000	Capital reserve Note 29(e) RMB'000	PRC statutory reserves Note 29(f) RMB'000	Exchange reserve Note 29(g) RMB'000	Retained earnings/ (accumulated losses) (Note) RMB'000	Total equity RMB'000
Balance at December 31, 2018 and January 1, 2019	71	167,037	132,102	21,835	12,223	67,518	400,786
Changes in equity for 2019:							
Loss for the year	–	–	–	–	–	(236,813)	(236,813)
Other comprehensive income	–	–	–	–	(3,680)	–	(3,680)
Total comprehensive income	–	–	–	–	(3,680)	(236,813)	(240,493)
Equity-settled share-based payments (note 26(d))	–	–	3,378	–	–	–	3,378
Appropriation to reserves	–	–	–	491	–	(491)	–
Issue of ordinary shares under share option plan (note 29(c))	1	2,889	(2,866)	–	–	–	24
Issue of ordinary shares for share consideration payment (note 29(c))	1	8,803	–	–	–	–	8,804
Placing of shares (note 29(c))	13	52,633	–	–	–	–	52,646
Balance at December 31, 2019	86	231,362	132,614	22,326	8,543	(169,786)	225,145

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

Consolidated Cash Flow Statement

For the year ended December 31, 2019 (Expressed in Renminbi)

	Note	2019 RMB'000	2018 (Note) RMB'000
Operating activities:			
Cash generated from operations	20(b)	**27,486**	66,994
Income tax paid	27(a)	**(6,407)**	(3,045)
Net cash generated from operating activities		**21,079**	63,949
Investing activities:			
Payment for acquisition of subsidiaries, net of cash acquired	24	**(166,776)**	(98,454)
Payment for financial investment at fair value through profit or loss		**–**	(10,000)
Payment for purchase of property, plant and equipment and intangible assets		**(5,042)**	(2,834)
Expenditure on development project		**(1,706)**	(2,036)
Proceeds from disposal of property, plant and equipment		**111**	–
Proceeds from maturity of financial investment at fair value through profit or loss		**10,000**	–
Interest received from financial investment		**99**	–
Interest received		**1,829**	756
Net cash used in investing activities		**(161,485)**	(112,568)
Financing activities:			
Payment for interest on acquisition consideration payable		**(20,395)**	–
Capital element of lease rentals paid		**(6,453)**	–
Interest element of lease rentals paid		**(726)**	–
Payment for interest on convertible bonds		**(5,314)**	–
Net proceeds from the issuance of convertible bonds		**–**	127,841
Proceeds from shares issued under share option scheme		**24**	1
Cash received from placing of shares		**52,646**	–
Payment for other financing activities		**(62)**	(1,318)
Net cash generated from financing activities		**19,720**	126,524
Net (decrease)/increase in cash and cash equivalents		**(120,686)**	77,905
Effect of foreign exchange rate changes		**(1,241)**	4,489
Cash and cash equivalents at January 1	20(a)	**267,037**	184,643
Cash and cash equivalents at December 31	20(a)	**145,110**	267,037

Note: The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

The notes on pages 86 to 161 form part of these financial statements.

1 Significant accounting policies

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("**HKFRSs**"), which collective term includes all applicable individual Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("**HKASs**") and Interpretations issued by the Hong Kong Institute of Certified Public Accountants ("**HKICPA**"), accounting principles generally accepted in Hong Kong and the requirements of the Hong Kong Companies Ordinance. These financial statements also comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited ("**Listing Rules**"). 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 current accounting period of the Group. Note 1(c) provides information on any changes in accounting policies resulting from initial application of these developments to the extent that they are relevant to the Group for the current and prior accounting periods reflected in these financial statements.

(b) Basis of preparation of the financial statements

The Company was incorporated in the Cayman Islands on August 19, 2015 as an exempted company with limited liabilities under Companies Law, (Cap 22) (Law 3 of 1961, as consolidated and revised) of the Cayman Islands.

The consolidated financial statements for the year ended December 31, 2019 comprise the Company and its subsidiaries (together referred to as the "Group") and the Group's interest in associate.

Items included in the financial statements of each entity in the Group are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to the entity (the "**Functional Currency**"). The financial statements are presented in RMB, rounded to the nearest thousands, which is the presentation currency. The measurement basis used in the preparation of the financial statements is the historical cost basis except for financial investments at fair value through profit or loss ("**FVTPL**") (see note 1(h)), contingent consideration payables and convertible bonds (see note 1(s)).

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

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

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

The Group incurred loss from operations of RMB81,792,000 and impairment losses of goodwill of RMB171,173,000 for the year ended December 31, 2019. As at December 31, 2019, the Group had net current assets of RMB224,662,000, which included cash and cash equivalents of RMB145,110,000. The directors of the Company have reviewed the latest financial position of the Group, its business plan and cash flow forecast for the 12 months ending December 31, 2020 and concluded that the Group is able to continue as a going concern for at least the next twelve months from the end of reporting period.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(c) Changes in accounting policies

The HKICPA has issued a new HKFRS, HKFRS 16, *Leases*, and a number of amendments to HKFRSs that are first effective for the current accounting period of the Group.

Except for HKFRS 16, Leases, none of the developments have had a material effect on how the Group's results and financial position for the current or prior periods have been prepared or presented. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period (note 36).

HKFRS 16, Leases

HKFRS 16 replaces HKAS 17, Leases, and the related interpretations, HK(IFRIC) 4, Determining whether an arrangement contains a lease, HK(SIC) 15, Operating leases — incentives, and HK(SIC) 27, Evaluating the substance of transactions involving the legal form of a lease. It introduces a single accounting model for lessees, which requires a lessee to recognise a right-of-use asset and a lease liability for all leases, except for leases that have a lease term of 12 months or less ("**short-term leases**") and leases of low-value assets. The lessor accounting requirements are brought forward from HKAS 17 substantially unchanged.

HKFRS 16 also introduces additional qualitative and quantitative disclosure requirements which aim to enable users of the financial statements to assess the effect that leases have on the financial position, financial performance and cash flows of an entity.

The Group has initially applied HKFRS 16 as from January 1, 2019. The Group has elected to use the modified retrospective approach and has therefore recognized the cumulative effect of initial application as an adjustment to the opening balance of equity at January 1, 2019. Comparative information has not been restated and continues to be reported under HKAS 17.

Further details of the nature and effect of the changes to previous accounting policies and the transition options applied are set out below:

a. *New definition of a lease*

The change in the definition of a lease mainly relates to the concept of control. HKFRS 16 defines a lease on the basis of whether a customer controls the use of an identified asset for a period of time, which may be determined by a defined amount of use. 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.

The Group applies the new definition of a lease in HKFRS 16 only to contracts that were entered into or changed on or after January 1, 2019. For contracts entered into before January 1, 2019, the Group has used the transitional practical expedient to grandfather the previous assessment of which existing arrangements are or contain leases. Accordingly, contracts that were previously assessed as leases under HKAS 17 continue to be accounted for as leases under HKFRS 16 and contracts previously assessed as non-lease service arrangements continue to be accounted for as executory contracts.

b. *Lessee accounting and transitional impact*

HKFRS 16 eliminates the requirement for a lessee to classify leases as either operating leases or finance leases, as was previously required by HKAS 17. Instead, the Group is required to capitalize all leases when it is the lessee, including leases previously classified as operating leases under HKAS 17, other than those short-term leases and leases of low-value assets which are exempt. As far as the Group is concerned, these newly capitalized leases are primarily in relation to properties, as disclosed in note 10. For an explanation of how the Group applies lessee accounting, see note 1(l).

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(c) Changes in accounting policies *(Continued)*

HKFRS 16, Leases *(Continued)*

b. *Lessee accounting and transitional impact (Continued)*

At the date of transition to HKFRS 16 (i.e. January 1, 2019), the Group determined the length of the remaining lease terms and measured the lease liabilities for the leases previously classified as operating leases at the present value of the remaining lease payments, discounted using the relevant incremental borrowing rates at January 1, 2019. The weighted average of the incremental borrowing rates used for determination of the present value of the remaining lease payments was 4.75%.

To ease the transition to HKFRS 16, the Group applied the following recognition exemption and practical expedients at the date of initial application of HKFRS 16:

(i) the Group elected not to apply the requirements of HKFRS 16 in respect of the recognition of lease liabilities and right-of-use assets to leases for which the remaining lease term ends within 12 months from the date of initial application of HKFRS 16, i.e. where the lease term ends on or before December 31, 2019;

(ii) when measuring the lease liabilities at the date of initial application of HKFRS 16, the Group applied a single discount rate to a portfolio of leases with reasonably similar characteristics (such as leases with a similar remaining lease term for a similar class of underlying asset in a similar economic environment); and

(iii) when measuring the right-of-use assets at the date of initial application of HKFRS 16, the Group relied on the previous assessment for onerous contract provisions as at December 31, 2018 as an alternative to performing an impairment review.

The following table reconciles the operating lease commitments as disclosed in note 31 as at December 31, 2018 to the opening balance for lease liabilities recognized as at January 1, 2019:

	January 1,2019 RMB'000
Operating lease commitments at December 31, 2018	6,999
Less: commitments relating to leases exempt from capitalisation:	
— short-term leases and other leases with remaining lease term ending on or before December 31, 2019	(877)
— leases of low-value assets	–
Add: lease payments for the additional periods where the Group considers it reasonably certain that it will exercise the extension options	7,291
	13,413
Less: total future interest expenses	(807)
Present value of remaining lease payments, discounted using the incremental borrowing rate at January 1, 2019	12,606
Total lease liabilities recognised at January 1, 2019	12,606

The right-of-use assets in relation to leases previously classified as operating leases have been recognized at an amount equal to the amount recognized for the remaining lease liabilities, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the statement of financial position at December 31, 2018.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(c) Changes in accounting policies *(Continued)*

HKFRS 16, Leases *(Continued)*

b. Lessee accounting and transitional impact (Continued)

The following table summarises the impacts of the adoption of HKFRS 16 on the Group's consolidated statement of financial position:

	Carrying amount at December 31, 2018 RMB'000	Capitalisation of operating lease contracts RMB'000	**Carrying amount at January 1, 2019 RMB'000**
Line items in the consolidated statement of financial position impacted by the adoption of HKFRS 16:			
Right-of-use assets	–	12,606	**12,606**
Total non-current assets	481,646	12,606	**494,252**
Lease liabilities (current)	–	5,207	**5,207**
Current liabilities	371,537	5,207	**376,744**
Net current assets	205,674	(5,207)	**200,467**
Total assets less current liabilities	687,320	7,399	**694,719**
Lease liabilities (non-current)	–	7,399	**7,399**
Total non-current liabilities	286,534	7,399	**293,933**
Net assets	400,786	–	**400,786**

The adoption of HKFRS 16 does not have significant impact on the Group's financial result, segment results and cash flows.

(d) Business combination

The Group accounts for business combination using the acquisition method when control is transferred to the Group. The consideration transferred in the acquisition is generally measured at fair value, as are the identifiable net assets acquired. Any goodwill that arises is tested annually for impairment (see note 1(m)(ii)). Any gain on a bargain purchase is recognized in profit or loss immediately. Transaction costs are expensed as incurred, except if related to the issue of debt or equity securities.

Any contingent consideration is measured at fair value at the date of acquisition. If an obligation to pay contingent consideration that meets the definition of a financial instrument is classified as equity, then it is not remeasured and settlement is accounted for within equity. Otherwise, other contingent consideration is remeasured at fair value at each reporting date and subsequent changes in the fair value of the contingent consideration are recognized in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(e) Subsidiaries and non-controlling interests

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

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows and any unrealized profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealized losses resulting from intra-group transactions are eliminated in the same way as unrealized gains but only to the extent that there is no evidence of impairment.

Non-controlling interests represent the equity in a subsidiary not attributable directly or indirectly to the Company, and in respect of which the Group has not agreed any additional terms with the holders of those interests which would result in the Group as a whole having a contractual obligation in respect of those interests that meets the definition of a financial liability. For each business combination, the Group can elect to measure any non-controlling interests either at fair value or at the non-controlling interests' proportionate share of the subsidiary's net identifiable assets.

Non-controlling interests are presented in the consolidated statement of financial position within equity, separately from equity attributable to the equity shareholders of the Company. Non-controlling interests in the results of the Group are presented on the face of the consolidated statement of profit or loss and other comprehensive income as an allocation of the total profit or loss and total comprehensive income for the year between non-controlling interests and the equity shareholders of the Company.

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

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

In the Company's statement of financial position, an investment in a subsidiary is stated at cost less impairment losses (see note 1(m)).

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(f) Associates

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

An investment in an associate is accounted for in the consolidated financial statements under the equity method. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of the Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see note 1(m)). Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognized in profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognized in other comprehensive income.

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

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

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

(g) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred; over

(ii) the net fair value of the acquiree's identifiable assets and liabilities measured as at the acquisition date.

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

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

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(h) Other investments in debt and equity securities

The Group's policies for investments in debt and equity securities, other than investments in subsidiaries and associates, are set out below.

Investments in debt and equity securities are recognized/derecognized on the date the Group commits to purchase/sell the investment. The investments are initially stated at fair value, plus directly attributable transaction costs, except for those investments measured at fair value through profit or loss (FVTPL) for which transaction costs are recognized directly in profit or loss. For an explanation of how the Group determines fair value of financial instruments, see note 30(e). These investments are subsequently accounted for as follows, depending on their classification:

Investments other than equity investments

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

— amortised cost, if the investment is held for the collection of contractual cash flows which represent solely payments of principal and interest. Interest income from the investment is calculated using the effective interest method.

— fair value through other comprehensive income (FVOCI) — recycling, if the contractual cash flows of the investment comprise solely payments of principal and interest and the investment is held within a business model whose objective is achieved by both the collection of contractual cash flows and sale. Changes in fair value are recognized 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 derecognized, the amount accumulated in other comprehensive income is recycled from equity to profit or loss.

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

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 FVOCI (non-recycling) such that subsequent changes in fair value are recognized 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 earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVTPL or FVOCI, are recognized in profit or loss as other income.

(i) Derivative financial instruments

Derivative financial instruments are recognized at fair value. At the end of each reporting period the fair value is remeasured. The gain or loss on remeasurement to fair value is recognized immediately in profit or loss.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(j) Property, plant and equipment

The following items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 1(m)(ii)):

— right-of-use assets arising from leases over freehold or leasehold properties where the Group is not the registered owner of the property interest; and

— items of plant and equipment, including right-of-use assets arising from leases of underlying plant and equipment (see note 1(l)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labor, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads.

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

Depreciation is calculated to write off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

— Plant and buildings	20 years
— Machinery and equipment	5–10 years
— Office and other equipment	3–5 years
— Motor vehicles	4–8 years
— Leasehold improvements	3–5 years

Where parts of an item of property, plant and equipment have different useful lives, the cost of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an asset and its residual value, if any, are reviewed annually.

Construction in progress represents property, plant and equipment under construction and equipment pending installation, and is stated at cost less impairment losses (see note 1(m)(ii)). Capitalization of construction in progress costs ceases and the construction in progress is transferred to property, plant and equipment when substantially all of the activities necessary to prepare the assets for their intended use are completed.

No depreciation is provided in respect of construction in progress until it is substantially completed and ready for its intended use.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(k) Intangible assets (other than goodwill)

Expenditure on research activities is recognized as an expense in the period in which it is incurred. Expenditure on development activities is capitalized if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalized includes the costs of materials, direct labor, and an appropriate proportion of overheads and borrowing costs, where applicable. Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see note 1(m)(ii)). Other development expenditure is recognized as an expense in the period in which it is incurred. Amortization of intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives.

The following intangible assets with finite useful lives are amortized from the date they are available for use and their estimated useful lives are as follows:

— Software	3–10 years
— Non-compete undertakings	5–7 years
— Customer relationships	3–10 years
— Unfulfilled contracts	2 years

Both the period and method of amortization are reviewed annually.

(l) Leased assets

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

As a lessee

(A) Policy applicable from January 1, 2019

Where the contract contains lease component(s) and non-lease component(s), the Group has elected not to separate non-lease components and accounts for each lease component and any associated non-lease components as a single lease component for all leases.

At the lease commencement date, the Group recognizes 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 which, for the Group are primarily office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalize the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalized are recognized as an expense on a systematic basis over the lease term.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(l) Leased assets *(Continued)*

As a lessee *(Continued)*

(A) Policy applicable from January 1, 2019 (Continued)

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

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

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.

(B) Policy applicable prior to January 1, 2019

Where the Group had the use of assets held under operating leases, payments made under the leases were charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis was more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received were recognized in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals were charged to profit or loss in the accounting period in which they were incurred.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Credit losses and impairment of assets

(i) Credit losses from financial assets

The Group recognizes a loss allowance for expected credit losses (ECLs) on the financial assets measured at amortized cost (including cash and cash equivalents, restricted bank deposits, contract assets and trade and other receivables).

Financial assets measured at fair value, including financial investments at fair value through profit or loss, are not subject to the ECL assessment.

Measurement of ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all expected cash shortfalls (i.e. the difference between the cash flows due to the Group in accordance with the contract and the cash flows that the Group expects to receive). For fixed-rate financial assets, trade and other receivables and contract assets, the expected cash shortfalls are discounted using the effective interest rate determined at initial recognition or an approximation thereof where the effect of discounting is material.

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

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

ECLs are measured on either of the following bases:

— 12-month ECLs: these are losses that are expected to result from possible default events within the 12 months after the reporting date; and

— lifetime ECLs: these are losses that are expected to result from all possible default events over the expected lives of the items to which the ECL model applies.

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

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Credit losses and impairment of assets *(Continued)*

(i) Credit losses from financial assets *(Continued)*

Significant increases in credit risk

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

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

— failure to make payments of principal or interest on their contractually due dates;

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

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

— existing or forecast changes in the technological, market, economic or legal environment that have a significant adverse effect on the debtor's ability to meet its obligation to the Group.

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

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Credit losses and impairment of assets *(Continued)*

(i) Credit losses from financial assets *(Continued)*

Basis of calculation of interest income

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

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

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

— significant financial difficulties of the debtor;

— a breach of contract, such as a default or delinquency in interest or principal payments;

— it becoming probable that the borrower will enter into bankruptcy or other financial reorganisation;

— significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor; or

— the disappearance of an active market for a security because of financial difficulties of the issuer.

Write-off policy

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

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

1 SIGNIFICANT ACCOUNTING POLICIES (Continued)

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

(ii) Impairment of other non-current assets

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

— property, plant and equipment;

— right-of-use assets;

— intangible assets;

— goodwill; and

— investments in subsidiaries.

If any such indication exists, the asset's recoverable amount is estimated. In addition, for goodwill, the recoverable amount is estimated annually whether or not there is any indication of impairment.

— *Calculation of recoverable amount*

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

— *Recognition of impairment losses*

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

— *Reversals of impairment losses*

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

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(m) Credit losses and impairment of assets *(Continued)*

(iii) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited, the Group is required to prepare an interim financial report in compliance with HKAS 34, *Interim financial reporting*, in respect of the first six months of the financial year. At the end of the interim period, the Group applies the same impairment testing, recognition, and reversal criteria as it would at the end of the financial year (see notes 1(m)(i) and (ii)).

Impairment losses recognized in an interim period in respect of goodwill are not reversed in a subsequent period. This is the case even if no loss, or a smaller loss, would have been recognized had the impairment been assessed only at the end of the financial year to which the interim period relates.

(n) Inventories and contract costs

(i) Inventories

Inventories are assets which are held for sale in the ordinary course of business, in the process of production for such sale or in the form of materials or supplies to be consumed in the production process or in the rendering of services.

Inventories are carried at the lower of cost and net realizable value.

Cost is calculated using the weighted average cost formula and comprises all costs of purchase, cost of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognized as an expense in the period in which the related revenue is recognized.

The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories is recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

(ii) Contract costs

Contract costs are the costs to fulfil a contract with a customer which are not capitalized as inventories (see note 1(n)(i)).

Costs to fulfil a contract are capitalized 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 (for example, payments to sub-contractors). Other costs of fulfilling a contract, which are not capitalized as inventory are expensed as incurred.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(n) Inventories and contract costs *(Continued)*

(ii) Contract costs *(Continued)*

Capitalized contract costs are stated at cost less accumulated amortization and impairment losses. Impairment losses are recognized 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 recognized as expenses.

Amortization of capitalized contract costs is charged to profit or loss when the revenue to which the asset relates is recognized. The accounting policy for revenue recognition is set out in note 1(w).

(o) Trade and other receivables

A receivable is recognized 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.

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

(p) Contract assets and contract liabilities

A contract asset is recognized when the Group recognizes revenue (see note 1 (w)) before being unconditionally entitled to the consideration under the payment terms set out in the contract. Contract assets are assessed for expected credit losses (ECL) in accordance with the policy set out in note 1(m)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see note 1(q)).

A contract liability is recognized when the customer pays consideration before the Group recognizes the related revenue (see note 1(w)).

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.

(q) Cash and cash equivalents

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

(r) Trade and other payables

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(s) 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 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 recognized directly in profit or loss in the period in which they arise.

(t) Employee benefits

(i) Short-term employee benefits

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

(ii) Defined contribution retirement plan obligations

Contributions to PRC local retirement schemes pursuant to the relevant labor rules and regulations in the PRC are recognized as an expense in profit or loss as incurred.

The Group has made contributions to a mandatory provident fund scheme ("**MPF**" **scheme**") in the Hong Kong Special Administrative Region for employees in Hong Kong. The Group's contributions to the MPF scheme are expensed as incurred.

(iii) Share-based payments

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

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognized in prior year is charged/credited to the profit or loss for the year of the review, unless the original expenses qualify for recognition as an asset, with a corresponding adjustment to the capital reserve. On vesting date, the amount recognized as expense is adjusted to reflect the actual number of options that vest (with a corresponding adjustment to the capital reserve) except where forfeiture is only due to not achieving vesting conditions that relate to the market price of the Company's shares. The equity amount is recognized in the capital reserve until either the option is exercised (when it is included in the amount recognized in share capital for the shares issued) or the option expires (when it is released directly to retained profits).

(iv) Termination benefits

Termination benefits are recognized at the earlier of when the Group can no longer withdraw the offer of those benefits and when it recognizes restructuring costs involving the payment of termination benefits.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(u) Income tax

Income tax for the year or period comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognized in profit or loss except to the extent that they relate to items recognized in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognized in other comprehensive income or directly in equity, respectively.

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

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

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

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

The amount of deferred tax recognized is measured based on the expected manner of realization or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of each reporting period. Deferred tax assets and liabilities are not discounted.

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(u) Income tax *(Continued)*

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Group has the legally enforceable right to set off current tax assets against current tax liabilities and the following additional conditions are met:

— in the case of current tax assets and liabilities, the Group intends either to settle on a net basis, or to realize the asset and settle the liability simultaneously; or

— in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:

  — the same taxable entity; or

  — different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realize the current tax assets and settle the current tax liabilities on a net basis or realize and settle simultaneously.

(v) Provisions and contingent liabilities

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

Where it is 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 of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events, are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

(w) Revenue and other income

Income is classified by the Group as revenue when it arises from the sale of goods and the provision of services in the ordinary course of the Group's business.

Revenue is recognized 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.

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

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(w) Revenue and other income *(Continued)*

Further details of the Group's revenue and other income recognition policies are as follows:

(i) **Sale of goods**

Revenue is recognized at a point in time when the customer takes possession of and accepts the products.

(ii) **Maintenance service income**

Revenue arising from maintenance services is recognized 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.

(iii) **Software licenses and post-contract customer support services**

Revenue from software licenses is recognized 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 recognized as the support is provided, which is generally ratably over the service period of the related software.

(iv) **Interest income**

Interest income is recognized as it accrues using the effective interest method.

(v) **Government grants**

Government grants are recognized in the consolidated statement of financial position initially when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognized as income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are recognized as deferred income and consequently are recognized in profit or loss on a systematic basis over the useful life of the asset by way of reduced depreciation expense.

(x) Translation of foreign currencies

Foreign currency transactions during the period are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at the end of each reporting period. Exchange gains and losses are recognized in profit or loss.

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

The results of foreign operations are translated into RMB at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items, including goodwill arising on consolidation of foreign operations are translated into RMB at the closing foreign exchange rates at the end of each reporting period. The resulting exchange differences are recognized in other comprehensive income and accumulated separately in equity in the exchange reserve.

On disposal of a foreign operation, the cumulative amount of the exchange differences relating to that foreign operation is reclassified from equity to profit or loss when the profit or loss on disposal is recognized.

1 SIGNIFICANT ACCOUNTING POLICIES *(Continued)*

(y) Related parties

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

(i) has control or joint control over the Group;

(ii) has significant influence over the Group; or

(iii) is a member of the key management personnel of the Group or the Group's parent.

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

(i) The entity and the Group are members of the same Group (which means that each parent, subsidiary and fellow subsidiary is related to the others).

(ii) One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a Group of which the other entity is a member).

(iii) Both entities are joint ventures of the same third party.

(iv) One entity is a joint venture of a third entity and the other entity is an associate of the third entity.

(v) The entity is a post-employment benefit plan for the benefit of employees of either the Group or an entity related to the Group.

(vi) The entity is controlled or jointly controlled by a person identified in (a).

(vii) A person identified in (a)(i) has significant influence over the entity or is a member of the key management personnel of the entity (or of a parent of the entity).

(viii) The entity, or any member of a Group of which it is a part, provides key management personnel services to the Group or to the Group's parent.

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

(z) Segment reporting

Operating segments, and the amounts of each segment item reported in the financial statements, are identified from the financial information provided regularly to the Group's most senior executive management for the purposes of allocating resources to, and assessing the performance of, the Group's various lines of business and geographical locations.

Individually material operating segments are not aggregated for financial reporting purposes unless the segments have similar economic characteristics and are similar in respect of the nature of products and services, the nature of production processes, the type or class of customers, the methods used to distribute the products or provide the services, and the nature of the regulatory environment. Operating segments which are not individually material may be aggregated if they share a majority of these criteria.

2 ACCOUNTING JUDGEMENT AND ESTIMATES

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

In the process of applying the Group's accounting policies, management has made the following accounting judgments:

(i) Recognition of income taxes and deferred tax assets

Determining income tax provision involves judgment on the future tax treatment of certain transactions. Management evaluates tax implications of transactions and tax provisions are set up accordingly. The tax treatments of such transactions are reconsidered periodically to take into account all changes in tax legislation. Deferred tax assets are recognized in respect of deductible temporary differences. As those deferred tax assets can only be recognized to the extent that it is probable that future taxable profits will be available against which the deductible temporary differences can be utilized, management's judgment is required to assess the probability of future taxable profits. Management's assessment is revised as necessary and additional deferred tax assets are recognized if it becomes probable that future taxable profits will allow the deferred tax asset to be recovered.

(b) Sources of estimation uncertainty

Key sources of estimation uncertainty are as follows:

(i) Loss allowance for credit losses

The Group assesses for impairment individually and recognizes lifetime expected credit losses ("**ECLs**") for trade and other receivables based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors and an assessment of both the current and forecast general economic conditions at the reporting date. The amount of the impairment loss based on ECL model is measured as difference between the 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 and using probability weighted estimation. 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.

The assessment of the correlation between historical default rates, forecast general economic conditions and ECLs is a significant estimate. The amount of ECLs is sensitive to changes in circumstances and of forecast general economic conditions. The Group's historical credit loss experience and forecast of general economic conditions may also not be representative of customer's actual default in the future. The information about the ECLs on the Group's trade receivables is disclosed in notes 18 and 30(a).

(ii) Warranty provisions

As explained in note 21(b), 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.

2 ACCOUNTING JUDGEMENT AND ESTIMATES *(Continued)*

(b) Sources of estimation uncertainty *(Continued)*

(iii) Net realizable value of inventories

As described in note 1(n), net realizable value of inventories is the estimated selling price in the ordinary course of business, less estimated distribution expenses. These estimates are based on the current market condition and historical experience of selling products of similar nature. It could change significantly as a result of competitor actions in response to changes in market conditions.

Management reassesses these estimations at the end of each reporting period to ensure inventory is shown at the lower of cost and net realizable value.

(iv) Fair value of convertible bonds

The fair value of convertibles bonds that are not traded in an active market is determined by using valuation techniques with estimates including expected volatility of share price. Details of the judgement and assumptions involved have been disclosed in note 25. Changes in assumptions and estimates could materially affect the fair value of the financial instruments and as a result affect the Group's financial position and results.

(v) Fair value of contingent acquisition consideration payables

The Group's business combinations involve performance-based contingent considerations. The Group recognizes contingent considerations at their fair values which are determined in accordance with the terms under those relevant agreements and with reference to the estimated financial performance of the acquired subsidiaries for the relevant financial period. Changes to assumptions and estimates of the acquired subsidiaries' financial performance can significantly affect the amounts of contingent consideration to be settled. Contingent considerations shall be re-measured at their fair value resulting from events or factors that emerge after the acquisition date, with any resulting gain or loss recognized in the consolidated statement of profit and loss.

(vi) Impairment of non-current assets

As described in note 1(m)(ii), the carrying amounts of non-current assets are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. When such a decline has occurred, the carrying amount is reduced to recoverable amount. Management determines the impairment loss on non-current assets other than goodwill if circumstances indicate that the carrying value of an asset may not be recoverable. Goodwill is tested annually for impairment. The recoverable amount is the greater of the fair value less costs to sell and the value in use. In determining the value in use, expected cash flows generated by the asset or cash-generating units are discounted to their present value, which requires significant judgement relating to the level of revenue, the amount of operating costs, and timing of cash flows. The Group uses readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions with respect to customer demand, market conditions, projections of revenue and the amount of operating costs. Any change in the assumptions adopted in the cash flow forecast would increase or decrease the provision of impairment loss and affect the Group's net asset value.

3 REVENUE AND SEGMENT REPORTING

(a) 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 Auto Meter Reading ("**AMR**") systems by power grid companies in the People's Republic of China ("**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 as well as the provision of software post-contract customer support services in connection with the smart manufacturing & industrial automation system ("**SMIA**") applied in the area of maintenance and safety integrity system in the petroleum and petrochemicals industry.

(i) Disaggregation of revenue

The amount of each significant category of revenue is as follows:

	2019 RMB'000	2018 RMB'000
Revenue from contracts with customers within the scope of HKFRS 15 and recognized at a point in time		
Disaggregated by major products of service lines		
AMR and other business		
— PLC Integrated circuits ("**ICs**")	**32,224**	52,797
— PLC Modules	**27,164**	137,716
— Collectors	**1,818**	82,635
— Other products	**56,026**	40,955
— AMR maintenance services	**22,594**	33,307
Sub-total of AMR and other business	**139,826**	347,410
SMIA business		
— Software license	**41,205**	89,282
— Production safety products	**26,537**	36,658
Sub-total of SMIA business	**67,742**	125,940
Revenue from contracts with customers within the scope of HKFRS 15 and recognized over time		
Disaggregated by major products of service lines		
SMIA business		
— Post-contract customer support service	**11,007**	2,443
Sub-total of SMIA business	**11,007**	2,443
Total	**218,575**	475,793

3 REVENUE AND SEGMENT REPORTING *(Continued)*

(a) Revenue *(Continued)*

(ii) Concentration of revenue

The Group had transactions with one individual customer the aggregate amount of which exceeded 10% of the Group's revenue in 2019 (2018: one). Revenue from this customer in 2019 amounted to approximately RMB41,947,000 (2018: RMB91,059,000). Details of concentrations of credit risk arising from these customers are set out in note 30(a).

(iii) Revenue expected to be recognized in the future arising from contracts with customers in existence at the reporting date

As at December 31, 2019, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contract is RMB78,624,000 (2018: RMB113,416,000). This amount represents revenue expected to be recognized in the future from sales contract of software license and post-contract customer support service entered into by the customers with the Group. The Group will recognize the expected revenue in future when the software is made available to the customers or, in the case of the post-contract customer support service, when the service is rendered monthly to the customers, which is expected to occur over the next 1 to 4 years.

The Group have applied the practical expedient in paragraph 121 of HKFRS 15 to its sales contracts that had an original expected duration of one year or less 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 these contracts.

(b) Segment reporting

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 presented the following two reportable segments during the current year.

- 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 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.

3 REVENUE AND SEGMENT REPORTING *(Continued)*

(b) Segment reporting *(Continued)*

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources between segments, the Group's senior executive management monitors the results attributable to each reportable segment based on revenue less cost of sales, sales and marketing expenses, and research and development expenses. General and administrative expenses are not allocated to segments.

A measurement of segment assets and liabilities is not provided regularly to the Group's most senior executive management and accordingly, no segment assets or liabilities information is presented.

Information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resources allocation and assessment of segment performance for the years ended December 31, 2019 and 2018 is set out as below:

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

	Year ended December 31, 2018		
	AMR and other business RMB'000	SMIA business RMB'000	Total RMB'000
Reportable segment revenue	347,410	128,383	475,793
Reportable segment cost of sales	(239,372)	(76,887)	(316,259)
Reportable segment sales and marketing expenses	(52,044)	(746)	(52,790)
Reportable segment research and development expenses	(34,667)	(2,287)	(36,954)
Reportable segment profit	21,327	48,463	69,790
Amortization expenses of intangible assets identified in acquisitions	3,560	16,863	20,423

3 REVENUE AND SEGMENT REPORTING *(Continued)*

(b) Segment reporting *(Continued)*

(ii) Reconciliation of reportable segment profit to the Group's (loss)/profit before taxation

	2019 RMB'000	2018 (Note) RMB'000
Reportable segment profit	**1,989**	69,790
Other income	**11,364**	11,215
General and administrative expenses	**(95,145)**	(84,163)
Finance costs	**(3,245)**	(3,539)
Share of loss of associate	**(50)**	(110)
Fair value gains on financial instruments at fair value	**5,635**	10,424
Impairment losses of goodwill	**(171,173)**	–
(Loss)/profit before taxation	**(250,625)**	3,617

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

(iii) Information about geographical area

The geographical location of revenue is based on the selling location. The geographical location of the specified non-current assets is based on the physical location of the asset, in the case of property, plant and equipment, and the location of the operation to which they are allocated, in the case of intangible assets. For the years ended December 31, 2019 and 2018, all of the Group's revenue was generated from customers in the PRC, and substantially all specified non-current assets were located in the PRC.

4 OTHER INCOME

	2019 RMB'000	2018 RMB'000
Interest income from bank deposits	**1,829**	756
Government grants		
— Unconditional subsidies (note (a))	**8,181**	10,515
— Conditional subsidies (note 28)	**1,900**	2,466
Net exchange loss	**(663)**	(2,676)
Others	**117**	154
	11,364	11,215

(a) Government grants

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.

5 PROFIT BEFORE TAXATION

Profit before taxation is arrived at after charging/(crediting):

(a) Finance costs

	2019 RMB'000	2018 (Note) RMB'000
Interest expense on promissory notes	**2,456**	250
Issuance costs for convertible bonds (note 20(c))	**–**	3,289
Interest expense on lease liabilities	**726**	–
Others	**63**	–
	3,245	3,539

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach. Under this approach, the comparative is not restated. See note 1(c).

(b) Staff costs

	2019 RMB'000	2018 RMB'000
Salaries, wages and other benefits	**42,956**	55,515
Contributions to defined contribution retirement plans (i)	**3,199**	4,353
Equity-settled share-based payment expenses	**3,378**	2,022
	49,533	61,890

(i) Employees of the Group's subsidiaries in the PRC are required to participate in a defined contribution retirement scheme administered and operated by the local municipal government. The Group's subsidiaries in the PRC contribute funds which are calculated on certain percentages of the average employee salary as agreed by the local municipal government to the scheme to fund the retirement benefits of the employees.

The Group also operates a MPF scheme under the Hong Kong Mandatory Provident Fund Schemes Ordinance for employees employed under the jurisdiction of the Hong Kong Employment Ordinance. The MPF scheme is a defined contribution retirement plan administered by independent trustees. Under the MPF scheme, the employer and its employees are each required to make contributions to the plan at certain percentage of the employees' relevant income. Contributions to the plan vest immediately.

The Group has no other material obligation for the payment of retirement benefits associated with the scheme beyond the annual contributions described above.

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

	2019 RMB'000	2018 RMB'000
Change in fair value of contingent share consideration (note 24(a))	**(14,628)**	(8,241)
Change in fair value of contingent consideration notes payable (note 24(b))	**7,985**	8,495
Change in fair value of convertible bonds (note 25)	**1,008**	(10,678)
	(5,635)	(10,424)

5 PROFIT BEFORE TAXATION *(Continued)*

(d) Other items

	2019 RMB'000	2018 (Note) RMB'000
Cost of inventories (i)	**116,128**	258,889
Cost of software license sold	**29,686**	56,292
Cost of post-contract customer support	**9,161**	1,737
Research and development expenses (ii)	**31,639**	36,954
Depreciation of property, plant and equipment	**6,035**	5,183
Depreciation of right-of-use assets	**6,607**	–
Amortisation of intangible assets	**37,570**	22,613
Operating lease charges under HKAS 17	**–**	9,627
Professional fees	**11,351**	7,084
Impairment losses of trade receivables (note 30(a))	**20,450**	17,322
Auditors' remuneration	**3,468**	2,938

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach and adjusted the opening balance at January 1, 2019 to recognize right-of-use assets relating to leases which were previously classified as operating leases under HKAS 17. After initial recognition of right-of-use assets at January 1, 2019, the Group as a lessee is required to recognize the depreciation of right-of-use assets, instead of the previous policy of recognizing rental expenses incurred under operating leases on a straight-line basis over the lease term. Under this approach, the comparative information is not restated. See note 1(c).

(i) Cost of inventories includes the following amounts, which are also included in the respective total amounts disclosed separately above or in notes 5(b) and 5(d) for each of these types of expenses.

	2019 RMB'000	2018 RMB'000
Staff costs	**1,690**	3,959
Depreciation of property, plant and equipment	**514**	618
Amortisation of intangible assets	**1,366**	1,366
Operating lease charges under HKAS 17	**–**	628

(ii) Research and development expenses include the following amounts, which are also included in the respective total amounts disclosed separately above or in notes 5(b) and 5(d) for each of these types of expenses, and cost of inventories as disclosed in note 16(b), respectively.

	2019 RMB'000	2018 RMB'000
Staff costs	**13,263**	20,742
Professional fees	**11,351**	7,084
Depreciation of property, plant and equipment	**1,142**	1,386
Depreciation of right-of-use assets	**1,732**	–
Amortisation of intangible assets	**50**	298
Operating lease charges under HKAS 17	**–**	3,077
Cost of inventories	**1,175**	659

6 INCOME TAX CREDIT IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

(a) Taxation in the consolidated statement of profit or loss represents:

	2019 RMB'000	2018 RMB'000
Current tax:		
Provision for current income tax for the year (note 27(a))	**1,636**	14,891
(Over)/under-provision in prior years (note 27(a))	**(605)**	175
Reversal of provision for permanent establishment risk (note 27(a))	**(1,290)**	(1,400)
Deferred tax:		
Origination and reversal of temporary differences (note 27(b))	**(13,553)**	(14,244)
	(13,812)	(578)

(b) Reconciliation between actual income tax credit and accounting (loss)/profit at applicable tax rates:

	2019 RMB'000	2018 RMB'000
(Loss)/profit before taxation	**(250,625)**	3,617
Notional tax (credit)/expense on profit before taxation, calculated at the rates applicable to the jurisdictions concerned (i)	**(19,319)**	670
Tax effect of preferential tax rate (i)	**1,965**	933
Tax effect of non-deductible expenses	**396**	471
Additional deduction for qualified research and development costs (ii)	**(2,245)**	(3,143)
(Over)/under-provision in prior years	**(605)**	175
Tax effect of tax losses not recognized (iii)	**1,186**	6,387
Tax effect of other temporary differences not recognized (iii)	**3,729**	3,112
Effect on deferred tax balance resulting from a change in tax rate (i)	**6,071**	(6,071)
Reversal of withholding tax on distributable profits	**(3,700)**	(1,712)
Reversal of provision for permanent establishment tax risk (iv)	**(1,290)**	(1,400)
Actual income tax credit	**(13,812)**	(578)

6 INCOME TAX CREDIT IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS *(Continued)*

(b) Reconciliation between actual income tax credit and accounting profit at applicable tax rates: *(Continued)*

(i) 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.

The Company's subsidiaries incorporated in Hong Kong are subject to Hong Kong profits tax at 16.5% of the estimated assessable profits, except for one subsidiary of the Group which is a qualifying corporation under the two-tiered Profits Tax rate regime. For this subsidiary, the first HKD2 million of assessable profits are taxed at 8.25% and the remaining assessable profits are taxed at 16.5%. Payments of dividends by Hong Kong companies are not subject to any withholding tax.

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 WFOE**"), a PRC subsidiary of the Group, was entitled to the preferential tax rate of 15% from years 2016 to 2018, 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 not renewed the qualification of High and New Technology Enterprise as at December 31, 2018, the tax rate used to recognize deferred tax assets and liabilities expected to be utilised after the year 2018 was changed to 25% as at December 31, 2018. The renewal of High and New Technology Enterprise qualification was approved in December 9, 2019 with an effective period of another three years starting from 2019, and therefore the tax rate used to recognize deferred tax assets and liabilities as at December 31, 2019 was 15%.

(ii) 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 2019 (2018: 75%).

(iii) Based on management's assessment of probability on the future taxable profits subsequent to the date of each reporting period, no deferred tax assets had been recognized for tax losses and other deductible temporary differences of certain loss-making PRC entities.

(iv) The corporate income tax provision related to PRC permanent establishment tax risk arising in year 2014 was reversed as at December 31, 2019 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 RMB1,290,000 was released in the year ended December 31, 2019 (2018: RMB1,400,000).

7 DIRECTORS' REMUNERATION

Directors' emoluments disclosed pursuant to section 383(1) of the Hong Kong Companies Ordinance and Part 2 of the Companies (Disclosure of Information about Benefits of Directors) Regulation are as follows:

Year ended December 31, 2019

	NOTE	Director's fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Total RMB'000
Executive directors						
Mr. Yue Jingxing		106	1,157	–	–	1,263
Mr. Lau Wai Leung, Alfred	(i)	509	–	–	–	509
Mr. Tang Andong (appointed on July 31, 2019)		44	707	523	192	1,466
Mr. Zhang Youyun (resigned on July 31, 2019)		62	316	–	19	397
Non-executive directors						
Mr. Wang Shiguang		106	938	–	26	1,070
Mr. Cheung Fan		225	–	–	–	225
Mr. Zhou, Francis Bingrong	(ii)	84	–	–	–	84
Mr. Yang Luokui (appointed on June 10, 2019 and resigned on November 12, 2019)		45	–	–	–	45
Independent non-executive directors						
Mr. Ong King Keung		213	–	–	–	213
Ms. Lo Wan Man (appointed on May 29, 2019)		62	–	–	–	62
Mr. Zou Heqiang (appointed on May 29, 2019)		62	–	–	–	62
Mr. Chen Yong (retired on May 23, 2019)		89	–	–	–	89
Mr. Pan Song (retired on May 23, 2019)		89	–	–	–	89
		1,696	3,118	523	237	5,574

7 DIRECTORS' REMUNERATION (Continued)

Year ended December 31, 2018

	NOTE	Director's fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Equity-settled share-based payments RMB'000	Total RMB'000
Executive directors							
Mr. Yue Jingxing		103	1,468	–	–	1	1,572
Mr. Zhang Youyun		103	550	–	34	1	688
Mr. Zhou, Francis Bingrong	(ii)	484	–	–	–	–	484
Non-executive directors							
Mr. Wang Shiguang	(iii)	103	1,098	210	30	–	1,441
Mr. Cheung Fan (appointed on September 7, 2018)		34	–	–	–	–	34
Mr. Lau Wai Leung, Alfred	(i)	60	–	–	–	–	60
Independent non-executive directors							
Mr. Ong King Keung		207	–	–	–	–	207
Mr. Chen Yong		207	–	–	–	–	207
Mr. Pan Song		207	–	–	–	–	207
		1,508	3,116	210	64	2	4,900

Notes:

(i) Mr. Lau Wai Leung, Alfred was a non-executive director during the year 2018 and the period from January 1, 2019 to January 20, 2019. On January 21, 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 December 31, 2019.

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

(iii) Mr. Wang Shiguang was an executive director during the period from January 1, 2018 to May 24, 2018. On May 25, 2018, Mr. Wang Shiguang was re-designated as a non-executive director. The remuneration of Mr. Wang Shiguang represented his capacity as both executive director and non-executive director of the Company during the year ended December 31, 2018.

No directors of the Group waived or agreed to waive any emoluments during the year.

During the year, there were no amounts paid or payable by the Group to the directors or any of the five highest paid individuals set out in note 8 below as an inducement to join or upon joining the Group or as compensation for loss of office.

8 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, three (2018: two) are directors whose emoluments are disclosed in note 7. The aggregate of the emoluments in respect of the other two (2018: three) individuals are as follows:

	2019 RMB'000	2018 RMB'000
Salaries, allowances and benefits in kind	**2,083**	3,148
Discretionary bonuses	**300**	490
Retirement scheme contributions	**81**	46
Equity-settled share-based payments	**102**	762
	2,566	4,446

The emoluments of the two (2018: three) individuals with the highest emoluments are within the following bands:

	2019	2018
HKD 500,001–HKD1,000,000	**1**	1
HKD1,000,001–HKD1,500,000	**–**	–
HKD1,500,001–HKD2,000,000	**1**	1
HKD2,000,001–HKD2,500,000	**–**	–
HKD2,500,001–HKD3,000,000	**–**	1

9 EARNINGS PER SHARE

(a) Basic earnings per share

The calculation of basic earnings per share is based on the loss attributable to ordinary equity shareholders of the Company of RMB236,813,000 (2018: profit of RMB4,204,000) and the weighted average of 859,319,034 ordinary shares (2018: 823,461,933) in issue during the year, calculated as follows:

(i) Weighted average number of ordinary shares

	2019	2018
Shares in issue on January 1	**811,247,421**	810,877,303
Effect of equity-settled share options exercised	**10,998,151**	368,190
Effect of vested equity-settled share options	**1,302,260**	12,216,440
Effect of shares issued as consideration for acquisition of NM Technology	**10,716,407**	–
Effect of share placing on October 31, 2019	**25,054,795**	–
Weighted average number of ordinary shares	**859,319,034**	823,461,933

9 EARNINGS PER SHARE (Continued)

(b) Diluted earnings per share

The calculation of diluted earnings per share is based on the loss attributable to ordinary equity shareholders of the Company of loss of RMB236,813,000 (2018: loss of RMB14,715,000) and the weighted average of 859,319,034 shares for 2019 (2018: 857,716,637), calculated as follows:

(i) (Loss)/profit attributable to ordinary equity shareholders of the Company (diluted)

	2019 RMB'000	2018 RMB'000
(Loss)/profit attributable to ordinary equity shareholders (basic)	**(236,813)**	4,204
After tax effect of gain on fair value changes of convertible bonds	–	(10,678)
After tax effect of gain on fair value changes of contingent share consideration	–	(8,241)
Loss attributable to ordinary equity shareholders (diluted)	**(236,813)**	(14,715)

(ii) Weighted average number of ordinary shares (diluted)

	2019	2018
Weighted average number of ordinary shares at December 31 (basic)	**859,319,034**	823,461,933
Effect of conversion of convertible bonds	–	23,178,082
Effect of settlement of contingent share consideration	–	11,076,622
Weighted average number of ordinary shares at December 31(diluted)	**859,319,034**	857,716,637

The computation of diluted loss per share for the year ended December 31, 2019 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 December 31, 2019.

The potential ordinary shares attributable to the Company's unvested equity-settled share options had anti-dilutive effect for the years ended December 31, 2019 and 2018 as the unvested equity-settled share options would result in a decrease in loss per share.

10 RIGHT-OF-USE ASSETS

	Properties leased for own use RMB'000
Cost:	
At December 31, 2018	–
Impact on initial application of HKFRS 16 (note)	12,606
At January 1, 2019	12,606
Additions	12,028
At December 31, 2019	24,634
Accumulated Amortization:	
At December 31, 2018 and January 1, 2019	–
Charge for the year	(6,607)
Effect of foreign exchange rate changes	(24)
At December 31, 2019	(6,631)
Net book value:	
At December 31, 2019	18,003
At December 31, 2018	–

Note: The Group has initially applied HKFRS 16 using the modified retrospective method and adjusted the opening balances at January 1, 2019 to recognize right-of-use assets relating to leases which were previously classified as operating leases under HKAS 17. See note 1(c).

The Group leased the above properties in the PRC mainland and Hong Kong as office premises.

10 RIGHT-OF-USE ASSETS *(Continued)*

The analysis of expense items (except for amortization expense presented above) in relation to leases recognized in profit or loss is as follows:

	Year ended December 31, 2019 RMB'000	2018 (Note) RMB'000
Amount recognized in profit or loss		
Interest on lease liabilities	**726**	–
Expenses relating to short-term leases	**3,203**	–
Operating lease expenses under HKAS 17	**–**	9,627
	3,929	9,627
Amount recognized in the consolidated statement of cash flows		
Within operating cash flows	**3,203**	9,627
Within financing cash flows	**7,179**	–
Total cash flow for leases	**10,382**	9,627

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach and adjusted the opening balances at January 1, 2019 to recognize right-of-use assets relating to leases which were previously classified as operating leases under HKAS 17. After initial recognition of right-of-use assets at January 1, 2019, the Group as a lessee is required to recognize the depreciation of right-of-use assets, instead of the previous policy of recognising rental expenses incurred under operating leases on a straight-line basis over the lease term. Under this approach, the comparative information is not restated. See note 1(c).

During the year, additions to right-of-use assets were RMB12,028,000, which related to the capitalised lease payments payable under new tenancy agreements.

Details of the maturity analysis of lease liabilities and the future cash outflows arising from leases that are not yet commenced are set out in notes 22 and 30(b), respectively.

11 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 January 1, 2018	20,755	20,934	6,514	1,214	4,254	–	53,671
Additions	–	566	986	95	150	622	2,419
Acquisitions of subsidiaries	–	–	274	26	–	–	300
Disposals	–	(166)	(340)	(1)	(1,108)	–	(1,615)
Reclassification	–	31	(57)	26	–	–	–
At December 31, 2018 and January 1, 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 December 31, 2019	20,755	21,457	6,362	2,342	6,257	–	57,173
Accumulated depreciation:							
At January 1, 2018	(1,118)	(12,355)	(2,987)	(507)	(3,195)	–	(20,162)
Charge for the year	(986)	(2,377)	(1,177)	(159)	(484)	–	(5,183)
Written back on disposals	–	109	230	–	1,108	–	1,447
Reclassification	–	(24)	44	(20)	–	–	–
At December 31, 2018 and January 1, 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)
Written back on disposals	–	160	1,139	–	–	–	1,299
At December 31, 2019	(3,090)	(16,773)	(3,963)	(891)	(3,917)	–	(28,634)
Net book value:							
At December 31, 2019	17,665	4,684	2,399	1,451	2,340	–	28,539
At December 31, 2018	18,651	6,718	3,487	674	725	622	30,877

12 INTANGIBLE ASSETS

	Software RMB'000	Capitalized development costs RMB'000	Customer relationships RMB'000	Non-compete undertakings RMB'000	Unfulfilled contracts RMB'000	Total RMB'000
Cost:						
At January 1, 2018	10,753	7,287	–	–	–	18,040
Acquisitions of subsidiaries	3	–	99,380	100,147	22,264	221,794
Additions	151	2,036	–	–	–	2,187
At December 31, 2018 and January 1, 2019	10,907	9,323	99,380	100,147	22,264	242,021
Additions	953	1,706	–	–	–	2,659
At December 31, 2019	11,860	11,029	99,380	100,147	22,264	244,680
Accumulated depreciation:						
At January 1, 2018	(4,045)	–	–	–	–	(4,045)
Charge for the year	(2,190)	–	(5,875)	(5,949)	(8,599)	(22,613)
At December 31, 2018 and January 1, 2019	(6,235)	–	(5,875)	(5,949)	(8,599)	(26,658)
Charge for the year	(1,667)	–	(12,652)	(14,726)	(8,525)	(37,570)
At December 31, 2019	(7,902)	–	(18,527)	(20,675)	(17,124)	(64,228)
Net book value:						
At December 31, 2019	3,958	11,029	80,853	79,472	5,140	180,452
At December 31, 2018	4,672	9,323	93,505	94,198	13,665	215,363

13 GOODWILL

	AMR and other business CGU RMB'000	SMIA business CGU RMB'000	Total RMB'000
Cost:			
At January 1, 2018	–	–	–
Arising from acquisition of			
— NM Technology	37,936	–	37,936
— Green Harmony	–	177,211	177,211
At December 31, 2018, January 1, 2019 and December 31, 2019	37,936	177,211	215,147
Accumulated impairment losses:			
At January 1, 2018, December 31, 2018 and January 1, 2019	–	–	–
Impairment loss recognized	(14,680)	(156,493)	(171,173)
At December 31, 2019	(14,680)	(156,493)	(171,173)
Carrying amount:			
At December 31, 2019	23,256	20,718	43,974
At December 31, 2018	37,936	177,211	215,147

13 GOODWILL *(Continued)*

Goodwill of AMR and other business

In second half of 2019, the Group experienced an unexpected delay in debut of the Group's PLC based broadband AMR products. This has postponed the Group's participation in certain centralized biddings to be conducted by State Grid as well as certain local biddings, and hence lead to a potential loss of market share which may hamper the financial performance of the Group's AMR and other business in the short run. The delay in debut of the Group's PLC based broadband AMR products and potential loss of market share has a negative impact on the expected future cash flow and the recoverable amount of the CGU.

As at December 31, 2019, management performed an impairment test for the goodwill and other intangible assets allocated to AMR and other business with assistance of an independent external valuation firm. The recoverable amount has been determined based on value-in-use calculation. The calculation 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 growth rate of 3% (2018: 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 20.16% (2018: 21.40%), 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 five-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 loss of RMB 14,680,000 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 RMB 243,751,000. Any adverse change in the assumptions used in the calculation of the recoverable amount would result in further impairment loss.

Goodwill of SMIA business

In 2019, there was a significant decrease in revenue and gross profit of the SMIA business segment as compared to that of 2018 which was primarily attributable to an unexpected delay in delivery/implementation of certain major contracts held as at December 31, 2019. Such delay was mainly attributable to the revision of corporate resources planning and implementation schedule conducted by the customers under SMIA business segment and hence has led to delay in revenue recognition by the Group. Given the financial performance of the SMIA business segment for the year ended December 31, 2019 had not achieved the 2019 financial budgets approved by the Board, the Board has revisited the strategic plan of the SMIA business, assessed the project progress, profitability and reasonableness of the timing of revenue recognition of the backlog contracts of the SMIA business held as at December 31, 2019, reassessed the sale pipeline forecast prepared by the management of the SMIA business in light of the recent expectation of market development in the short and medium run etc.

As at December 31, 2019, management performed an impairment test for the goodwill and other intangible assets allocated to SMIA business with assistance of an independent external valuation firm. 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 growth rate of 3% (2018: 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 23.96% (2018: 24.41%), 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 loss of RMB 156,493,000 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 RMB 208,428,000. Any adverse change in the assumptions used in the calculation of the recoverable amount would result in further impairment loss.

(Expressed in Renminbi unless otherwise indicated)

14 INVESTMENTS IN SUBSIDIARIES

The following list contains only the particulars of subsidiaries which principally affected the results, assets or liabilities of the Group. The class of shares held is ordinary unless otherwise stated.

Name of companies	Place of establishment and nature of legal entity	Registered capital/ issued share capital	Proportion of ownership interest			Principal activities and place of operation
			Group' effective interest	Held by the Company	Held by a subsidiary	
Risecomm Co. Ltd.	Established in the Cayman Islands, limited liability company	18,128,214 shares of USD0.001 each	100%	100%	–	Dormant
Harvest Year Global Limited	Established in Seychelles, limited liability company	1 share of USD1 each	100%	100%	–	Investment holding in Hong Kong
Prime Key Holdings Limited	Established in Seychelles, limited liability company	1 share of USD1 each	100%	100%	–	Investment holding in Hong Kong
Risecomm (HK) Technology Co. Limited	Established in Hong Kong, limited liability company	1 share of HKD1 each	100%	–	100%	Trading and research and development in the PRC
Risecomm (HK) Holding Co. Limited	Established in Hong Kong, limited liability company	1 share of HKD1 each	100%	–	100%	Investment holding in Hong Kong
Risecomm Microelectronics (Shenzhen) Co., Ltd.* (瑞斯康微電子(深圳)有限公司)	Established in the PRC, wholly foreign owned enterprise	USD17,500,000	100%	–	100%	Manufacturing and sales of AMR products in the PRC
Beijing Risecomm Communication Technology Company Limited* (北京瑞斯康通信技術有限公司)	Established in the PRC, limited liability company	RMB3,000,000	100%	–	100%	Sales and marketing in the PRC
Wuxi Risecomm Communication Technology Company Limited* (無錫瑞斯康通信技術有限公司)	Established in the PRC, limited liability company	RMB3,100,000	100%	–	100%	Research and development in the PRC
North Mountain Information Technology Company Limited	Established in Hong Kong, limited liability company	HKD10,000	100%	–	100%	Investment holding in Hong Kong
North Mountain Power Technology (Beijing) Co., Ltd* (北山網電電力技術(北京)有限公司)	Established in the PRC, wholly foreign owned enterprise	RMB1,000,000	100%	–	100%	Sales and marketing in the PRC
Green Harmony Limited	Established in Seychelles, limited liability company	1 share of USD1 each	100%	100%	–	Investment holding in Seychelles

(Expressed in Renminbi unless otherwise indicated)

14 INVESTMENTS IN SUBSIDIARIES *(Continued)*

Name of companies	Place of establishment and nature of legal entity	Registered capital/ issued share capital	Proportion of ownership interest: Group' effective interest	Proportion of ownership interest: Held by the Company	Proportion of ownership interest: Held by a subsidiary	Principal activities and place of operation
Hongten Technology Limited	Established in Hong Kong, limited liability company	10,000 shares of HKD 1 each	100%	–	100%	Investment holding in Hong Kong
Beijing Hongteng Weitong Technology Co.,Ltd* (北京鴻騰偉通科技有限公司)	Established in the PRC, wholly foreign owned enterprise	RMB32,244,307.16	100%	–	100%	SMIA business in the PRC
Beijing Jiangxinchuangda Technology Co.,Ltd* (北京鍵鑫創達科技有限公司)	Established in the PRC, limited liability company	RMB2,000,000	100%	–	100%	SMIA business in the PRC
Beijing Tongyong Chuangweishi Technology Development Co.,Ltd * (北京通用創為實技術發展有限公司)	Established in the PRC, limited liability company	RMB2,000,000	100%	–	100%	Dormant

* The official name of the company is in Chinese. The English translation of the company name is for reference only.

15 INTEREST IN ASSOCIATE

The following list contains only the particulars of the Group's associate, which is immaterial and accounted for using the equity method in the consolidated financial statements.

Name of associate	Form of business structure	Place of establishment and nature of legal entity	Particulars of registered capital	Proportion of ownership interest-Group's effective interest	Principal activities
Risecomm (Beijing) Technology Company Limited.* 瑞北通(北京)科技有限公司	Incorporated	Established in the PRC, limited liability company	RMB2,000,000	50%	Research and development in the PRC

* The official name of the company is in Chinese. The English translation of the company name is for reference only.

16 INVENTORIES

(a) Inventories in the consolidated statement of financial position comprise:

	2019 RMB'000	2018 RMB'000
Raw materials	**17,370**	16,925
Work in progress	**2,233**	3,418
Finished goods	**27,590**	26,897
	47,193	47,240
Provision for diminution in value of inventories	**(21,496)**	(14,015)
	25,697	33,225

(b) The analysis of the amount of inventories recognized as expenses and included in profit or loss is as follows:

	2019 RMB'000	2018 RMB'000
Carrying amount of inventories sold	**107,472**	250,396
Write down of inventories	**7,481**	7,834
Cost of inventories directly recognized as research and development expenses	**1,175**	659
	116,128	258,889

17 CONTRACT COSTS

Contract costs capitalized as at December 31, 2019 and 2018 relate to the costs to fulfil a contract with a customer. Contract costs are recognized as part of "cost of sales" in the statement of profit or loss in the period in which revenue is recognized.

The amount of capitalized contract costs recognized in profit or loss during the year was RMB7,548,000 (2018: RMB1,737,000). The amount of capitalized contract costs is expected to be recovered within one year.

18 TRADE AND OTHER RECEIVABLES

	2019 RMB'000	2018 RMB'000
Trade receivables, net of loss allowance	**96,366**	206,425
Bills receivable (note (b))	**9,951**	15,342
Total trade receivables	**106,317**	221,767
Prepayments	**7,949**	27,735
Income tax recoverable (note 27(a))	**242**	85
Other receivables	**11,708**	9,666
Trade and other receivables, net	**126,216**	259,253

(a) Aging analysis

As at the end of each reporting period, the ageing analysis of trade receivables (which are included in trade and other receivables), based on invoice date and related loss allowance, is as follows:

	2019 RMB'000	2018 RMB'000
Within 6 months	**43,780**	156,901
After 6 months but within 1 year	**14,292**	28,814
After 1 year	**94,462**	56,428
Trade receivables	**152,534**	242,143
Loss allowance	**(56,168)**	(35,718)
Trade receivables, net of loss allowance	**96,366**	206,425

Further details on the Group's credit policy and credit risk arising from trade receivables and bills receivable are set out in note 30(a).

18 TRADE AND OTHER RECEIVABLES *(Continued)*

(b) Bills receivables

Bills receivables represent short-term bank and commercial acceptance notes receivable that entitle the Group to receive the full face amount from banks and issuers at maturity, which generally ranges from 3 to 12 months from the date of issuance. Historically, the Group has experienced no credit losses on bills receivable. The Group from time to time endorses bills receivables to suppliers as part of the treasury management.

During the years ended December 31, 2019 and 2018, the Group endorsed certain bank acceptance bills to suppliers for settling trade payables of the same amount on a fully recourse basis. The Group had derecognized these bills receivable and the payables to suppliers in their entirety. These derecognized bank acceptance bills had a maturity date of less than 1 year from the end of each reporting period. In the opinion of the directors, the Group had transferred substantially all the risks and rewards of ownership of these bills and had discharged its obligation of the payables to its suppliers, and the Group has limited exposure in respect of the settlement obligation of these bills receivable under the relevant PRC rules and regulations should the issuing banks fail to settle the bills on maturity date. The Group considered the issuing banks of the bills are of good credit quality and the non-settlement of these bills by the issuing banks on maturity is not probable.

As at December 31, 2019, the Group's maximum exposure to loss and undiscounted cash outflow, which is same as the amount payable by the Group to suppliers in respect of the endorsed bills, should the issuing banks fail to settle the bills on maturity date, amounted to RMB10,568,000 (2018: RMB2,335,000).

19 FINANCIAL INVESTMENTS AT FAIR VALUE THROUGH PROFIT OR LOSS

	2019 RMB'000	2018 RMB'000
Financial investments at fair value through profit or loss	–	10,000

Financial investments at fair value through profit or loss comprise the investments in wealth management products sold by banks in the PRC. The wealth management products with floating financial return which is determined by the underlying USD3M-LIBOR. The wealth management products had matured in February 2019.

20 CASH AND CASH EQUIVALENTS

(a) Cash and cash equivalents comprise:

	2019 RMB'000	2018 RMB'000
Cash at banks and on hand	**145,110**	267,037

20 CASH AND CASH EQUIVALENTS *(Continued)*

(b) Reconciliation of (loss)/profit before taxation to cash generated from operations:

	Note	2019 RMB'000	2018 (Note) RMB'000
(Loss)/profit before taxation		**(250,625)**	3,617
Adjustments for:			
Depreciation and amortization	5(d)	**50,212**	27,796
Finance costs	5(a)	**3,245**	3,539
Impairment losses of trade receivables	5(d)	**20,450**	17,322
Write down of inventories	16(b)	**7,481**	7,834
Interest income from financial investment		**(99)**	–
Interest income from bank deposits	4	**(1,829)**	(756)
Fair value gains on financial instruments at fair value	5(c)	**(5,635)**	(10,424)
Loss on disposal of property, plant and equipment		**281**	168
Equity-settled share-based payment expenses	5(b)	**3,378**	2,022
Share of loss of associate		**50**	110
Impairment losses of goodwill		**171,173**	–
Changes in working capital:			
Decrease in inventories		**47**	63,702
Increase in contract costs		**(21,572)**	(6,868)
Decrease/(increase) in trade and other receivables		**112,745**	(50,292)
Increase in restricted bank deposits		**(178)**	(148)
(Decrease)/increase in trade and other payables		**(45,694)**	7,010
(Decrease)/increase in contract liabilities		**(14,044)**	1,828
(Decrease)/increase in deferred income		**(1,900)**	534
Cash generated from operations		**27,486**	66,994

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach and adjusted the opening balances at January 1, 2019 to recognize right-of-use assets and lease liabilities relating to leases which were previously classified as operating leases under HKAS 17. Previously, cash payments under operating leases made by the Group as a lessee of RMB9,627,000 were classified as operating activities in the consolidated cash flow statement. Under HKFRS 16, except for short-term lease payments, all other rentals paid on leases are now split into capital element and interest element (see note 20(c)) and classified as financing cash outflows. Under the modified retrospective approach, the comparative information is not restated. Further details on the impact of the transition to HKFRS 16 are set out in note 1(c).

20 CASH AND CASH EQUIVALENTS *(Continued)*

(c) Reconciliation of liabilities arising from financial activities:

The table below details changes in the Group's liabilities from financing activities, including both cash and non-cash changes. Liabilities arising from financing activities are liabilities for which cash flows were, or future cash flows will be, classified in the Group's consolidated cash flow statement as cash flows from financing activities.

	Acquisition consideration payable (Note 24(b)) RMB'000	Lease liabilities (Note 22) RMB'000	Convertible bonds (Note 25) RMB'000	Total RMB'000
At December 31, 2018	284,335	–	120,502	404,837
Impact on initial application of HKFRS 16 (Note)	–	12,606	–	12,606
At January 1, 2019	284,335	12,606	120,502	417,443
Changes from financing cash flows:				
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 financing cash flows	(20,395)	(7,179)	(5,314)	(32,888)
Changes from investing cash flows:				
Payment of principal of Green Harmony acquisition promissory notes payable (Note 24 (b))	(157,776)	–	–	(157,776)
Other changes:				
Changes in fair value of contingent consideration notes payable recognized in the profit or loss (Note 5(c))	7,985	–	–	7,985
Finance cost of acquisition consideration payable recognized in the profit or loss (Note 5(a))	2,331	–	–	2,331
Increase in lease liabilities from entering into new leases during the year	–	12,028	–	12,028
Interest expense (Note 5(a))	–	726	–	726
Changes in fair value of convertible bonds (Note 5(c))	–	–	1,008	1,008
Exchange adjustments	2,334	(24)	–	2,310
Total other changes	12,650	12,730	1,008	26,388
At December 31, 2019	118,814	18,157	116,196	253,167

Note: The Group has initially applied HKFRS 16 using the modified retrospective method and adjusted the opening balances at January 1, 2019 to recognize lease liabilities relating to leases which were previously classified as operating leases under HKAS 17. See notes 1(c) and 22.

20 CASH AND CASH EQUIVALENTS *(Continued)*

(c) Reconciliation of liabilities arising from financial activities: *(Continued)*

	Convertible bonds (Note 25) RMB'000
Balance at January 1, 2018	–
Changes from financing cash flows	
— Inflow from financing activities	127,841
Total changes from financing cash flows	127,841
Exchange adjustments	50
Issuance costs on convertible bonds	3,289
Changes in fair value of convertible bonds (note (5c))	(10,678)
Balance at December 31, 2018	120,502

21 TRADE AND OTHER PAYABLES

	December 31, 2019 RMB'000	December 31, 2018 RMB'000
Trade payables (note (a))	**66,594**	91,794
Product warranty provision (note (b))	**1,701**	3,474
Other payables and accruals	**10,017**	28,738
Trade and other payables	**78,312**	124,006

All trade payables are expected to be settled within one year.

(a) An ageing analysis of trade payables, based on the invoice date, is as follows:

	2019 RMB'000	2018 RMB'000
Within 3 months	**51,428**	70,249
After 3 months but within 6 months	**3,059**	8,825
After 6 months but within 1 year	**5,819**	7,798
Over 1 year but within 2 years	**6,288**	4,922
	66,594	91,794

21 TRADE AND OTHER PAYABLES *(Continued)*

(b) Product warranty provision

	2019 RMB'000	2018 RMB'000
At January 1, 2019	**3,474**	4,644
Additional provisions made	**656**	2,063
Provision utilised	**(47)**	(3,233)
Provision reversed	**(2,382)**	–
At December 31, 2019	**1,701**	3,474

22 LEASE LIABILITIES

The following table shows the remaining contractual maturities of the Group's lease liabilities at the end of the current reporting period and at the date of transition to HKFRS 16:

	As at December 31, 2019		As at January 1, 2019 (Note)	
	Present value of the minimum lease payments RMB'000	**Total minimum lease payments RMB'000**	Present value of the minimum lease payments RMB'000	Total minimum lease payments RMB'000
Within 1 year or on demand	**7,797**	**8,004**	4,847	5,341
More than 1 year but less than 2 years	**5,115**	**5,480**	4,813	5,075
More than 2 years but less than 5 years	**5,245**	**6,158**	2,946	2,997
	10,360	**11,638**	7,759	8,072
	18,157	**19,642**	12,606	13,413
Less: total future interest expenses		**(1,485)**		(807)
Present value of lease liabilities		**18,157**		12,606

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach and adjusted the opening balances at January 1, 2019 to recognize lease liabilities relating to leases which were previously classified as operating leases under HKAS 17. Comparative information as at December 31, 2018 has not been restated. Further details on the impact of the transition to HKFRS 16 are set out in note 1(c).

23 CONTRACT LIABILITIES

Contract liabilities	2019 RMB'000	2018 RMB'000
Made-to-order manufacturing arrangements		
— Billings in advance of performance (i)	**7,472**	14,678
Deferred post-contract customer support income (ii)	**2,184**	9,022
	9,656	23,700

(i) 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 recognized 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.

(ii) Deferred post-contract customer support income primarily consists of unamortized revenue from sales of software license, where there is still an implied service performance obligation to be provided by the Group over time.

Movements in contract liabilities

	2019 RMB'000	2018 RMB'000
Balance at January 1	**23,700**	5,226
Decrease in contract liabilities as a result of recognising revenue during the year that was included in the contract liabilities at the beginning of the period	**(23,700)**	(5,226)
Increase in contract liabilities as a result of billing in advance of manufacturing activities	**7,472**	14,678
Increase in contract liabilities as a result of billing in advance of post-contract support activities	**2,184**	9,022
Balance at December 31	**9,656**	23,700

24 ACQUISITION CONSIDERATION PAYABLES

	Note	2019 RMB'000	2018 RMB'000
Acquisition of NM Technology	(a)		
— Promissory note payable		**–**	8,875
— Contingent share consideration payable		**–**	23,325
Acquisition of Green Harmony	(b)		
— Promissory note payable		**118,814**	–
— Contingent consideration notes payable		**–**	284,335
		118,814	316,535
Representing:			
— Amounts payable within 1 year		**–**	211,280
— Amounts payable after 1 year but within 2 years		**118,814**	105,255
		118,814	316,535

(a) Acquisition of NM Technology

	2019 RMB'000	2018 RMB'000
Balance at January 1	**32,200**	–
Acquisition of a subsidiary	**–**	55,191
Payment of the cash consideration	**–**	(15,000)
Payment of the Promissory note (i)	**(9,000)**	–
Interest expense on Promissory note (i)	**125**	250
Issue of shares for settlement of contingent share consideration payable (ii)	**(8,804)**	–
Fair value gains arising from contingent share consideration payable	**(14,628)**	(8,241)
Foreign currency exchange adjustment	**107**	–
Balance at December 31	**–**	32,200

(i) Promissory note payable

On April 30, 2018, the Group issued an unsecured, non-interest bearing promissory note with payment due date of 12 months from April 30, 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 May 21, 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) Contingent share consideration payable

The decrease in the balance of contingent share consideration payables during the year ended December 31, 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.

24 ACQUISITION CONSIDERATION PAYABLES *(Continued)*

(b) Acquisition of Green Harmony

	2019 **RMB'000**	2018 RMB'000
Balance at January 1	**284,335**	–
Acquisition of a subsidiary	**–**	363,675
Payment of the cash consideration	**–**	(87,720)
Partial principal redemption of the "First Promissory note" (i)	**(157,776)**	–
Payment for interest on promissory notes	**(20,395)**	–
Changes in fair value of contingent consideration recognized in the profit or loss	**7,985**	8,495
Finance cost recognized in the profit or loss	**2,331**	–
Foreign currency exchange adjustment	**2,334**	(115)
Balance at December 31	**118,814**	284,335

(i) 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 August 15, 2018 (the "**GH Acquisition Date**"). The face value of the "First Promissory Note" on the GH Acquisition Date is HKD200,000,000. During the year ended December 31, 2019, the Group partially redeemed HKD180,000,000 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 August 15, 2018 to actual payment date in 2019.

On November 25, 2019, the Group has entered into a supplemental agreement to the SPA with the vendor of Green Harmony, based on which, the payment due date of the remaining HKD20,000,000 principal of the First Promissory Note was extended to August 14, 2021. Coupon interest rate on the remaining principal balance was revised to 4% per annum.

(ii) According to the SPA, the Group was required to issue another unsecured promissory note (the "**Second Promissory Note**") on or before December 31, 2018, 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 HKD200,000,000. The Second Promissory note was issued on December 31, 2018.

On August 29, 2019, the face value of the Second Promissory Note has been agreed by the Company and the vendor of Green Harmony as HKD123,000,000 based on actual financial performance of Green Harmony for the year ended December 31, 2018.

According to the supplemental agreement signed on November 25, 2019, the payment due date of the Second Promissory Note was extended to December 30, 2021 and was therefore reclassified to non-current liabilities. Coupon interest rate on the principal amount was revised to 4% per annum.

25 CONVERTIBLE BONDS

	2019 RMB'000	2018 RMB'000
As at January 1	**120,502**	–
Fair value of convertible bonds issued	**–**	131,130
Payment for interest on convertible bonds	**(5,314)**	–
Re-measurement on convertible bonds	**1,008**	(10,628)
At December 31	**116,196**	120,502

On August 13, 2018 ("**Issue Date**"), the Group issued convertible bonds to an independent third party (the "**Holder**") with principal amount of HKD150,000,000 (equivalent to approximately RMB131,130,000) with a maturity period of two years to August 13, 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 August 13, 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.

The convertible bonds can be converted into ordinary shares of the Company at the holder's option at an initial conversion price of HKD2.50 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:

	As at December 31, 2019	As at December 31, 2018	On inception date
Risk free rates	**1.77%**	1.74%	1.87%
Discount rate	**19.18%**	18.28%	18.40%
Dividend yield	**0.58%**	1.03%	0.95%
Expected volatility	**50.29%**	45.47%	57.28%

(Expressed in Renminbi unless otherwise indicated)

26 EQUITY-SETTLED SHARE-BASED COMPENSATION TRANSACTIONS

The Group issued four tranches of share options on February 1, 2007, April 21, 2011, March 26, 2014 and September 3, 2018 respectively.

(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 February 1, 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 April 21, 2011	200,000		10 years
— On March 26, 2014	503,858		10 years
— On September 3, 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 September 3, 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 February 1, 2007	200,000	Vested immediately on grant date	10 years
— On March 26, 2014	26,799		10 years
Options granted to SAIF			
— On April 21, 2011	168,666	Vested immediately on grant date	10 years
— On March 26, 2014	136,000		10 years
Total share options granted	17,466,657		

(Expressed in Renminbi unless otherwise indicated)

26 EQUITY-SETTLED SHARE-BASED COMPENSATION TRANSACTIONS *(Continued)*

(b) The number and weighted average exercise prices of share options are as follows:

	At December 31, 2019		At December 31, 2018	
	Weighted average exercise price	Number of options	Weighted average exercise price	Number of options
Outstanding at the beginning of the year	USD0.0003	12,300,411	USD0.0003	12,670,529
Outstanding at the beginning of the year	HKD1.71	15,500,000	–	–
Exercised during the year (note 29(c)(ii))	USD0.0003	(11,436,824)	USD0.0003	(370,118)
Granted during the year	–	–	HKD1.71	15,500,000
Forfeited during the year	HKD1.71	(1,770,000)	–	–
Outstanding at the end of the year	USD0.0003	863,587	USD0.0003	12,300,411
Outstanding at the end of the year	HKD1.71	13,730,000	HKD1.71	15,500,000
Exercisable at the end of the year	USD0.0003	863,587	USD0.0003	12,300,411
Exercisable at the end of the year	HKD1.71	1,125,000	HKD1.71	1,125,000

The weighted average share price at the date of exercise for shares options exercised during the year was HKD1.67 (2018: HKD1.95).

The options outstanding at December 31, 2019 had an exercise price of USD0.0003 or HKD1.71 (2018: USD0.0003 or HKD1.71) and a weighted average remaining contractual life of 5.66 years (2018: 5.46 years).

(Expressed in Renminbi unless otherwise indicated)

26 EQUITY-SETTLED SHARE-BASED COMPENSATION TRANSACTIONS *(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	HKD13,574,844
Share price	USD0.80	USD1.14	USD1.23	HKD1.71
Exercise price (note)	USD0.01	USD0.01	USD0.01	HKD1.71
Expected volatility (expressed as a weighted average volatility used in the modelling under binomial option pricing model)	51.90%	50.15%	46.15%	58.25%
Option life (expressed as weighted average life used in the modelling under binomial option pricing model)	10 years	10 years	10 years	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 (based on Exchange Fund Notes)	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.

26 EQUITY-SETTLED SHARE-BASED COMPENSATION TRANSACTIONS *(Continued)*

(d) Equity-settled share-based compensation expenses recognized in the consolidated statement of profit or loss during the year are set out as follows:

	2019 **RMB'000**	2018 RMB'000
Sales and marketing expenses	**2,127**	689
General and administrative expenses	**379**	978
Research and development expenses	**872**	355
	3,378	2,022
Represented by:		
Staff costs (note 5(b))	**3,378**	2,022

27 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(a) Current taxation in the consolidated statement of financial position represent:

	2019 **RMB'000**	2018 RMB'000
Balance at January 1	**12,466**	5,601
Acquisition through business combination	**–**	(3,756)
Provision for current income tax for the year (note 6(a))	**1,636**	14,891
(Over)/under-provision in prior years (note 6(a))	**(605)**	175
Reversal of provision for permanent establishment risk (note 6(a))	**(1,290)**	(1,400)
Payment during the year	**(6,407)**	(3,045)
Balance at December 31	**5,800**	12,466
Reconciliation to the consolidated statement of financial position:		
Income tax payable	**6,042**	12,551
Income tax recoverable (note 18)	**(242)**	(85)
Balance at December 31	**5,800**	12,466

27 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Continued)

(b) Deferred tax assets and liabilities recognized:

(i) Movement of each component of deferred tax assets/(liabilities) recognized in the consolidated statement of financial position and the movements during the year are as follows:

Deferred tax arising from:	Tax losses RMB'000	Impairment losses on receivables and inventories RMB'000	Unrealized profit due to intra-group transactions RMB'000	Accrued expenses and other payables RMB'000	Deferred income RMB'000	Intangible assets RMB'000	Withholding tax on distributable profits RMB'000	Intangible assets identified in business combination RMB'000	Total RMB'000
At January 1, 2018	2,264	1,887	1,381	1,827	900	(698)	(5,412)	–	2,149
Acquisition through business combination	1,294	3,470	–	61	–	–	–	(55,448)	(50,623)
(Charged)/credited to profit or loss	(317)	2,975	(654)	(1,015)	110	257	1,712	5,105	8,173
Credited/(charged) to profit or loss due to a change in tax rate	2,160	2,706	485	340	674	(294)	–	–	6,071
At December 31, 2018 and January 1, 2019	5,401	11,038	1,212	1,213	1,684	(735)	(3,700)	(50,343)	(34,230)
Credited/(charged) to profit or loss (note 6(a))	2,985	5,103	(501)	(557)	(285)	205	3,700	8,974	19,624
(Charged)/credited to profit or loss due to a change in tax rate (note 6(a))	(2,160)	(2,706)	(485)	(340)	(674)	294	–	–	(6,071)
At December 31, 2019	6,226	13,435	226	316	725	(236)	–	(41,369)	(20,677)

(ii) Reconciliation to the consolidated statement of financial position:

	2019 RMB'000	2018 RMB'000
Deferred tax assets recognized in the consolidated statement of financial position	**20,692**	19,813
Deferred tax liabilities recognized in the consolidated statement of financial position	**(41,369)**	(54,043)
	(20,677)	(34,230)

27 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

(Continued)

(c) Deferred tax assets not recognized

In accordance with the accounting policy set out in note 1(u), as it is not probable that future taxable profits against which the tax losses and deductible temporary differences can be utilised will be available in the relevant tax jurisdiction before they expire, the Group has not recognized deferred tax assets in respect of cumulative tax losses of RMB53,450,000 (2018: RMB33,126,000) and deductible temporary differences of RMB11,998,000 (2018: RMB8,251,000) of certain subsidiaries, among which, tax losses of RMB14,241,000, RMB33,041,000 and RMB6,168,000 will expire in the year of 2022, 2023 and 2024 respectively.

(d) Deferred tax liabilities not recognized

As at December 31, 2019, deferred tax liabilities of RMB12,540,500 (2018: RMB3,951,200) relating to the undistributed profits of PRC subsidiaries have not been recognized in the consolidated financial statements as the Group controls the dividend policy of these subsidiaries and it is probable that these profits will not be distributed in the foreseeable future.

28 DEFERRED INCOME

Deferred income represents conditional government subsidies for encouragement of research and development projects, which is recognized in profit or loss in accordance with the accounting policy adopted for government grants set out in note 1(w)(v).

29 CAPITAL AND RESERVES

(a) Movements in components of equity:

The reconciliation between the opening and closing balances of each component of the Group's consolidated equity is set out in the consolidated statement of changes in equity. Details of the changes in the Company's individual components of equity between the beginning and the end of the year are set out below:

Company	Note	Share capital RMB'000	Share premium RMB'000	Capital reserve RMB'000	Exchange reserve RMB'000	Accumulated losses RMB'000	Total RMB'000
Balance at January 1, 2018		71	166,943	157,523	1,493	(19,101)	306,929
Changes in equity for 2018:							
Total comprehensive income for the year		–	–	–	10,878	(18,342)	(7,464)
Equity-settled share-based payments		–	–	2,022	–	–	2,022
Issue of ordinary shares under share option plan		–	94	(93)	–	–	1
Balance at December 31, 2018 and January 1, 2019		71	167,037	159,452	12,371	(37,443)	301,488
Changes in equity for 2019:							
Total comprehensive income for the year		–	–	–	(3,070)	(161,802)	(164,872)
Equity-settled share-based payments	26	–	–	3,378	–	–	3,378
Issue of ordinary shares under share option plan	29(c)	1	2,889	(2,866)	–	–	24
Issue of ordinary shares for share consideration payment	29(c)	1	8,803	–	–	–	8,804
Placing of shares	29(c)	13	52,633	–	–	–	52,646
Balance at December 31, 2019		86	231,362	159,964	9,301	(199,245)	201,468

(b) Dividends

The Board did not recommend the payment of a final dividend for year ended December 31, 2019 (2018: Nil).

29 CAPITAL AND RESERVES *(Continued)*

(c) Share capital

(i) Authorized and issued shares capital

	Par value HKD	No. of shares '000	HKD'000
Authorized shares at December 31, 2019:	0.0001	10,000,000	1,000
Ordinary shares, issued and fully paid			
At January 1, 2018	0.0001	810,877	81
Issue of shares under share option plan	0.0001	370	–
At December 31, 2018	0.0001	811,247	81
RMB equivalent ('000)			71
At January 1, 2019	0.0001	811,247	81
Issue of shares under share option plan (note (ii))	0.0001	11,437	1
Issue of shares upon settlement of contingent consideration (note (iii))	0.0001	16,435	2
Placing of shares (note (iv))	0.0001	147,500	15
At December 31, 2019	0.0001	986,619	99
RMB equivalent ('000)			86

(ii) Shares issued under Pre-IPO share option scheme

On January 15, 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 August 25, 2016 at the exercise price of USD 0.0003 per share.

(iii) On June 14, 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 NM SPA.

(iv) On October 31, 2019, the Company issued 147,500,000 ordinary shares through placing to independent third parties at the placing price of HKD 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 May 23, 2019.

(d) Share premium

Under the Companies Law of the Cayman Islands, the share premium account of the Company is distributable to the shareholders of the Company provided that immediately following the date on which the dividend is proposed to be distributed, the Company will be in a position to pay off its debts as they fall due in the ordinary course of the business.

29 CAPITAL AND RESERVES *(Continued)*

(e) Capital reserve

Capital reserve comprised the followings:

— the fair value of unexercised share options (see note 26);

— 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 August 10, 2018 (the date of exchange) when acquiring the non-controlling interest in a subsidiary, Changsha Risecomm Communication Technology Company Limited.

(f) PRC statutory reserves

Statutory general reserve is established in accordance with the relevant PRC rules and regulations and the articles of association of the companies comprising the Group which are incorporated in the PRC.

For the entities concerned, statutory general reserves can be used to make good previous years' losses, if any, and may be converted into capital in proportion to the existing equity interests of investors, provided that the balance of the reserve after such conversion is not less than 25% of the entity's registered capital.

(g) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of the Group companies outside the mainland China which are dealt with in accordance with the accounting policies set out in note 1(x).

(h) Capital management

The Group's primary objectives when managing capital are to safeguard the Group's ability to continue as a going concern, so that it can continue to provide returns for shareholders and benefits for other stakeholders, by pricing products and services commensurately with the level of risk and by securing access to finance at a reasonable cost.

The Group actively and regularly reviews and manages its capital structure to maintain a balance between the higher shareholder returns that might be possible with higher levels of borrowings and the advantages and security afforded by a sound capital position, and makes adjustments to the capital structure in light of changes in economic conditions.

The Group monitors its capital structure on the basis of the adjusted net debt-to-capital ratio. The ratio is calculated as net debt divided by equity. The Group defines net debt as interest-bearing liabilities less cash and cash equivalents. Total equity comprises all components of equity.

29 CAPITAL AND RESERVES *(Continued)*

(h) Capital management *(Continued)*

The Group has initially applied HKFRS 16 using the modified retrospective approach. Under this approach, the Group recognizes right-of-use assets and corresponding lease liabilities for almost all leases previously accounted for as operating leases as from January 1, 2019. This caused an increase in the Group's total debt and hence the Group's adjusted net debt-to-capital ratio rose from 34.4% to 37.5% on January 1, 2019 when compared to its position as at December 31, 2018.

During 2019, the Group's strategy, which was unchanged from 2018, was to maintain the adjusted net debt-to-capital ratio at a range considered reasonable by management. In order to maintain or adjust the ratio, the Group may adjust the amount of dividends paid to shareholders, issue new shares or other forms of equity financing, return capital to shareholders, raise new debt financing or sell assets to reduce debt.

	Note	**December 31, 2019 RMB'000**	January 1, 2019 (Note) RMB'000	December 31, 2018 (Note) RMB'000
Current liabilities:				
Acquisition consideration payables				
— Contingent consideration notes payable	24	**–**	179,080	179,080
Lease liabilities	22	**7,797**	5,207	–
		7,797	184,287	179,080
Non-current liabilities:				
Acquisition consideration notes payables	24	**118,814**	105,255	105,255
Convertible bonds	25	**116,196**	120,502	120,502
Lease liabilities	22	**10,360**	7,399	–
		245,370	233,156	225,757
Total debt		**253,167**	417,443	404,837
Less: Cash and cash equivalents	20	**(145,110)**	(267,037)	(267,037)
Adjusted net debt		**108,057**	150,406	137,800
Total equity		**225,145**	400,786	400,786
Adjusted net debt-to-capital ratio		**48.0%**	37.5%	34.4%

Note: The Group has initially applied HKFRS 16 using the modified retrospective approach and adjusted the opening balances at January 1, 2019 to recognise lease liabilities relating to leases which were previously classified as operating leases under HKAS 17. Under this approach, the comparative information is not restated. See note 1(c).

Neither the Company nor its subsidiaries are subject to internally or externally imposed capital requirements.

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

Exposure to credit, liquidity, interest rate and currency risks arises in the normal course of the Group's business.

The Group's exposure to these risks and the financial risk management policies and practices used by the Group to manage these risks are described below.

(a) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in a financial loss to the Group. The Group's credit risk is primarily attributable to bank deposits and trade and other receivables. Management has a credit policy in place and the exposures to these credit risks are monitored on an ongoing basis.

Bank deposits are placed with financial institutions that have high credit ratings. Bills receivable are guaranteed for payments by financial institutions. Given their credit ratings, management does not expect any counterparty to fail to meet its obligations.

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, 10.6% (2018: 18.8%) and 36.3% (2018: 41.8%) of the total trade and bills receivables was due from the Group's largest customer and the five largest customers respectively.

In respect of trade and other receivables, individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's background and financial strengths, historical repayment records and current repayment ability, and take into account information specific to the economic environment in which the customer operates. Trade receivables under credit sales arrangement are due in accordance with specific payment terms agreed with individual customer on a case by case basis subject to the fulfilment of conditions as stipulated in the respective sales contracts. Normally, the Group does not obtain collateral from customers.

The Group measures loss allowances for trade receivables at an amount equal to lifetime ECLs, which is calculated using a provision matrix. As the Group's historical credit loss experience shares significantly different loss patterns for different customer portfolio, the provision for loss allowance based on invoice date aging is further distinguished between the Group's customer portfolios of different risk types.

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

(Continued)

(a) Credit risk *(Continued)*

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

	2019		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance 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

	2019		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance 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	Loss allowance 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

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS *(Continued)*

(a) Credit risk *(Continued)*

	2019		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance RMB'000
Risk Category IV			
Within 6 months	3.0%	–	–
After 6 months but within 1 year	10.0%	–	–
After 1 year but within 2 years	25.0%	–	–
After 2 years but within 3 years	50.0%	160	80
After 3 years	100.0%	–	–
Individually impaired	100.0%	4,469	4,469
		4,629	4,549

	2019		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance 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

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

(Continued)

(a) Credit risk *(Continued)*

	2018		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance RMB'000
Risk Category I			
Within 6 months	3.0%	67,595	2,028
After 6 months but within 1 year	10.0%	18,398	1,842
After 1 year but within 2 years	25.0%	2,613	930
After 2 years but within 3 years	50.0%	566	283
After 3 years	100.0%	220	220
Individually impaired		28,780	25,198
		118,172	30,501

	2018		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance RMB'000
Risk Category II			
Within 6 months	1.5%	2,216	33
After 6 months but within 1 year	5.0%	540	29
After 1 year but within 2 years	12.5%	789	182
After 2 years but within 3 years	25.0%	–	–
After 3 years	50.0%	–	–
Individually impaired		1,471	767
		5,016	1,011

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS *(Continued)*

(a) Credit risk *(Continued)*

	2018		
	Expected loss rate	Gross carrying amount RMB'000	Loss allowance RMB'000
Risk Category III			
Within 6 months	0.5%	87,092	435
After 6 months but within 1 year	3.3%	8,725	301
After 1 year but within 2 years	6.8%	14,934	1,153
After 2 years but within 3 years	25.0%	7,140	1,785
After 3 years	50.0%	1,064	532
		118,955	4,206

Expected loss rates are based on actual loss experience over the past recent years. These rates are adjusted to reflect differences between economic conditions during the period 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. As a result of credit risk reassessment performed in 2019, customers have been re-grouped into five risk categories in 2019 so as to better reflect their risk characteristics.

Movement in the loss allowance account in respect of trade receivables during the year is as follows:

	2019 RMB'000	2018 RMB'000
Balance at January 1	**35,718**	7,159
Acquired from business combinations	**–**	11,237
Impairment losses recognized during the year (note 5 (d))	**20,450**	17,322
Balance at December 31 (note 18(a))	**56,168**	35,718

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

(Continued)

(b) Liquidity risk

Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, as far as possible, that it will have sufficient cash to meet its liabilities when they are due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The following table shows the contractual maturities at the end of each reporting period of the Group's non-derivative financial liabilities, which are based on contractual undiscounted cash flows (including interest payments computed using contractual rates or, if floating, based on rates current at the end of the reporting period) and the earliest date the Group can be required to pay.

The Group's convertible bonds and related accrued interest of approximately RMB139,745,000 will be due for payment in August 2021 and acquisition consideration payables and related accrued interest of approximately RMB18,633,000 and RMB114,458,000 will be due for payment in August and December 2021 respectively. The Group has been actively discussing with the respective counter-parties to refinance or extend the due dates of the convertible bonds and the acquisition consideration payables upon their respective payment due dates in 2021.

	As at December 31, 2019				
	Contractual undiscounted cash outflow				
	Within 1 year or on demand RMB'000	**More than 1 year but less than 2 years RMB'000**	**More than 2 years but less than 5 years RMB'000**	**Total RMB'000**	**Carrying amount RMB'000**
Trade and other payables	**78,312**	**–**	**–**	**78,312**	**78,312**
Acquisition consideration notes payables	**5,119**	**133,091**	**–**	**138,210**	**118,814**
Convertible bonds	**5,375**	**139,745**	**–**	**145,120**	**116,196**
Lease liabilities	**8,004**	**5,480**	**6,158**	**19,642**	**18,157**
Total	**96,810**	**278,316**	**6,158**	**381,284**	**331,479**

	As at December 31, 2018				
	Contractual undiscounted cash outflow				
	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 years but less than 5 years RMB'000	Total RMB'000	Carrying amount RMB'000
Trade and other payables	124,006	–	–	124,006	124,006
Acquisition consideration notes payables	201,609	116,259	–	317,868	293,210
Convertible bonds	5,257	136,687	–	141,944	120,502
Total	330,872	252,946	–	583,818	537,718

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

(Continued)

(c) Currency risk

The Group is exposed to currency risk primarily through purchases which give rise to payables and cash balances that are denominated in a foreign currency, i.e. a currency other than the functional currency of the operations to which the transactions relate. The currency giving rise to this risk is primarily United States Dollars ("**USD**").

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognized assets and liabilities denominated in a currency other than the functional currency of the entity to which they relate. For presentation purposes, the amounts of the exposure are shown in RMB, translated using the spot rate at the end of the reporting period.

	Exposure to USD (expressed in RMB)	
	2019 RMB'000	2018 RMB'000
Cash and cash equivalents	**1,398**	8,615
Trade and other payables	**(22,599)**	(125,673)
	(21,201)	(117,058)

The following table indicates the instantaneous change in the Group's profit after tax (and retained profits) and other components of consolidated equity that would arise if foreign exchange rates to which the Group's financial assets and liabilities have significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant:

	2019		2018	
	Increase/ decrease in foreign exchange rates	**(Decrease)/ increase in profit after taxation and retained earnings RMB'000**	Increase/ decrease in foreign exchange rates	(Decrease)/ increase in profit after taxation and retained earnings RMB'000
USD	**5%**	**(901)**	5%	(4,975)
	-5%	**901**	-5%	4,975

Results of the analysis as presented in the above table represent an aggregation of the instantaneous effects on each of the Group entities' profit after tax and equity measured in the respective functional currencies, translated into RMB at the exchange rate ruling at the end of the reporting period for presentation purposes.

The sensitivity analysis assumes that the change in foreign exchange rates had been applied to re-measure those financial instruments held by the Group which expose the Group to foreign currency risk at the end of the reporting period, including inter-company payables and receivables within the Group which are denominated in a currency other than the functional currencies of the lender or the borrower. The analysis excludes differences that would result from the translation of the financial statements of foreign operations into the Group's presentation currency. The analysis is performed on the same basis for 2018.

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS

(Continued)

(d) Interest rate risk

The Group's interest rate risk arises primarily from interest-bearing borrowings.

(i) Interest rate profile

At the reporting date, the interest rate profile of the Group's interest-bearing financial instruments was as follows.

	2019 RMB'000	2018 RMB'000
Fixed rate:		
Acquisition consideration payables	**118,814**	284,335
Convertible bonds	**116,196**	120,502
Lease liabilities	**18,157**	–
	253,167	404,837
Variable rate:		
Cash at bank	**145,110**	267,037
Restricted bank deposits	**326**	148
Financial investments at fair value through profit or loss	**–**	10,000
	145,436	277,185

(ii) Interest rate sensitivity analysis

As at December 31, 2019, it is estimated that a general increase/decrease of 100 basis points in interest rates, with all other variables held constant, would have increased/decreased the Group's profit after tax for the year and consolidated equity by approximately RMB1,226,000 (2018: RMB2,271,000).

(e) Fair value measurement

(i) Financial assets and liabilities measured at fair value

Fair value hierarchy

The following table presents the fair value of the Group's financial instruments measured at the end of the reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in HKFRS 13, *Fair value measurement*. The level into which a fair value measurement is classified is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

- Level 1 valuations: Fair value measured using only Level 1 inputs i.e. unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

- Level 2 valuations: Fair value measured using Level 2 inputs i.e. observable inputs which fail to meet Level 1, and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.

- Level 3 valuations: Fair value measured using significant unobservable inputs.

30 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS *(Continued)*

(e) Fair value measurement *(Continued)*

(i) Financial assets and liabilities measured at fair value *(Continued)*

Fair value hierarchy (Continued)

The Group has a financial reporting team performing valuations for the financial instruments. The team reports directly to the chief financial officer. A valuation report with analysis of changes in fair value measurement is prepared by the team at each interim and annual reporting date, and is reviewed and approved by the chief financial officer. Discussion of the valuation process and results with the chief financial officer and the directors is held twice a year, to coincide with the reporting dates. The Group engages external valuation firms to perform valuations for its financial instruments where necessary.

	Fair value at December 31, 2019 RMB'000	Fair value measurements as at December 31, 2019 categorised into		
		Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000
Convertible bonds	**116,196**	**–**	**116,196**	**–**

	Fair value at December 31, 2018 RMB'000	Fair value measurements as at December 31, 2018 categorised into		
		Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000
Recurring fair value measurements				
Assets:				
Financial investment at fair value through profit or loss	10,000	–	10,000	–
Liabilities:				
Contingent share consideration	23,325	–	–	23,325
Contigent consideration note payable	284,335	–	–	284,335
Convertible bonds	120,502	–	120,502	–

During the years ended December 31, 2018 and 2019, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3. The Group's policy is to recognize transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

For the fair value of convertible bonds and the valuation techniques and inputs, please see note 25.

(ii) Fair value of financial assets and liabilities carried at other than fair value

The carrying amounts of the Group's financial instruments carried at cost or amortized cost were not materially different from their fair values as at December 31, 2019.

31 COMMITMENTS

(a) Operating leasing commitments

At December 31, 2018, the total future minimum lease payments under non-cancellable operating leases are payable as follows:

	2018 RMB'000
Within 1 year	5,315
After 1 year but within 5 years	1,684
	6,999

The Group is the lessee in respect of a number of properties held under leases which were previously classified as operating leases under HKAS 17. The Group has initially applied HKFRS 16 using the modified retrospective approach. Under this approach, the Group adjusted the opening balances at January 1, 2019 to recognize lease liabilities relating to these leases (see note 1(c)). From January 1, 2019 onwards, future lease payments are recognized as lease liabilities in the statement of financial position in accordance with the policies set out in note 1(l), and the details regarding the Group's future lease payments are disclosed in note 22.

32 RELATED PARTY TRANSACTIONS

In addition to the related party information disclosed elsewhere in the consolidated financial statements, the Group entered into the following material related party transactions.

(a) Key management personnel remuneration

Remuneration for key management personnel of the Group, including amounts paid to the Company's directors as disclosed in note 7 and certain of the highest paid employees as disclosed in note 8, is as follows:

	2019 RMB'000	2018 RMB'000
Short-term employee benefits	**9,738**	10,290
Post-employee benefits	**385**	212
Equity-settled share-based payments	**102**	764
	10,225	11,266

Total remuneration is included in "staff costs" (see note 5(b)).

(b) Transactions with related parties

	2019 RMB'000	2018 RMB'000
Recurring transactions:		
Office premises rental expenses paid to		
Wang Shiguang	**716**	724

As at December 31, 2019, the Group had nil balance with related parties (2018: nil.).

(Expressed in Renminbi unless otherwise indicated)

33 COMPANY-LEVEL STATEMENT OF FINANCIAL POSITION

	2019 RMB'000	2018 RMB'000
Non-current assets		
Investments in subsidiaries	**367,213**	522,460
	367,213	522,460
Current assets		
Deposits and prepayments	**1,438**	1,521
Amounts due from subsidiaries	**67,609**	127,363
Cash and cash equivalents	**884**	57,392
	69,931	186,276
Current liabilities		
Acquisition consideration payables	**–**	179,080
Other payables	**666**	2,411
	666	181,491
Net current assets	**69,265**	4,785
Total assets less current liability	**436,478**	527,245
Non-current liabilities		
Acquisition consideration payables	**118,814**	105,255
Convertible bonds	**116,196**	120,502
	235,010	225,757
Net assets	**201,468**	301,488
Equity		
Share capital	**86**	71
Reserves	**201,382**	301,417
Total equity	**201,468**	301,488

(Expressed in Renminbi unless otherwise indicated)

34 NON-ADJUSTING EVENTS AFTER THE REPORTING PERIOD

As disclosed in the announcements of the Company dated February 18, 2020 and March 30, 2020, due to the outbreak of the coronavirus (COVID-19) epidemic (the "**Epidemic**") in the PRC, full resumption of operation and production of the Group was delayed. As at the approval date of these consolidated financial statements, the Group has resumed full operation and production.

The Group will continue to closely monitor the situation and assess the impact of the COVID-19 on the Group's operations, financial position and financial performance accordingly.

35 COMPARATIVE FIGURES

The Group has initially applied HKFRS 16 at January 1, 2019 using the modified retrospective approach. Under this approach, the comparative information is not restated. See note 1(c).

36 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED DECEMBER 31, 2019

Up to the date of issue of these financial statements, the HKICPA has issued a number of amendments and a new standard, HKFRS 17, Insurance contracts, which are not yet effective for the year ended December 31, 2019 and which have not been adopted in these financial statements. These developments include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Revised Conceptual Framework for Financial Reporting 2018	1 January 2020
Amendments to HKFRS 9, HKAS 39 and HKFRS 7, Interest Rate Benchmark Reform	1 January 2020
Amendments to HKFRS 3, Definition of a business	1 January 2020
Amendments to HKAS 1 and HKAS 8, Definition of material	1 January 2020
HKFRS 17, Insurance contracts	1 January 2021

The Group is in the process of making an assessment of what the impact of these developments 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.

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

	2015 RMB'000	2016 RMB'000	2017 RMB'000	2018 RMB'000	**2019** **RMB'000**
Revenue	340,724	390,210	317,333	475,793	**218,575**
Gross profit	175,753	195,263	145,727	159,534	**64,775**
Net profit/(loss)	55,192	57,603	12,851	4,195	**(236,813)**
Profit/(loss) attributable to equity shareholders of the Company	55,300	57,743	12,670	4,204	**(236,813)**
Total assets	407,256	355,134	482,355	1,058,857	**618,525**
Total liabilities	164,587	134,425	90,974	658,071	**393,380**
	242,669	220,709	391,381	400,786	**225,145**
Equity attributable to:					
— Equity shareholders of the Company	242,777	220,707	391,198	400,786	**225,145**
— Non-controlling interests	(108)	2	183	–	**–**
	242,669	220,709	391,381	400,786	**225,145**
Gross profit margin[1]	51.6%	50.0%	45.9%	33.5%	**29.6%**
Net profit margin[2]	16.2%	14.8%	4.0%	0.9%	**(108.3)%**
Current ratio[3]	2.65	2.67	5.23	1.55	**3.21**
Quick ratio[4]	2.14	2.26	4.32	1.46	**2.95**
Net debt to equity ratio[5]	N/A	N/A	N/A	34.4%	**48.0%**

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.