中核集团
CNNC

中國同輻股份有限公司
China Isotope & Radiation Corporation

（於中華人民共和國註冊成立的股份有限公司）
(A joint stock company incorporated in the People's Republic of China with limited liability)

股份代號 Stock Code：1763

2020
ANNUAL REPORT
年度報告

CONTENTS

CORPORATE INFORMATION

LEGAL NAME OF THE COMPANY

中國同輻股份有限公司(Abbreviation: 中國同輻)

ENGLISH NAME OF THE COMPANY

China Isotope & Radiation Corporation*

REGISTERED OFFICE

Room 418, South 4th Floor
Building 1, No. 66 Changwa Middle Street
Haidian District
Beijing
PRC

HEAD OFFICE IN THE PRC

No. 66
Changwa Middle Street
Haidian District
Beijing
PRC

PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Level 54, Hopewell Centre
183 Queen's Road East
Hong Kong

BOARD OF DIRECTORS

Executive Directors

Mr. Meng Yanbin *(chairman of the Board)*
Mr. Wu Jian (resigned on 25 February 2021)
Mr. Wang Suohui (appointed on 25 February 2021)
Mr. Du Jin

Non-executive Directors

Mr. Zhou Liulai (resigned on 25 February 2021)
Mr. Chen Zongyu (resigned on 30 November 2020)
Mr. Liu Zhonglin (appointed on 25 February 2021)
Mr. Chen Shoulei
Ms. Chang Jinyu
Ms. Liu Xiuhong (appointed on 30 December 2020)

Independent Non-executive Directors

Mr. Guo Qingliang (resigned on 25 February 2021)
Mr. Meng Yan (resigned on 25 February 2021)
Mr. Hui Wan Fai
Mr. Tian Jiahe
Ms. Chen Jingshan (appointed on 25 February 2021)
Mr. Lu Chuang (appointed on 25 February 2021)

THE COMMITTEES UNDER THE BOARD

Audit and Risk Management Committee

Mr. Hui Wan Fai *(chairman)*
Mr. Meng Yan (resigned on 25 February 2021)
Mr. Zhou Liulai (resigned on 25 February 2021)
Mr. Liu Zhonglin (appointed on 25 February 2021)
Mr. Lu Chuang (appointed on 25 February 2021)

Nomination Committee

Ms. Chen Jingshan *(chairman)* (appointed on 25 February 2021)
Mr. Meng Yanbin *(chairman)* (resigned on 25 February 2021)
Mr. Guo Qingliang (resigned on 25 February 2021)
Mr. Hui Wan Fai
Mr. Lu Chuang (appointed on 25 February 2021)

Remuneration and Appraisal Committee

Mr. Meng Yan *(chairman)* (resigned on 25 February 2021)
Mr. Lu Chuang *(chairman)* (appointed on 25 February 2021)
Mr. Guo Qingliang (resigned on 25 February 2021)
Ms. Liu Xiuhong (appointed on 25 February 2021)
Ms. Chen Jingshan (appointed on 25 February 2021)

Strategy Committee

Mr. Meng Yanbin *(chairman)*
Mr. Wu Jian (resigned on 25 February 2021)
Mr. Zhou Liulai (resigned on 25 February 2021)
Mr. Chen Zongyu (resigned on 25 February 2021)
Mr. Wang Suohui (appointed on 25 February 2021)
Mr. Liu Zhonglin (appointed on 25 February 2021)
Mr. Chen Shoulei
Mr. Tian Jiahe (appointed on 25 February 2021)

CORPORATE INFORMATION (CONTINUED)

Legal Affairs Committee

Mr. Meng Yanbin *(chairman)*
Mr. Chen Zongyu (resigned on 30 November 2020)
Mr. Guo Qingliang (resigned on 25 February 2021)
Mr. Liu Zhonglin (appointed on 25 February 2021)
Ms. Liu Xiuhong (appointed on 25 February 2021)
Ms. Chen Jingshan (appointed on 25 February 2021)
Mr. Hui Wan Fai

LEGAL REPRESENTATIVE

Mr. Meng Yanbin

AUTHORISED REPRESENTATIVES

Mr. Meng Yanbin *(chairman of the Board)*
Mr. Wu Laishui (resigned on 30 November 2020)
Mr. Gui Youquan (appointed on 30 November 2020)
Ms. Kam Mei Ha Wendy
(as the alternate representative of Mr. Meng Yanbin)

SUPERVISORS

Mr. Zhang Qingjun
Mr. Liu Zhonglin (resigned on 25 February 2021)
Mr. Zhang Guoping
Mr. Li Guoxiang (resigned on 26 March 2020)
Mr. Zhang Yiming (resigned on 26 March 2020)
Mr. Li Zhenhua (appointed on 26 March 2020)
Mr. Zhang Jian (appointed on 26 March 2020)
Mr. Zhao Nanfei (appointed on 25 February 2021)

JOINT COMPANY SECRETARIES

Mr. Wu Laishui (resigned on 30 November 2020)
Mr. Gui Youquan (appointed on 30 November 2020)
Ms. Kam Mei Ha Wendy

AUDITOR

KPMG
Public Interest Entity Auditor registered
in accordance with the
Financial Reporting Council Ordinance

LEGAL ADVISORS

As to Hong Kong Law
Herbert Smith Freehills
23/F, Gloucester Tower
15 Queen's Road Central
Central
Hong Kong

As to PRC Law
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6A Jia Jianguomenwai Avenue
Chaoyang District
Beijing
PRC

CORPORATE INFORMATION (CONTINUED)

PRINCIPAL BANKS

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Chang'an Branch
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Beijing
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Hong Kong

STOCK CODE

1763

INVESTORS' ENQUIRIES

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E-mail: ir@circ.com.cn

LISTING DATE

6 July 2018

FINANCIAL HIGHLIGHTS

(RMB' 000)	Year ended 31 December 2020	Year ended 31 December 2019
Revenue	4,274,183	3,988,904
Gross profit	2,615,987	2,829,327
Profit from operations	626,454	720,594
Profit before taxation	596,163	733,807
Profit attributable to equity shareholders of the Company	213,582	329,030
Basic/diluted earnings per share (RMB)	0.67	1.03
Profitability		
Gross profit margin	61.2%	70.9%
Operating profit margin	14.7%	18.1%
Net profit margin	11.1%	15.7%

	Year ended 31 December 2020	Year ended 31 December 2019
Total assets	9,185,292	8,843,372
Total liabilities	3,679,682	3,839,939
Net assets	5,505,610	5,003,433

GROUP PROFILE

As a leader in the isotopes and irradiation technology application industry in the PRC, CIRC tapped into the field of isotopes and irradiation technologies since it was established in 1983, and tilled the nuclear technology application industry for over 30 years. The businesses of the Company have basically covered the entire nuclear technology application industry. Given the high entry qualification and complex technological barriers, CIRC has huge space for business expansion in addition to its existing business.

CIRC focuses on research and development, manufacturing, and sales of pharmaceuticals, and is also engaged in radioactive sources, irradiation, nuclear medical equipment and independent clinical laboratory services. The Company derives 69.7% of its revenue and 83.2% of its gross profit from the pharmaceuticals segment in the nuclear medicine industry. As a leading enterprise in the PRC nuclear medicine industry featured with huge potential, high entry barriers and strong profitability, CIRC is the largest manufacturer of imaging diagnostic and therapeutic radiopharmaceuticals, UBT kits and analyzers, and RIA kits in the PRC. CIRC's products have high market presence. CIRC is the largest radioactive source products manufacturer with most comprehensive product portfolio in the PRC, and is the only radioactive source product manufacturer in the PRC with manufacturing capability to produce various products, such as cobalt-60 for irradiation service and cobalt-60 for medical applications. In terms of the irradiation service, CIRC is the third largest provider for irradiation service, and is the only provider which provides the services of the upstream production as well as the downstream design and installation of irradiation facilities. Two subsidiaries of CIRC are among the three qualified EPC service providers approved by the Ministry of Ecology and Environment to engage in the design, manufacturing and installation of irradiation facilities in China.

As an important member of isotopes and irradiation technology industry of CNNC, CIRC has achieved the domestication of radioisotope raw materials production and research and development of irradiation products by leveraging on the availability of CNNC's nuclear reactors, cyclotrons and resources on professional and technical staff.

CHAIRMAN'S STATEMENT

Dear Shareholders,

On behalf of the Board, I am pleased to present to you the annual results report of the Company for the Reporting Period.

2020 marked the closing year of the "13th Five-Year" Plan and it was also a highly unusual one for CIRC. The COVID-19 outbreak in the early part of the year coincided with the fast-changing macroenvironment to produce a combined impact that radically reshaped the world and all aspects of people's lives. Faced with the epidemic' negative impact, severe global recession and complicated international situation, CIRC stood united with its entire staff to overcome challenges, seek progress amidst stability, focus on risk prevention and control, coordinate plans to further epidemic prevention and control along with its manufacturing operation and leverage on the closure of the "13th Five-Year" Plan to lay a strong foundation for the opening of the "14th Five-Year" Plan.

Rendering assistance in epidemic prevention and control to meet corporate responsibilities. It is in critical times that corporations and businesses are most required to ensure that their social responsibilities are met. Since the COVID-19 outbreak, the entire country had reported a severe shortage of medical supplies like disposable protective clothing at the frontline of the fight against the pandemic. CIRC became actively involved in the formulation of the "Emergency Regulations for Irradiation and Sterilization of Medical Disposable Protective Clothing during the Epidemic Period (Provisional)" during which we took full advantage of our industry's competitive edge to participate in epidemic prevention and control and provided free irradiation services to pandemic-affected areas in urgent need of medical products. For this exercise, we shortened the sterilization periods of disposable medical products from 14 days originally to 1 day. A total of 2.51 million sets of medical disposable protective clothing were irradiated and sterilized along with 2.49 million units of medical masks and 140 million pairs of medical gloves. Jinhui Radiation was awarded with the "National Advanced Group in the Fight Against the COVID-19" (全國抗擊新冠肺炎疫情先進集體) title. In February 2020, CIC Lab was approved as the only COVID-19 testing institution of the central enterprise, which swiftly helped Wuhan to carry out nucleic acid tests. For the entire year, we contributed to the battle against the epidemic with around 1 million nucleic acid tests administered at locations including Wuhan, Chengdu and Beijing.

Meeting challenges positively as financial performance continued to improve. Since the epidemic's eruption, the various business segments of CIRC have been hit hard. Facing the grim circumstances, our entire staff handled the situation confidently and calmly to prioritise resumption of work and productivity as the goal and mission for the entire year. As the epidemic prevent and control became increasingly effective, the company's business also showed positive changes. Bucking the general trend, our income for the entire year of 2020 reached RMB4.274 billion, representing a 7.2% year-on-year increase. Starting from August, our monthly total profit recorded a year-on-year increase for 5 consecutive months to realize total profit of RMB596 million, with a year-on-year decrease of 18.8%. Total assets amounted to RMB9.185 billion, net assets totaled RMB5.506 billion and asset-liability ratio stood at 40.06%.

CHAIRMAN'S STATEMENT (CONTINUED)

Technology-led developments with steady increase in R&D capabilities. Nuclear technology application industry is a high-tech strategic industry. Recognising this, we are fully aware that technology innovations are the principal driver of our company's quality and sustainable developments. In the past year, we put great efforts to facilitate technology innovations. A total of 14 external projects have been approved, with the number of our projects and funding support at a historic high. We applied for 152 patents in total, including 42 invention patents, and 8 new software copyright applications. We obtained a total of 76 patent licensing, including 6 invention patents, and a total of 21 software copyright licensing. We continued to strengthen the establishment of our R&D platform. CNNC has approved our "CNNC Radiopharmaceutical Engineering Technology Research Center" (中核放射性藥物工程技術研究中心), thereby providing strong support for follow-up pharmaceuticals research and development as well as outcome conversions. In addition, the Irradiation Application Technology Research and Development Center (輻照應用技術研發中心) has been inaugurated with an opening ceremony. CIRC Institute's "1+N" research and development platform system also saw gradual improvements.

Implement the "CIRC speed", accelerate industry layout improvements. Project establishment is key to upgrading a company's business layout. In the past year, we actively overcame the epidemic's impact to focus on facilitating the network layout of nationwide pharmaceuticals centres and building key projects, including the North China medical base. With regard to medical bases, the Guangdong medical base project has completed relocation of production facilities and entered operation; the land bidding for the North China medical base is completed and ready for construction in Zhuozhou of Hebei Province; the Sichuan medical base has passed the onsite inspection of the Ministry of Environment and has been offered a Radiation Safety Permit (輻安證); the CNNC Accuray project in Tianjin has completed conversion of its plants and is in operation officially. With regard to pharmaceuticals centers, the Positron Pharmaceuticals Production Line (正電子藥物生產線) in Chongqing Phase 2 has obtained a permit to enter production; the ones in Qingdao and Nanchang have obtained the Radiation Safety Permit successively and those in Yichang and Lanzhou are under construction. Tentatively, the network layout encompassing 32 key cities in the country has been formed.

CHAIRMAN'S STATEMENT (CONTINUED)

Reinforcing our leadership position through win-win collaboration. In the past year, we further strengthened our cooperation with external parties. We signed an exclusive sales agreement with Bayer on introducing a Novel Alpha-Particle Targeted Drug Xofigo® (新型α粒子靶向藥物多菲戈) into China. We also reached a strategic partnership with GE Healthcare to co-facilitate clinical trials of a Novel Radioactive Tracer Injection (新型放射性示蹤劑注射液) in mainland China. In addition, we have reached a collaboration with FutureChem from Korea to develop a new radiopharmaceutical. Closely following in China's strategic footsteps, we signed a service vendor agreement with Hainan Boao Lecheng Pilot Zone to become its first vendor to be equipped with radioactive pharmaceuticals operation experience and transportation credentials. We are collaborating with a number of domestic hospitals, including Huada Hospital in Handan City and Beijing Nuclear Industry Hospital, in a joint effort to establish the nuclear medicine discipline and further facilitate the overall service and solutions of CIRC nuclear medicine.

Greatness is nurtured under circumstances of difficulties and hardship. In 2020, through the collective hard work of CIRC, we endured the test of the pandemic and achieved results that were hard to come by, to arrive at a successful conclusion under the "13th Five-Year" Plan. 2021 is the year when the "14th Five-Year" Plan begins and a critical period for CIRC to embark a new journey of development. As before, we will stay united this year, move upward along with the trends, do our utmost to facilitate our work to achieve new progress, new breakthroughs, new outcomes and foster a new momentum for CIRC, build our new development edge, establish a new development outcome, strive to gain victory in the opening year of the "14th Five-Year" Plan and continue to create greater value for our clients, shareholders and the society.

Mr. Meng Yanbin
Executive Director and Chairman of the Board

Hong Kong, 30 March 2021

MANAGEMENT DISCUSSION AND ANALYSIS

The Group is primarily engaged in the research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications, the provision of irradiation service for sterilisation purpose and EPC service for the design, manufacturing and installation of gamma ray irradiation facilities and the provision of independent clinical medical and laboratory services and medicine equipment to hospitals and other medical institutions.

BUSINESS REVIEW

For the year ended 31 December 2020, we operated five business segments, namely pharmaceuticals, radioactive source products, irradiation, independent clinical medical and laboratory services and other business and radiation therapy equipments and related services. The outbreak of the COVID-19 pandemic at the beginning of 2020 exerted a significant impact on our businesses, especially the radiopharmaceutical business. Faced with the severe test brought by the pandemic, the Group earnestly took effective measures to unswervingly prevent and control the pandemic, and promote the resumption of work and production in a targeted and orderly manner, striving to minimise the impact of the pandemic. With a bettering situation of epidemic prevention and control, various indicators of our business operations improved month by month. Revenue achieved for 2020 was RMB4,274.2 million, representing a year-on-year increase of 7.2%. Net profit for the year was RMB475.5 million, representing a year-on-year decrease of 23.9%, and net profit attributable to equity shareholders of the Company was RMB213.6 million, representing a year-on-year decrease of 35.1%.

BUSINESS SEGMENTS

1. Pharmaceuticals

We are a leading manufacturer of diagnostic and therapeutic radiopharmaceuticals in China, primarily engaged in the research, development, manufacturing and sale of a wide range of imaging diagnostic and therapeutic radiopharmaceuticals, UBT kits and analyzers and in vitro diagnostic reagents and kits in the domestic market.

During the Reporting Period, CIRC adhered to the strategic development plan of each business segment. In respect of pharmaceutical segment, by supporting “demonstration base construction projects for the promotion of nuclear medicine application for medical diagnosis” of Nuclear Medicine Branch of the Chinese Medical Association, we consistently promoted the development of existing business by intensifying our efforts in marketing to introduce nuclear medicine diagnosis technologies to clinical departments. Closely following the development of service intelligentisation and information modernisation in the medical industry, we upgraded “one-stop” solutions for particle therapy, created “one-stop” solutions for brachytherapy, and integrated important brachytherapy products, realising CIRC’s first digital supply chain with traceability throughout the process. We placed sources to explore new markets, continuously optimised service capabilities, and improved the industrial structure. We continued to develop overall nuclear medicine solutions, and our business HTA formally signed an equity acquisition agreement with Hubei Zhongxun Medical Supplies Industrial Co., Ltd. The completion of the acquisition will not only improve our nuclear medicine service industry chain, but will also strengthen cooperation with downstream and end markets, consolidating customer relationship and enhancing business undertaking capacity.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

During the Reporting Period, we recorded RMB2,979.6 million of revenue from sales of pharmaceuticals, representing a year-on-year decrease of 10.0%. As for the radiopharmaceuticals, at the time when the national pandemic was severe in 2020, we proactively carried forward the social responsibility of central enterprises in pushing the resumption of work and production in an orderly manner as soon as possible. Our members began to resume work on 27 January, and formally accepted market orders to ensure the supply of radiopharmaceutical products in the market. Through the unremitting efforts of the whole system, especially the first-line production and sales personnel, the positive growth of radiopharmaceuticals segment was maintained well throughout the year. As for breath test, the temporary suspension of medical examination centers and respiratory medicine division at hospitals during the period of COVID-19 prevention and control in 2020 led to a decline in the sales of our breath test reagents. As the spread of the pandemic is brought under control, it is expected that the products will resume steady growth in 2021.

2. Radioactive source products

We are a major manufacturer of medical and industrial radioactive source products in China and also a radioactive source producer with a most complete range of radioactive source product offerings in China, primarily engaged in the research, development, manufacturing and sale of various medical and industrial radioactive sources products as well as provision of related technical services.

During the Reporting Period, our radioactive source segment actively sought breakthroughs amidst the pandemic, continuously enriching our competitive advantages in the radioactive source market in terms of brand building, supporting services and other aspects. In 2020, we recorded RMB452.1 million of revenue from sales of radioactive source products, representing a year-on-year increase of 19.2%.

As for the export of radioactive sources, it has multiple links and difficult operations. In 2020, in a special period of epidemic prevention and control, we tackled the critical issues to overcome the difficulties, and accomplished the mission of exporting domestically-produced cobalt-60 irradiated and radioactive sources on 15 February. The revenue from sales of cobalt-60 irradiated and radioactive sources throughout the year was RMB114.8 million, basically the same as last year.

Meanwhile, we actively gave play to the competitive advantages of our domestically-produced cobalt-60 radioactive sources for gamma knife, actively exploring the market. Throughout the year, we recorded revenue of RMB44.8 million from cobalt-60 radioactive sources for gamma knife, representing a year-on-year increase of 19.6%.

During the Reporting Period, we conducted sufficient market research, focused on the customer demand for non-destructive testing, finely arranged production to ensure market supply, and through the marketing strategy of integrating sales and recycling, achieved revenue of RMB 45.6 million from sales of Iridium-192 non-destructive testing radioactive sources, representing a year-on-year increase of 60.1%.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

3. Irradiation

In the field of irradiation processing, we are mainly aimed at providing the manufacturers of medical devices, food, traditional Chinese medicine and cosmetics for sterilisation in China, and meanwhile EPC services related to the design, manufacturing and installation of gamma ray irradiation facilities is also accessible.

During the Reporting Period, we actively leveraged our sterilisation technologies. When disposable medical protective clothing was "severely in short supply", Jinhui Radiation, a subsidiary of CIRC, aiming at the sterilisation of disposable medical protective clothing, organised enterprises in the system to complete the experimental verification of sterilisation with medical protective clothing, promoting the solution of vital issues in the production of disposable medical protective clothing, and ultimately reducing the sterilisation time from 7-14 days to less than one day. At the same time, we actively participated in the preparation of the "Emergency Regulations for Irradiation and Sterilisation of Disposable Medical Protective Clothing (Provisional)" of the China Isotope and Radiation Industry Association, and promoted it internationally through the International Atomic Energy Agency and the International Radiation Protection Association. For this reason, we received letters of gratitude from the General Office of the SASAC, the Ministry of Industry and Information Technology, the Medical Supplies Team of the Joint Prevention and Control Mechanism of the State Council, the Ministry of Ecology and Environment and others, and we were rated as the "National Advanced Group in the Fight Against the COVID-19". During the anti-epidemic period, we have provided irradiation services for 2.51 million sets of disposable medical protective clothing, 2.49 million disposable medical masks, and 4.55 million disposable medical latex gloves.

At the same time, we actively promoted the "Zhong He Fu" ("中核福") series of products, and brought a variety of high-end building materials to the 2020 China Heating Conference and other exhibitions, giving full publicity to the performance of PE-Xc floor heating pipes including cold resistance, heat resistance, corrosion resistance, long life, energy saving and environmental protection. In 2020, we recorded RMB102.6 million of revenue from the irradiation application business, representing a year-on-year increase of 20.7%.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

4. Independent clinical medical and laboratory services and other businesses

Our independent clinical medical and laboratory services, as a downstream extension of our in vitro diagnostic reagents sales of the Company, are mainly being offered to medical institutions. We offer independent clinical medical and laboratory services with respect to hepatitis, endocrine, bone metabolism, cardiovascular disease, diabetes and other diseases.

In order to help the epidemic prevention and control work in China, our medical testing centres actively participated in the nucleic acid testing of the COVID-19, and have been successively approved as nucleic acid testing institutions, as a result of which a group of anti-epidemic "retrogrades" have emerged. Among them, Hong Wei, general manager of Wuhan CIC, was awarded the title of "Individuals from Central Enterprises Advanced in Fighting COVID-19".

During the Reporting Period, revenue from independent clinical medical and laboratory services and other businesses of the Group was RMB509.5 million, representing a year-on-year increase of 377.5%, of which revenue from our independent clinical medical and laboratory services recorded RMB129.4 million, representing a year-on-year increase of 74.2%, and revenue from medical supplies sales business recorded RMB366.9 million, increased by RMB351.6 million.

5. Radiation therapy equipments and related services

During the Reporting Period, domestic hospitals which were affected by the pandemic slowed down the procurement and installation of medicine equipment. While doing well in following up on existing hospital projects, our medicine equipment business adjusted work arrangements and expanded new channels, and recorded RMB230.4 million of revenue for the year, representing a year-on-year increase of 115.3%.

The table below sets forth our revenue by business segment in 2020 and 2019:

	Year ended 31 December 2020		Year ended 31 December 2019	
(RMB in million, except for percentage)	**Amount**	**%**	Amount	%
Pharmaceuticals	**2,979.6**	**69.7**	3,311.1	83.0
Radioactive source products	**452.1**	**10.6**	379.1	9.5
Irradiation	**102.6**	**2.4**	85.0	2.1
Radiation therapy equipments and related services	**230.4**	**5.4**	107.0	2.7
Independent clinical medical and laboratory services and other businesses	**509.5**	**11.9**	106.7	2.7
Total	**4,274.2**	**100.0**	3,988.9	100.0

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

MARKETING

During the Reporting Period, we continued to push brand building work. Brand is one of the most important intangible assets of an enterprise. Over the years, we have been deeply plowing the field of nuclear technology application and creating value for customers through products and services in a mutually successful way. In 2020, we further optimised the systems of brand definition and brand structure, and by implementing brand strategies that are more in line with the current development stage, we facilitated the realisation of the two-way transfer of brand assets, the accumulation of brand assets and the continuous improvement of brand value.

On the other hand, as we integrated resources in the market in a coordinated way and deepened the development of three marketing platforms, enabling each of such marketing platforms continue to fully play their roles in their respective market segment and further explore market potential. Upon the acquisition of Ningbo Junan Pharmaceuticals Technology Co., Ltd., we have significantly developed our ability in exploring market and competitiveness in sale of Iodine-125 sealed sources, promoting the rapid expansion of our existing businesses.

"Demonstration base construction projects for the promotion of nuclear medicine application for medical diagnosis": we have completed the start-up and acceptance of 6 medical institutions throughout the year. As of December 2020, CIRC and the Nuclear Medicine Branch of the Chinese Medical Association commenced the project start-up work for 57 hospitals, accelerating the popularisation of nuclear medicine with the applications in clinical diagnosis and treatment, which effectively helped us to expand the market for our products.

The project "overall nuclear medicine solutions" created by us completed the acquisition of 51% stake in Hubei Zhongxun in January 2021, thus possessing the qualification and ability to undertake foreign engineering projects. Going forward, the project will continuously enhance our market service capacity and increase the revenue from new business.

We have established a nationwide sales network and had diversified marketing campaigns. During the Reporting Period, we actively promoted the academic promotion of radiopharmaceuticals, especially technetium-99m-MIBI products. Throughout the year, we completed 58 academic promotion of clinical departments, and approximately 200 sessions of regional online training, including core salons covering more than 5,500 people in total. As of 31 December 2020, we conducted various marketing campaigns through our own sales personnel, technical service promoters and distributors, and our sales network covered 31 provinces, municipalities and autonomous regions in China. Our sales network covered 17,000 medical institutions, including 1,100 tertiary hospitals, 5,000 secondary hospitals and 2,500 primary hospitals.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

SCIENTIFIC RESEARCH AND INNOVATION

The Group continued to increase its scientific and technological research and development capabilities. A scientific research team composed of 410 R&D personnel and R&D assistants* focused on carrying out more research and development projects in radiopharmaceuticals, radiation therapy equipment, COVID-19 diagnostic products, irradiation service for sterilisation purpose and other fields in accordance with market demand. At the beginning of the outbreak of COVID-19 in Wuhan, we quickly conducted scientific research to tackle the critical issues, actively promoted the use of radiation technology to solve the problem of long disinfection and sterilisation cycles for medical protective clothing, and completed the process development and experimental verification of irradiation sterilisation of medical protective clothing, reducing the sterilisation time from 7-14 days in traditional methods to less than one day, thus making outstanding contributions to the guaranteed supply of anti-epidemic materials. As of 31 December 2020, we obtained the EU CE product certification for four COVID-19 diagnostic reagent products, and were recorded in the "white list" of the China Chamber of Commerce for Import & Export of Medicines and Health Products. Eight radiopharmaceuticals for imaging diagnostic and therapeutic use are in different stages of research and development, one of which is to be approved for production (i.e. therapeutic sodium iodine-131 capsules), and two radiopharmaceuticals in clinical trials (namely iodine-131-MIBG injection and sodium fluorine-18 injection), a therapeutic radiopharmaceutical (namely palladium-103 sealed source) pending approval to enter clinical trials, four types of radiopharmaceuticals for imaging diagnosis and treatment in various stages of development.

In 2020, the Group achieved remarkable results in our work on intellectual properties with a total of 152 patents, including 42 patents for inventions, and eight software copyrights applied, and a total of 76 patents licensed, including six patents for inventions, and 21 software copyrights registered. As of 31 December 2020, we had cumulatively 340 licensed patents. In terms of standards preparation, we cumulatively completed the preparation of one standard for the nuclear industry, five group standards for the China Isotope & Radiation Association (同輻協會), and one corporate standard for CNNC throughout the year. In terms of achievements and awards, the results were remarkable. "Independent Innovation and Transformational Application of Key Technologies of Positron Emission Tomography" (《正電子發射斷層顯像關鍵技術的自主創新及轉化應用》) was awarded the second prize of the Beijing Municipal Science and Technology Progress Awards, and "Development and Preparation of Peptides and Other Small Molecule Immunogens and Corresponding Antibodies" (《多肽類等小分子免疫原及相應抗體的研制》), and "R&D and Industrialisation of New Carbon Dioxide Gas Collectors and Scintillation Sampling Bottles" (《新型二氧化碳集氣劑和閃爍採樣瓶研發及產業化》) were awarded the second and third prizes of the CNNC Science and Technology Progress Awards respectively. In 2020, the Group completed the establishment of the Guangdong Provincial Isotope Application Engineering Technology Research Centre, the CNNC Radiopharmaceutical Engineering Technology Research Centre, and the Shenzhen Postdoctoral Innovation Practice Base, and completed the application for a key laboratory of quality control of in vitro diagnostic reagents (體外診斷試劑質量控制重點實驗室) with the National Medical Products Administration. At the same time, we continued to strengthen cooperation with external parties, and set up a postgraduate workstation at Soochow University, continuously improving the basic conditions for research and development, and innovating the mechanism and mode of operating systems.

* R&D assistants: personnel with more than 50% of the research work time

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

INTERNATIONAL BUSINESS

During the Reporting Period, we seized opportunities in the international market, and adjusted and allocated domestic and foreign resources to assist global partners in fighting the pandemic. We exported cobalt sources, breath test kits, radioimmunity kits, COVID-19 test kits and other products to 27 countries including Thailand, Bangladesh, Serbia, Mexico, Italy, South Korea and Peru, as well as protective clothing, medical masks and other anti-epidemic materials to Germany, India, United Arab Emirates, Laos, etc. Our revenue from the international business increased significantly, and we recorded an export revenue of RMB267.0 million. During this period, breakthroughs were made in our international business: following the export of a cobalt source irradiation station in 2013, we exported an overall solution for irradiation stations to Malaysia again, bringing about a good brand effect in the irradiation industry in Southeast Asia; we obtained the exclusive distribution right for radium-223 injection in China; we for the first time realised the export of integrated "flaw detection equipment + domestically-produced iridium-192 radioactive sources" packages, which may become a new source of business growth in the future; we continued to export finished industrial cobalt sources and raw materials to overseas in batches; we obtained the qualifications for international road transportation of dangerous goods, which has solved the key issue concerning the land transportation of cobalt sources, laying a solid foundation for the export of finished cobalt sources by land to neighbouring countries in Southeast Asia; we were accredited the "qualifications of general contracting enterprises for foreign aid material projects"; upholding the concept of a community of common destiny for mankind, we practiced the social responsibility of state-owned enterprises, and donated more than 80,000 pieces of anti-epidemic materials to business partners and customers in over 30 countries; we actively communicated with international organisations such as the International Atomic Energy Agency (IAEA) and the International Irradiation Association (IIA), and through the IAEA and IIA, we shared the "Emergency Regulations for Irradiation and Sterilisation of Disposable Medical Protective Clothing (Provisional)" with atomic energy institutions, irradiation technology industries and others in various countries so as to share our advanced management experiences and technical cooperation achievements in the field of nuclear technology application.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

CAPITAL OPERATION

During the Reporting Period, the Group has entered into agreements to acquire three enterprises with a total investment of RMB42.88 million.

S/N	Acquired enterprise	Agreement signature date	Acquisition completion	Acquisition amount (RMB in million)	Principal businesses	Shareholding percentage
1	Beijing Feitian Zhaoye Technology Limited Liability Company (北京飛天兆業科技有限責任公司)	2020.9.17	--	17.58	Radioactive particle therapy TPS industry, production and sales of TPS as well as three-dimensional radiation implantation treatment planning systems and their related products	70%
2	Zhonghe Lixin (Beijing) Technology Co., Ltd. (中核立信(北京)科技有限公司)	2020.12.18	--	1.84	Nuclear radiation protection and detection	51%
3	Hubei Zhongxun Medical Supplies Co., Ltd. (湖北中循醫療用品實業有限公司)	2020.12.30	2021.01.28	23.46	Production and sale of medical equipment, design and engineering construction of radiation protection products	51%

As a main platform of CNNC for the development of nuclear technology application industry, we are undertaking the important task of developing China's nuclear technology application industry. With the strategic goal of "growing bigger, stronger and better", we adhere to its strategy of "industrialisation and internationalisation" and strives to build itself a top-notch international supplier of nuclear technology application products and services. The Company closely focuses on the established strategy and implements the merger and acquisition strategy of controlling investment at the source, strengthening the core, and extending to the downstream. Our acquisition work and direction is focused on business segments such as radiopharmaceuticals, in vitro diagnostics, and irradiation applications. Under the state-owned assets regulatory policy and system, we have formulated relevant investment management systems and authorised business systems taking into account the actual conditions of the Company and its subordinate companies, and have carried out mergers and acquisitions in light of the strategic or market investment considerations for different targets. In order to facilitate the implementation of the Company's strategy, explore new sources of economic growth and enhance the economic scale and efficiency of the Company, Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership) (北京同輻創新產業投資基金合夥企業(有限合夥)) completed the second round of fundraising at the end of 2020, and introduced National Military-civilian Integration Industry Investment Fund and Daxing Fund, which has further enhanced the capital advantages of the fund. The fund primarily invests in the application areas of nuclear technology, including nuclide production, radioactive sources, other diagnostic and therapeutic drugs in the field of nuclear medicine applications, medical devices, in vitro diagnosis, medical services and industrial nuclear applications.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

As of 31 December 2020, the Company's actual amount paid to Tongfu Fund was RMB480 million, and the total actual amount paid to the Fund was RMB1.2 billion, so the Company's proportion accounted for 40%. After evaluation, the net assets of Tongfu Fund measured at fair value as of December 31, 2020 are RMB1,199.6 million. The Company's net assets calculated based on the 40% shareholding percentage were RMB479.8 million, accounted for 5.2% of the Company's total assets. In 2020, the Company's investment income in Tongfu Fund was RMB4.9 million, and the Company received dividends of RMB5.0 million.

PRODUCTION CAPACITY

The manufacturing and production facilities of the Group have a wide geographical coverage in China. As of the end of 2020, the pharmaceuticals centers that had been put into production by the Company were located in 17 regions including Beijing, Shanghai, Guangzhou, Chongqing, Chengdu and Hefei. In 2020, we made efforts to overcome the impact of the COVID-19 and solidly advanced the construction of projects. The positron drug production lines including the Chongqing Phase II and Guangzhou Phase II production lines were completed and put into operation and the positron drug production lines including Xuzhou, Jinan, and Shijiazhuang production lines passed the "Two Certifications" inspection. The Shantou project passed the "Two Certifications" inspection on the technetium drug, projects such as those in Qingdao, Nanchang and Kunming obtained the Radiation Safety Permit, initially forming a network layout across 32 major cities nationwide.

The diagnostic and therapeutic radiopharmaceuticals manufacturing bases were mainly located in four regions (i.e. Beijing, Ningbo, etc.), and the production lines that are newly planned and laid out were also in full swing. The UBT diagnostic kits and test analyzers manufacturing bases were located in two regions (i.e. Shenzhen and Tongcheng). The stable isotope industry base project overcame the impact of the COVID-19 and completed the nodal tasks on schedule. The radioactive source manufacturing bases were located in two regions (i.e. Beijing and Leshan). The in vitro immunoassay diagnostic reagents and kits manufacturing bases were located in Beijing and other regions.

The production capacity, actual production volume and utilisation rates for the year 2020 are set out in the table below:

Imaging diagnostic and therapeutic radiopharmaceuticals:

	Year ended 31 December 2020		
	Annual designed capacity	Actual production volume	Utilisation rate
Fluorine-18-FDG injections (Ci)	12,203	4,935	40.44%
Molybdenum-99/technetium-99m generators (Ci)	32,445	13,169	40.59%
Technetium-99m labeled injections (vial)	1,093,950	510,231	46.64%
Sodium iodine-131 oral solution (Ci)	22,036	11,698	53.08%
Iodine-125 sealed sources (unit)	990,000	644,309	65.08%
Strontium-89 chloride injections (vial)	67,000	13,108	19.56%

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

UBT kits and analyzers:

	Year ended 31 December 2020		
	Annual designed capacity	Actual production volume	Utilisation rate
Carbon-13/14 UBT kits (unit)	57,250,000	40,871,538	71.4%
Carbon-13/14 UBT analyzers (unit)	6,200	5,498	88.7%

In vitro immunoassay reagents and kits:

	Year ended 31 December 2020		
	Annual designed capacity	Actual production volume	Utilisation rate
RIA kits (unit)	200,000	76,404	38.20%
EIA reagents, CLIA reagents and TRFIA reagents (unit)	100,000	43,982	43.98%
Colloidal gold reagents (unit)	100,000	0	0

Radioactive source products:

	Year ended 31 December 2020		
	Annual designed capacity	Actual production volume	Utilisation rate
Cobalt-60 source for gamma knife (Ci)	3,600,000	181,314	5.0%
Iridium-192 brachytherapy sources (Ci)	10,000	2,435	24.4%
Cobalt-60 radioactive source for irradiation service (Ci)	14,400,000	7,940,000	55.1%
Iridium-192 non-destructive testing radioactive sources (Ci)	1,200,000	170,510	14.2%
Caesium-137 radioactive sources (Ci)	55,700	6,054	10.9%
Americium-241/Beryllium neutron sources (Ci)	1,000	0.5	0.05%
Selenium-75 non-destructive testing radioactive source (Ci)	50,000	48,450	96.9%

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

FUTURE DEVELOPMENT

Currently, China's economic development is in a critical period of transforming the development pattern, optimizing the economic structure, and converting the growth momentum. In order to ensure the realization of a high-quality economic development in China, the Chinese government has proposed to continue to deepen supply-side reform during the "14th Five-Year Plan" period to accelerate the formation of a new development pattern with the domestic cycle as the mainstay and the domestic and international cycles complementing each other. As a comprehensive strategic industry, nuclear technology application is closely related to nearly one-third of the industries in the manufacturing sector of the national economy. The transformation and upgrading of traditional industries and the accelerated layout of strategic emerging industries will provide new impetus and room for developing the nuclear technology application industry. At the same time, the development of the nuclear technology application industry as a whole depends on the development of the national economy. During the "14th Five-Year Plan" period, with the construction and perfection of a new "dual cycle" development pattern for the Chinese economy, market demand will continue to grow going forward, and thus the development potential of the nuclear technology application industry will be immense.

As a leading company in the industry, during the "14th Five-Year Plan" period, we will firmly grasp the critical period of industrial development, centering on the strategic goal of "bigger, stronger and better" nuclear technology application industry, with "investment control source, stronger core, expanding applications" as the path, through in-depth promotion of corporate reform, vigorously improving scientific research capabilities, continuous strengthening of capital operations, solid promotion of project construction, and effective management and improvement, etc., to fully promote the accelerated development of our Company.

In terms of corporate reform, in 2020, we successfully implemented the first tranche of our Share Appreciation Rights Incentive Plan, which was a major breakthrough that the Company has made in terms of equity incentive reform since its listing. During the "14th Five-Year Plan" period, we will continue to deepen reforms, thoroughly implement the three-year action plan for the reform of state-owned enterprises, focus on grasping well the market-oriented reform of management systems, employment mechanisms, and incentive mechanisms, solve the root and deep-seated problems that restrict the Company's development through reforms, and establish an operating mechanism that is more in line with the development requirements of the market economy, so as to continuously stimulate the Company's innovative vitality and endogenous motivation.

In terms of technological research and development, we deeply realize that technological innovation is the first driving force leading the development of enterprises. Although the COVID-19 pandemic exerted a relatively large impact on our operation results in 2020, we unswervingly continued to increase investment in scientific research. Going forward, we will further increase investment in research and development on such basis, and by continuously promoting the construction of the "1+N" research and development platform of the CIRC Institute, speeding up the introduction of leading scientific research talents and other means, we will continuously enhance the Company's strength in independent research and development, striving to achieve major breakthroughs in advantageous fields and key technologies through independent innovation. At the same time, we will continue to carry out external cooperation at a higher level. Through cooperation with scientific research institutions and well-known enterprises at home and abroad and other means, we will accelerate our new product development efficiency and improve our product development pipeline layout, thus enhancing our overall scientific and technological strength and core competitiveness.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In terms of capital operation, in 2019, we initiated the establishment of the Beijing Tongfu Innovation Industrial Investment Fund with a total value of RMB5 billion. Currently, fundraising work for the second tranche of the fund has been completed, and the current size of the fund has reached RMB4 billion. Over the past year, we completed a number of equity investment projects using the "listed company + industrial fund" investment model, which has further improved our industrial layout in radiopharmaceuticals, nuclear medical equipment, irradiation applications and other fields. Going forward, we will continue to advance fundraising work for the third tranche of the fund. In addition, by improving the efficiency of capital operations through continuous optimization of the fund operation mechanism, we will accelerate the commencement of strategic capital operations that are supportive of industrial development in the fields of radiopharmaceuticals, medical diagnosis, nuclear medical equipment, irradiation applications, etc., and we will continuously improve our industrial layout through empowerment-type mergers and acquisitions.

In terms of capacity building, in order to meet the increasing demand for radiopharmaceuticals in China's densely inhabited districts in a timely manner, we will accelerate layout for the network of pharmaceuticals centres, laying a solid foundation for the formation of a network layout system covering major cities in China in 2022. In addition, progress has been made in the construction of medical bases in 2020. The Guangdong medical base project has completed production relocation and is fully put into operation. The North China medical base project has completed land acquisition and is landed on Zhuozhou, Hebei. The Sichuan medical base project passed the site inspection by the environmental protection department and obtained the Radiation Safety Permit. The successive completion and operation of the medical bases will further enhance our research and development and production capacity, and help meet the requirements of standardised and large-scale production and operation of radiopharmaceuticals for imaging diagnosis and medical treatment, so as to meet the demand in China's growing radiopharmaceuticals market.

In terms of management improvement, we have been vigorously promoting lean management in the past few years. Currently, we have basically formed a lean management system with the characteristics of CIRC, and the Company's production and operational efficiency has been significantly improved. Going forward, we will extend the lean management concepts from the production and manufacturing aspects to the entire process and the entire chain covering research and development, design, supply chain management, marketing service, etc., striving to create more and greater value with minimal investment in resources. Meanwhile, we are aware that, with the continuous maturity and wide application of digital technology, its integration with the nuclear technology application industry is also deepening. Digital information technology represented by artificial intelligence, 5G, big data, cloud computing and others will rapidly improve the efficiency and quality of the development of the nuclear technology application industry. In the future, we will accelerate informatization construction and promote the full integration of informatization into all fields and aspects of corporate management to foster the digital and intelligent upgrade of corporate management, thus realizing the transformation of management supported by digitalization.

The "14th Five-Year Plan" is a period of strategic opportunities for the development of the nuclear technology application industry. In the future development, we will spare no efforts to promote the rapid development of the nuclear technology application industry with adherence to market orientation, taking increasing economic benefits and promoting development quality as its core guidance and driven by reform and innovation, so as to consolidate its leading position in the industry.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

IMPACT OF POLICY AND UNCERTAINTIES

Considering drug characteristics, market supply, drug costs and other factors, the volume-based drug procurement policy has not had any impact on the sales of nuclear medicine related products of our Company.

In respect of drug characteristics, the Company's products are mainly imaging diagnostic and therapeutic radiopharmaceuticals, not covered by volume-based drug procurement. In addition, radiopharmaceuticals, containing radionuclides, have a certain half-life. Certain drugs cannot be stored for a long time due to their half-life, which requires the implementation of appointment system for diagnosis and treatment of patients visiting the nuclear medicine departments. Therefore, hospitals cannot guarantee a certain amount of purchase in exchange for price concessions.

In respect of drug supply, in recent years, as the advantages of PET/CT imaging in China's nuclear medicine gradually emerged, the development of nuclear medicine has attracted extensive attention from the government and the medical industry. However, from the perspective of drug types, drug doses and domestic suppliers, the main drugs used in domestic nuclear medicine diagnosis and treatment projects are relatively stationary. There are only a few domestic suppliers for each radiopharmaceutical, and there are still exclusive sales of individual products in China. Overall, the market competition pattern is positive. According to the statistics in 2017, the total sales of radiopharmaceuticals in China only accounted for 0.22% of the total sales of top seven pharmaceutical products that year. The sales of radiopharmaceuticals in the market have not yet reached the extent of "exchanging quantity for price".

In terms of drug costs, raw materials of radiopharmaceuticals are made by reactors or accelerators, which has certain particularity. Limited by such factors as raw material costs, production management and transportation costs, even if large quantities of material purchases are practical, the price of radiopharmaceuticals cannot be significantly reduced.

In summary, during the Reporting Period, the volume-based drug procurement policy did not have a significant impact on our Company, and it is expected that the situation will not change much in 2021. Under the influence of industrial policies, innovative drugs with high technology barriers have become the focus of development among domestic pharmaceutical enterprises. During the "14th Five-Year Plan" period, we will further strengthen technological innovation to adapt to the new situation of industry development. In the future, with the deepening of medical reform and the introduction of new medical reform and drug policies, there will occur some changes in achieving success in the pharmaceutical industry, and innovation will become the core driving force of the domestic drug market. We will keep abreast of the changing industry trend, increase investment in research and development, and maintain sustained high-quality growth by improving products under research.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

IMPACT OF THE COVID-19

In 2020, the outbreak of the COVID-19 brought a certain impact on the Group's operations, resulting in a decrease in annual profits compared to last year. At present, with the continuous spread of the pandemic in overseas, and the occurrence of sporadic cases and local clusters of epidemics in multiple places in China, we will pay close attention to changes in the situation of epidemic prevention and control, continue to implement the prevention and control work well, and strengthen working capital management so as to ensure the sustainability of the Company's assets and operations. In overcoming difficulties, we actively recommend the resumption of work and production on the basis of comprehensively implementing epidemic prevention measures, and strive to coordinate with international raw material suppliers and domestic transportation companies to ensure the supply of domestic radiopharmaceuticals, radioactive sources and other products in the market. During the Reporting Period, the Company closely monitors its collection and inventory status, and negotiate with suppliers to make a deferred payment, extend credit period, etc. to strengthen working capital management and ensure the sustainability of its assets and operations. Meanwhile, the pandemic has brought opportunities for the development of the nuclear technology application industry. Irradiation technology has played an irreplaceable role in fighting against the COVID-19, which has been fully recognised by all sectors of society. China's emphasis on the nuclear technology application industry has further increased. The outbreak of the COVID-19 has prompted the country to pay more attention to health issues, and people's needs for health promotion and disease prevention and cure are increasing day by day. This has provided an important opportunity for the development of radiopharmaceuticals, medical diagnosis, high-end nuclear medicine equipment and other industries. The Company will fully grasp the opportunities brought by the pandemic to the development of the nuclear technology application industry, actively strategise and take positive action, and make full use of the favorable policies and conditions for the development of the nuclear technology application industry during the pandemic to promote the accelerated development of related industries.

FINANCIAL REVIEW

Revenue

We derived our revenue mainly from five major business segments: (1) pharmaceuticals; (2) radioactive source products; (3) irradiation; (4) radiation therapy equipments and related services; and (5) independent clinical medical and laboratory services and other businesses.

Our revenue increased by 7.2% from RMB3,988.9 million in 2019 to RMB4,274.2 million in 2020, which was mainly due to an increase in revenue from our radioactive source products segment, radiation therapy equipments and related services segment and independent clinical medical and laboratory services and other businesses segment.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

COST OF SALES, GROSS PROFIT AND GROSS MARGIN

Our cost of sales increased by 43.0% from RMB1,159.6 million in 2019 to RMB1,658.2 million in 2020, which was mainly due to an increase in cost of sales of our independent clinical medical and laboratory services and other businesses segment.

Our gross profit decreased by 7.5% from RMB2,829.3 million in 2019 to RMB2,616.0 million in 2020 and our gross margin decreased from 70.9% to 61.2%. The decline in gross profit margin was primarily due to changes in the profit structure affected by the epidemic, and the revenue and gross profit margin of the pharmaceuticals segment with higher gross profit margins decreased.

OTHER INCOME

Our other income increased by 15.4% from RMB68.7 million in 2019 to RMB79.3 million in 2020, mainly due to the increase in government subsidies in 2020, primarily government support for the steady growth of the industry segments that the pharmaceuticals belong to and supportive supplementation.

SELLING AND DISTRIBUTION EXPENSES

Our selling and distribution expenses decreased by 14.5% from RMB1,687.5 million in 2019 to RMB1,442.6 million in 2020. This is mainly due to the decrease in sales of the pharmaceuticals segment affected by the epidemic. Therefore, the corresponding sales service fees and transportation fees have all dropped significantly.

As a percentage of revenue, selling and distribution expenses decreased from 42.3% in 2019 to 33.8% in 2020.

ADMINISTRATIVE EXPENSES AND CREDIT IMPAIRMENT LOSSES

Our administrative expenses and credit impairment losses increased by 27.8% from RMB489.9 million in 2019 to RMB626.2 million in 2020, mainly due to (i) the increased research and development expense resulting from more investments in research and development, and (ii) the increased depreciation charges as a result of transfer of projects under construction to fixed assets.

As a percentage of revenue, administrative expenses increased from 12.3% in 2019 to 14.7% in 2020.

FINANCE COSTS

Our finance costs increased by 148.4% from RMB18.8 million in 2019 to RMB46.7 million in 2020, which was mainly attributable to significant increase in bond interest expenses due to the issuance of three-year corporate bonds “19-CIRC Bond” (19一 同輻債) at the end of 2019.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

SHARE OF PROFITS LESS LOSSES OF ASSOCIATES AND SHARE OF PROFITS OF A JOINT VENTURE

Our share of profits less losses of associates decreased from RMB2.1 million in 2019 to negative RMB12.0 million in 2020, mainly due to the losses of our associate, Shenzhen CICAM Manufacturing Co., Ltd. Our share of profits of a joint venture decreased by 4.8% from RMB29.8 million in 2019 to RMB28.4 million in 2020. An decrease in profits from our joint venture, Shanghai GMS Pharmaceutical Co., Ltd. is mainly affected by the epidemic.

PROFIT BEFORE TAX

As a result of the foregoing, our profit before tax decreased by 18.8% from RMB733.8 million in 2019 to RMB596.2 million in 2020.

INCOME TAX

Our income tax increased by 10.7% from RMB108.9 million in 2019 to RMB120.6 million in 2020, mainly due to the fact that the income tax rate change resulting from the subsidiaries obtaining the High and New Technology Enterprises certification offset the deferred income tax assets accrued in the previous period, resulting in an increase in deferred income tax over the same period of the previous year.

Our effective tax rate was 14.8% and 20.2% in 2019 and 2020, respectively.

PROFIT FOR THE YEAR

As a result of the foregoing, our profit for the year decreased by 23.9% from RMB624.9 million in 2019 to RMB475.5 million in 2020.

FINANCIAL POSITION

Overview

For the year ended 31 December 2020, the total assets of the Group increased slightly. The total assets, the total liabilities and the total equity were RMB9,185.3 million, RMB3,679.7 million and RMB5,505.6 million, respectively.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

NET CURRENT ASSETS

The table below sets forth our current assets, current liabilities and net current assets as at the dates indicated:

		RMB in million
	31 December 2020	31 December 2019
Inventories	**590.0**	444.4
Trade and bill receivables	**2,368.5**	2,187.7
Prepayments, deposits and other receivables	**256.1**	263.4
Cash at bank and on hand	**2,556.5**	2,744.9
Total Current Assets	**5,771.1**	5,640.4
Bank borrowings	**90.2**	191.2
Trade payables	**199.5**	173.6
Accruals and other payables	**2,327.4**	2,368.8
Lease liabilities	**29.9**	27.8
Provisions	**73.9**	69.6
Income tax payable	**51.3**	98.2
Total Current Liabilities	**2,772.2**	2,929.2
Net Current Assets	**2,998.9**	2,711.2

Our net current assets increased by 10.6% from RMB2,711.2 million as of 31 December 2019 to RMB2,998.9 million as of 31 December 2020, which was mainly due to the increase in the Company's inventory, trade and bill receivables and the return of short-term loans.

ADJUSTED NET GEARING RATIO AND QUICK RATIO

Our adjusted net gearing ratio (adjusted net debt (interest-bearing debt plus unaccrued proposed dividends) divided by adjusted equity (all components of equity less unaccrued proposed dividends)) was 18.5% and 14.8% as of 31 December 2019 and 31 December 2020, respectively.

Our quick ratio (total current assets excluding inventories divided by total current liabilities as of the same date) was 1.8 times and 1.9 times as of 31 December 2019 and 31 December 2020, respectively.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

ANALYSIS OF CASH FLOWS

The following table sets forth the cash flows of the Group:

		RMB in million
	31 December 2019	31 December 2018
Net cash generated from operating activities	**291.9**	601.9
Net cash used in investing activities	**(423.9)**	(1,108.5)
Net cash (used in)/generated from financing activities	**(156.2)**	590.7
Net (decrease)/increase in cash and cash equivalents	**(288.2)**	84.1
Cash and cash equivalents at the beginning of the year	**2,640.3**	2,557.5
Effect of changes in foreign exchange rate	**(0.5)**	(1.3)
Cash and cash equivalents at the end of the year	**2,351.6**	2,640.3

TRADE AND OTHER RECEIVABLES

Trade and other receivables are stated at amortised cost using the effective interest method less allowance for credit losses. As of 31 December 2020, our trade and other receivables (net of bad debt allowance of RMB154.4 million) were RMB2,624.6 million.

TRADE AND OTHER PAYABLES

Our trade and other payables mainly consist of trade payables and accruals and other payables, which include receipts in advance, other taxes payables, deposits from distributors, payables to distributors, payables for staff-related costs, dividends payables and other accruals and payables. As of 31 December 2020, our trade and other payables were RMB2,526.9 million.

BANK LOANS AND PLEDGE OF ASSETS

As of 31 December 2020, the unsecured long-term bank loans mainly included a loan of RMB50.0 million borrowed by a subsidiary of the Group in 2020 at an interest rate of 4.15%.

As of 31 December 2020, the secured long-term bank loans mainly included:

(i) A three-year loan of RMB5.9 million borrowed by a subsidiary of the Group in 2020 at base rate plus 15 base points per annum, for which was jointly guaranteed by the shareholders of the subsidiary.

(ii) A fifteen-year loan of RMB8.0 million borrowed by a subsidiary of the Group in 2019 at base rate plus 78.5 base points per annum, with an amount of RMB7.5 million remaining as at 31 December 2020, for which certain of the Group's properties with total carrying amount of RMB9.1 million and right of use assets with total carrying amount of RMB1.0 million were pledged.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

(iii) A five-year loan of RMB30.0 million borrowed by a subsidiary of the Group in 2019 at base rate plus 20.25 base points per annum, with an amount of RMB10.0 million remaining as at 31 December 2020, for which certain of the Group's properties with total carrying amount of RMB57.9 million and right of use assets with total carrying amount of RMB7.0 million were pledged.

As of 31 December 2020, the short-term bank loans mainly included:

(i) A loan of RMB6.4 million borrowed by a subsidiary of the Group in 2020 at base rate plus 4.5 base points per annum, with an amount of RMB6.2 million remaining as at 31 December 2020, for which certain of the subsidiary's trade receivables with total carrying amount of RMB6.2 million were pledged.

(ii) A loan of RMB83.5 million borrowed by a subsidiary of the Group in 2020 at an interest rate of 3.10%, with an amount of RMB83.5 million remaining as at 31 December 2020.

CAPITAL EXPENDITURES

Our capital expenditures mainly comprise additions to plant and equipment and intangible assets. In 2020, our capital expenditures were RMB489.7 million.

CONTINGENT LIABILITIES

As of 31 December 2020, we did not have any material contingent liabilities.

FOREIGN EXCHANGE AND FOREIGN EXCHANGE RISK

During the year ended 31 December 2020, the Group was exposed to currency risk primarily through bank deposits denominated in foreign currency, which were primarily Hong Kong dollars. The Group monitors foreign exchange movements and determines exchange when necessary. The Group currently has no foreign exchange hedging policy.

CREDIT RISK

In order to minimise the credit risk, we have policies in place to monitor the exposures to these credit risks on an ongoing basis. Before accepting any new customer requiring credit over a certain credit amount, we carry out research into their creditability and assess their credit quality and define credit limits for that customer. Our individual credit evaluations focus on the customer's historical payment records, and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates.

We normally do not require collateral from customers. Therefore, our exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry in which the customer operates. The significant concentration of credit risk primarily arises when we rely heavily on individual customers. We will, however, perform periodic credit evaluation on our customers and monitor the compliance of credit terms by them. We believe we do not have any significant concentration of credit risk as the trade and bill receivables involve a large number of customers across diverse industries and geographical areas.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

LIQUIDITY RISK

Our policy is to regularly monitor current and expected liquidity requirements, and furthermore we issued small public corporate bonds in 2019 to raise funds for liquidity requirements from the Company's business expansion, to ensure that we maintain sufficient reserves of cash and adequate commitment funds from major financial institutions to meet both short-term and long-term liquidity requirements. Our Directors believe that there is no significant liquidity risk, as we have sufficient monetary capital to fund our operations.

DIVIDEND POLICY

When the Board recommends the declaration of cash dividends to Shareholders at a general meeting, the decision to declare any dividends and the amount of dividends will depend on, among other things:

- our results of operations and cash flows;
- our financial position;
- overall performance;
- our future prospects;
- statutory, regulatory and contractual restrictions on the payment of dividends by us; and
- other factors that the Board deems relevant.

NO MATERIAL ADVERSE CHANGE

The Directors have confirmed that there was no material adverse change in our financial and trading position or prospects as of 31 December 2020.

SUBSEQUENT EVENTS

On 29 January 2021 (after trading hours), the Board has approved commencing the related work of the proposed issue of A Shares and listing on the Science and Technology Innovation Board of the Shanghai Stock Exchange.

Save as disclosed above, no significant subsequent events take place after the Reporting Period to the date of this announcement.

USE OF PROCEEDS FROM THE INITIAL PUBLIC OFFERING

On 6 July 2018, H shares of the Company became listed on the Main Board of the Stock Exchange (stock code: 1763). Based on the offer price of HKD21.60 per H share and upon the partial exercise of the over-allotment option (100 Shares), the net proceeds that the Group received from the Global Offering were approximately HKD1,690.0 million after deduction of the underwriting commissions and other estimated expenses in relation to the Global Offering. As at 31 December 2020, current assets of approximately RMB1,155.4 million were used and approximately RMB536.1 million was used in selective mergers and acquisitions.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

In accordance with the requirements of paragraph 11(8) of Appendix 16 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited, the use of proceeds will be updated to provide the use of proceeds from the initial public offering for 2020 (including the expected timeline of full utilisation of the balance), which is set out below:

RMB in million

Use	Initial allocation of the net proceeds	Revised allocation of the net proceeds	Amount utilised as of 31 December 2018	Amount utilised as of 31 December 2019	Amount utilised as of 31 December 2020	Balance as of 31 December 2020	Expected time of full utilisation of balance
Investment in imaging diagnostic and therapeutic radiopharmaceuticals manufacturing and research and development bases	597.3	460.0	0.0	29.5	200	260	In 2022
Establishment of production and distribution subsidiaries	67.3	0.0	0.0	0.0	0.0	0.0	
Establishment of new production facilities	84.5	50.0	0.0	50.0	50.0	0.0	
Investment in the research and development of various imaging diagnostic and therapeutic radiopharmaceuticals, raw materials of radioactive source products, medical radioisotopes, and UBT products and related raw materials	253.6	118.3	0.0	76.6	101.2	17.1	In 2021
Investments/selective (mergers) acquisitions	286.5	536.1	51.4	529.9	536.1	0	
Working capital and general corporate purposes	143.3	268.1	71.7	232.5	268.1	0	
Total	1,432.5	1,432.5	123.1	918.5	1,155.4	277.1	

Note: The investment in the research and development in the use of proceeds is under preparation due to certain research and development projects to be newly launched. There may be differences between the actual and expected timeline for utilising the proceeds for investment in research and development. The specific timeline of utilisation of the proceeds for the investment in the research and development is subject to the actual timeline of utilisation of the projects. The Company will fullfill the disclosure obligations in accordance with the relevant requirements according to the progress of the projects.

MANAGEMENT DISCUSSION AND ANALYSIS (CONTINUED)

EMPLOYEES AND REMUNERATION POLICY

The Group had a total of 2,912 employees as at 31 December 2020. During the year ended 31 December 2020, our staff costs (including directors' remuneration but excluding contributions to any pension plan) were approximately RMB492.7 million. The remuneration policy of the Group is to motivate and retain excellent staff so as to realise the long-term enterprise goals and objectives of the Group. The employee remuneration policy of the Group is determined after taking into account the overall salary level in the industry, employees' performance and other factors. The management regularly reviews the employee remuneration policy and arrangement of the Group.

We provide our employees with salaries and bonuses, as well as employee benefits, including employee retirement benefit schemes, medical and vocational injury insurance schemes and housing provident fund schemes. Our employees located in China are covered by the mandatory social security schemes defined by PRC local practice and regulations, which are essentially defined contribution schemes.

We provide training to all of our employees to have them equipped with the necessary skills to perform their jobs competently and to give them the opportunities to realise their personal career goals and aspirations. We are also committed to providing individuals with management and leadership training that will improve our capability to achieve our vision, mission and growth objectives. We realise the importance of developing individual career paths that will help employees develop their full potential. Development opportunities are provided as a result of on-the-job training and formal training programs.

HEDGING ACTIVITIES

During the year ended 31 December 2020, the Group had not entered into any hedging transaction in relation to foreign exchange risks or interest risks.

FUTURE PLANS FOR MATERIAL INVESTMENTS OR CAPITAL ASSETS

The Group will actively explore investment opportunities in and outside the PRC to diversify its source of income, which may or may not include any acquisition or disposal of assets and/or business by the Group. Any such plans will comply with the applicable requirements under Listing Rules (where appropriate).

CORPORATE GOVERNANCE REPORT

The Board of Directors (the "**Board**") is pleased to report to the shareholders on the corporate governance of the Company for the year ended 31 December 2020.

CORPORATE GOVERNANCE PRACTICES

The Board of the Company is committed to maintaining high 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 has adopted the principles and code provisions of the Corporate Governance Code (the "**CG Code**") contained in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "**Stock Exchange**") (the "**Listing Rules**") as the basis of the Company's corporate governance practices.

The Company has in place a corporate governance framework and has established a set of policies and procedures based on the CG Code. Such policies and procedures provide the infrastructure for enhancing the Board's ability to implement governance and exercise proper oversight on business conduct and affairs of the Company.

The Board is of the view that throughout the year ended 31 December 2020, the Company has complied with all the code provisions as set out in the CG Code.

The Company has also put in place certain recommended best practices as set out in the CG Code.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Group has adopted a set of code with the standard no less favorable than that of the Model Code as set out in Appendix 10 of the Listing Rules (the "**Customised Code**") as its own code of conduct regarding securities transaction by all Directors, Supervisors and the relevant employees of the Company. Having made specific enquiry with the Directors and Supervisors, all Directors and Supervisors confirmed that they had complied with the required standards as set out in the Customised Code during the Reporting Period. No incident of non-compliance with the Customised Code by such employees was noted by the Company.

BOARD OF DIRECTORS

The Company is headed by an effective Board which oversees the Group's businesses, strategic decisions and performance and takes 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.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Board Composition

The Board currently comprises 11 Directors, consisting of three executive Directors, namely Mr. Meng Yanbin, Mr. Wang Suohui and Mr. Du Jin; four non-executive Directors, namely Mr. Liu Zhonglin, Mr. Chen Shoulei, Ms. Chang Jinyu and Ms. Liu Xiuhong; four independent non-executive Directors, namely Mr. Hui Wan Fai, Mr. Tian Jiahe, Ms. Chen Jingshan and Mr. Lu Chuang.

The biographical information of the Directors are set out in the section headed "Biographical Details of Directors, Supervisors and Senior Management" on pages 50 to 60 of this annual report.

Save as disclosed in the biographies of Directors set out in the section "Biographical Details of Directors, Supervisors and Senior Management" in this annual report, none of the Directors had any personal relationships (including financial, business, family or other material/relevant relationships) with any other Directors, Supervisors or senior management members.

Attendance Records of Directors and Board Committee Members

The attendance records of each Director at the Board and Board committee meetings and the general meeting of the Company held during the year ended 31 December 2020 is set out below:

	Attendance/Number of Meetings							
Directors	Board	Audit and Risk Management Committee	Nomination Committee	Remuneration and Appraisal Committee	Strategy Committee	Legal Affairs Committee	Annual General Meeting	Extraordinary General Meeting
Mr. Meng Yanbin	5/5		1/1		0/0	0/0	1/1	1/1
Mr. Wu Jian[1]	5/5				0/0		1/1	0/1
Mr. Du Jin[2]	5/5						1/1	1/1
Mr. Zhou Liulai[3]	5/5	3/3			0/0		1/1	1/1
Mr. Chen Zongyu[4]	4/5			2/2	0/0	0/0	1/1	0/1
Mr. Chen Shoulei	5/5				0/0		1/1	0/1
Ms. Chang Jinyu	5/5						1/1	0/1
Ms. Liu Xiuhong[5]	0/0						0/0	0/0
Mr. Guo Qingliang[6]	5/5		1/1	2/2		0/0	1/1	0/1
Mr. Meng Yan[7]	5/5	3/3		2/2			1/1	0/1
Mr. Hui Wan Fai	5/5	3/3	1/1			0/0	0/1	0/1
Mr. Tian Jiahe	5/5						0/1	0/1

1 Mr. Wu Jian was resigned as an executive Director on 25 February 2021

2 Mr. Du Jin was appointed as employee representative Director on 26 January 2021

3 Mr. Zhou Liulai was resigned as a non-executive Director on 25 February 2021

CORPORATE GOVERNANCE REPORT (CONTINUED)

4 Mr. Chen Zongyu was resigned as a non-executive Director on 30 November 2020

5 Ms. Liu Xiuhong was appointed as a non-executive Director at the 2020 extraordinary general meeting held on 30 December 2020

6 Mr. Guo Qingliang was resigned as an independent non-executive Director on 25 February 2021

7 Mr. Meng Yan was resigned as an independent non-executive Director on 25 February 2021

Apart from regular Board meetings, the Chairman also held a meeting with the independent non-executive Directors without the presence of other directors on 28 August 2020. All the relevant Directors attended this meeting.

Chairman and Chief Executive Officer

Mr. Meng Yanbin, an executive Director, is the Chairman of the Board while Mr. Wang Suohui, an executive Director and general manager, assumes the role of the Chief Executive Officer of the Company. 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

During the year ended 31 December 2020, the Board at all times met the requirements of the Listing Rules relating to the appointment of at least three independent non-executive Directors, representing one-third of the Board, with one of whom possessing appropriate professional qualifications or accounting or related financial management expertise.

The Company has received written annual confirmation from each 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

Pursuant to the Articles of Association, the Directors shall be elected at the general meetings with a term of office of three years, renewable upon re-election. The Company has implemented a set of effective procedures for appointment of new Directors. Nomination of new Directors shall be first considered by the nomination committee whose recommendations will then be put forward to the Board for consideration. All newly nominated Directors are subject to election and approval at general meetings.

The Company has entered into service contracts with each of the Directors (including non-executive Directors). Such service contracts are for a term commencing from the date of appointment to the expiry of the current session of the Board.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Responsibilities, Accountabilities and Contributions of the Board and Management

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 at the Company's expenses for discharging their duties to the Company.

The Directors shall disclose to the Company details of other offices held by them.

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.

CORPORATE GOVERNANCE REPORT (CONTINUED)

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 a formal and comprehensive induction on the first occasion of his/her 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. Such induction shall be supplemented by visits to the Company's key plant sites and meetings with senior management of the Company.

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 material on relevant topics would be provided to Directors where appropriate.

The Company will organize relevant training courses for all Directors in due course at the Company's expenses.

During the year ended 31 December 2020, the Company organized training sessions conducted by the legal advisers for all Directors. The training sessions covered a wide range of relevant topics including directors' duties and responsibilities, corporate governance and regulatory updates. In addition, relevant reading materials including compliance manual/legal and regulatory updates/seminar handouts have been provided to the Directors for their reference and studying.

CORPORATE GOVERNANCE REPORT (CONTINUED)

The training records of the Directors during the year ended 31 December 2020 are summarized as follows:

Directors	Type of Training Note
Executive Directors	
Mr. Meng Yanbin	A
Mr. Wu Jian (resigned on 25 February 2021)	A
Mr. Du Jin	A
Non-executive Directors	
Mr. Zhou Liulai (resigned on 25 February 2021)	A
Mr. Chen Zongyu (resigned on 30 November 2020)	A
Mr. Chen Shoulei	A
Ms. Chang Jinyu	A
Ms. Liu Xiuhong (appointed on 30 December 2020)	B
Independent Non-executive Directors	
Mr. Guo Qingliang (resigned on 25 February 2021)	A
Mr. Meng Yan (resigned on 25 February 2021)	A
Mr. Hui Wan Fai	A
Mr. Tian Jiahe	A

Note:

Type 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 five committees, namely, the Audit and Risk Management Committee, Nomination Committee, Remuneration and Appraisal Committee, Strategy Committee and Legal Affairs 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 and Risk Management Committee, Nomination Committee, Remuneration and Appraisal Committee, Strategy Committee and Legal Affairs Committee are posted on the Company's website and/or 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 pages 2 to 4.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Audit and Risk Management Committee

During the Reporting Period, the Audit and Risk Management Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. Hui Wan Fai (chairman), Mr. Meng Yan and Mr. Zhou Liulai.

The terms of reference of the Audit and Risk Management Committee are of no less exacting terms than those set out in the CG Code. The main duties of the Audit and Risk Management Committee are to assist the Board in reviewing the financial information and reporting process, risk management and internal control systems, effectiveness of the internal audit function, scope of audit and appointment of external auditors, and arrangements to enable employees of the Company to raise concerns about possible improprieties in financial reporting, internal control or other matters of the Company.

During the year ended 31 December 2020, the Audit and Risk Management Committee held two meetings to review, in respect of the year ended 31 December 2020, 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, appointment of external auditors and relevant scope of works and arrangements for employees to raise concerns about possible improprieties.

The Audit and Risk Management Committee also met the external auditors twice without the presence of the executive Directors.

The attendance of the Audit and Risk Management Committee meetings is set out under "Attendance Records of Directors and Board Committee Members" on page 33.

Nomination Committee

During the Reporting Period, the Nomination Committee consists of one executive Director and two independent non-executive Directors, namely Mr. Meng Yanbin (chairman), Mr. Guo Qingliang and Mr. Hui Wan Fai.

The terms of reference of the Nomination Committee are of no less exacting terms than those set out in the CG Code. The principal duties of the Nomination Committee include reviewing the Board composition, developing and formulating relevant procedures for the nomination and appointment of Directors, making recommendations to the Board on the appointment and succession planning of Directors, and assessing the independence of independent non-executive Directors.

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.

CORPORATE GOVERNANCE REPORT (CONTINUED)

In identifying and selecting suitable candidates for directorships, the Nomination Committee would consider the candidate's relevant criteria as set out in the Director Nomination Policy that are necessary to complement the corporate strategy and achieve Board diversity, where appropriate, before making recommendation to the Board.

During the year ended 31 December 2020, the Nomination Committee met once to review the structure, size and composition of the Board and the independence of the independent non-executive Directors and to consider and recommend to the Board on the appointment of non-executive and independent non-executive Directors. The Nomination Committee considered an appropriate balance of diversity perspectives of the Board is maintained.

The attendance records of the Nomination Committee are set out under "Attendance Records of Directors and Board Committee Members" on page 33.

Board Diversity Policy

The Company has adopted a Board Diversity Policy which sets out the approach to achieve diversity of the Board. 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 achieving diversity at all levels and will consider a number of aspects, including but not limited to gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and term of service. The above factors are all the consideration factors of measurable objectives. In addition, the consideration factors of measurable objectives also include the rich experience in different business areas of a Director with technical, legal, financial, managerial and audit background. Meanwhile, the Company will consider the above factors according to its own business model and specific needs and finally determine a candidate by combination of his or her specialties, value and the contribution that can be made to the Board.

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 has set measurable objectives to implement the Board Diversity Policy and will 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 confirmed that the measurable objectives have been achieved.

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

CORPORATE GOVERNANCE REPORT (CONTINUED)

Director Nomination Policy

The Board has delegated its responsibilities and authority for selection and appointment of Directors to the Nomination Committee of the Company.

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 of the Company 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 for the selection and appointment of new Directors and re-election of Directors at general meetings. During the year ended 31 December 2020, there was additional appointment of non-executive director in the composition of the Board.

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

CORPORATE GOVERNANCE REPORT (CONTINUED)

Remuneration and Appraisal Committee

During the Reporting Period, the Remuneration and Appraisal Committee consists of two independent non-executive Directors and one non-executive Director, namely Mr. Meng Yan (chairman), Mr. Guo Qingliang and Mr. Chen Zongyu (resigned on 30 November 2020).

The terms of reference of the Remuneration and Appraisal Committee are of no less exacting terms than those set out in the CG Code. The primary functions of the Remuneration and Appraisal Committee include reviewing and making recommendations to the Board on the remuneration packages of individual Directors and senior management, the remuneration policy and structure for all Directors and senior management; and establishing transparent procedures for developing such remuneration policy and structure to ensure that no Director or any of his/her associates will participate in deciding his/her own remuneration.

During the year ended 31 December 2020, the Remuneration and Appraisal Committee met once during the year 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 emoluments of Directors for the Reporting Period are set out in note 9 in the Notes to the Audited Financial Statements for the year ended 31 December 2020.

The emoluments of senior management (exclusive of Directors) for the Reporting Period are within the following bands:

Emoluments Band (RMB)	**2020** **Number of Individuals**	2019 Number of Individuals
Less than 500,000	**–**	–
500,000 – 800,000	**–**	–
More than 800,000	**3**	3
Total	**3**	3

The Remuneration Committee also made recommendations to the Board on the terms of service contracts or letters of appointment of the new Directors appointed during the year.

The attendance records of the Remuneration and Appraisal Committee are set out under "Attendance Records of Directors and Board Committee Members" on page 33.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Strategy Committee

During the Reporting Period, the Strategy Committee consists of two executive Directors and three non-executive Directors, namely Mr. Meng Yanbin (chairman), Mr. Wu Jian, Mr. Zhou Liulai, Mr. Chen Zongyu (resigned on 30 November 2020) and Mr. Chen Shoulei.

The principal duties of the Strategy Committee include considering various special development strategies and plans of the Company and to make recommendations to the Board and assisting with other matters specified by laws, administrative rules, regulations and the rules of the securities supervision and administration authority of the place where the shares of the Company are listed and authorized by the Board.

During the year ended 31 December 2020, the Strategy Committee did not convene any meeting.

Legal Affairs Committee

During the Reporting Period, the Legal Affairs Committee consists of one executive Director, one non-executive Director and two independent non-executive Directors, namely Mr. Meng Yanbin (chairman), Mr. Chen Zongyu (resigned on 30 November 2020), Mr. Guo Qingliang and Mr. Hui Wan Fai.

The principal duties of the Legal Affairs Committee include performing the duties and responsibilities of promoting the law-based and law-compliant construction, researching and formulating the plan for implementing the law-based and law-compliant construction and reporting it to the Board for consideration and approval, considering the overall objectives for the law-based administration and law-compliant administration and the basic system of the Company, and to advise thereon, considering the system of the law-based and law-compliant administration, the setup of authorities and their duties and responsibilities and to advise thereon, supervising and evaluate the law-based and law-compliant administration of the Company, and to check the implementation by the Company in the compliance with laws and regulatory requirements and assisting other matters specified by the Articles of Association and authorized by the Board.

During the year ended 31 December 2020, the Legal Affairs Committee did not convene any meeting.

CORPORATE GOVERNANCE REPORT (CONTINUED)

BOARD OF SUPERVISORS

The Board of Supervisors is responsible for supervising the legality of the performance of duties by the Directors and senior management members of the Company, thus to protect the overall benefits of the Company and shareholders.

As at 31 December 2020, the Board of Supervisors comprised 5 Supervisors, namely Mr. Zhang Qingjun, Mr. Liu Zhonglin, Mr. Zhang Guoping, Mr. Li Zhenhua and Mr. Zhang Jian. The biographical information of the Supervisors are set out in the section headed “Biographical Details of Directors, Supervisors and Senior Management” on pages 50 to 60 of this annual report.

Mr. Li Guoxiang and Mr. Zhang Yiming have resigned as Supervisors with effect from 26 March 2020. Mr. Li Zhenhua and Mr. Zhang Jian were appointed as Supervisors on 26 March 2020 for a term of office until the date on which the term of office of the second session of the Board of Supervisors of the Company expires.

Save as disclosed in the biographies of Supervisors set out in the section “Biographical Details of Directors, Supervisors and Senior Management” in this annual report, none of the Supervisors had any personal relationships (including financial, business, family or other material/relevant relationships) with any other Directors, Supervisors or senior management members.

The Board of Supervisors met twice during the year to consider and approve the interim and annual results announcement, the interim and annual report and other resolutions.

The attendance records of the members of the Board of Supervisors are as follows:

Supervisors	**Number of meetings attended**
Mr. Zhang Qingjun	2/2
Mr. Liu Zhonglin (resigned on 25 February 2021)	2/2
Mr. Zhang Guoping	2/2
Mr. Li Guoxiang (resigned on 26 March 2020)	0/2
Mr. Zhang Yiming (resigned on 26 March 2020)	0/2
Mr. Li Zhenhua (appointed on 26 March 2020)	2/2
Mr. Zhang Jian (appointed on 26 March 2020)	2/2

CORPORATE GOVERNANCE REPORT (CONTINUED)

RISK MANAGEMENT AND INTERNAL CONTROLS

The Board acknowledges its responsibility for the risk management and internal control systems and reviewing their effectiveness. Such systems are designed to manage rather than eliminate the risk of failure to achieve business objectives and can only provide reasonable and not absolute assurance against material misstatement or loss. The Board has the overall responsibility for evaluating and determining the nature and extent of the risks it is willing to take in achieving the Company's strategic objectives, and establishing and maintaining appropriate and effective risk management and internal control systems. The Audit and Risk Management Committee assists the Board in leading the management and overseeing their design, implementation and monitoring of the risk management and internal control systems.

The Company has developed and adopted various risk management procedures and guidelines with defined authority for implementation by key business processes and office functions, including project management, sales and leasing, financial reporting, human resources and information technology.

The Company's risk management and internal control systems have been developed with the following principles, features and processes:

The principles of the overall risk management work of CIRC: the strategy-oriented principle, the principle of significance and importance, the principle of participation by all, the internal control principle, the principle of comprehensiveness, the principle of significance and the principle of objectiveness.

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 processes, regulatory compliance and information security.

Self-evaluation has been conducted annually to confirm that control policies are properly complied with by each department.

The management, in coordination with department heads, assessed the likelihood of risk occurrence, provided treatment plans, and monitored the risk management progress, and reported to the Audit and Risk Management Committee and the Board on all findings and the effectiveness of the systems.

The management has confirmed to the Board and the Audit and Risk Management Committee on the effectiveness of the risk management and internal control systems from the Listing Date to 31 December 2020.

CORPORATE GOVERNANCE REPORT (CONTINUED)

The Board, as supported by the Audit and Risk Management Committee as well as the management report and the internal audit findings, reviewed the risk management and internal control systems, including the financial, operational and compliance controls, during the year ended 31 December 2020, and considered that such systems are effective and adequate. The annual review also covered the financial reporting and internal audit function and staff qualifications, experiences and relevant resources.

The Company has developed its disclosure policy which provides a general guide to the Company's Directors, Supervisors, senior management and relevant employees in handling confidential information, monitoring information disclosure and responding to enquiries. Control procedures have been implemented to ensure that unauthorized access and use of inside information are strictly prohibited.

The Company has an internal audit function to carry out independent reviews of the adequacy and effectiveness of its risk management and internal control systems. The risk management and internal controls are self-assessed by the management and reviewed by the Board on an on-going basis.

DIRECTORS' RESPONSIBILITY IN RESPECT OF THE FINANCIAL STATEMENTS

The Directors acknowledge their responsibility for preparing the financial statements of the Company for the year ended 31 December 2020.

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 auditors of the Company about their reporting responsibilities on the financial statements is set out in the Independent Auditor's Report on pages 98 to 102.

AUDITORS' REMUNERATION

The remuneration payable to the Company's external auditors in respect of audit services and non-audit services for the year ended 31 December 2020 amounted to RMB2.2 million, and RMB0.5 million is outstanding. An analysis of the remuneration paid to the external auditors of the Company, KPMG, in respect of audit services and non-audit services for the year ended 31 December 2020 is set out below:

Service Category	**Fees Paid RMB**
Audit Services	1,700,000
Non-audit Services	–
Total	0

CORPORATE GOVERNANCE REPORT (CONTINUED)

JOINT COMPANY SECRETARIES

Mr. Gui Youquan and Ms. Kam Mei Ha Wendy have been appointed as the Company's joint company secretaries. Ms. Kam Mei Ha Wendy is an executive director of the Corporate Services Division of Tricor Services Limited, a global professional services provider specializing in integrated business, corporate and investor services. She is a fellow member of The Hong Kong Institute of Chartered Secretaries and The Chartered Governance Institute (formerly "The Institute of Chartered Secretaries and Administrators").

All Directors have access to the advice and services of the joint company secretaries on corporate governance and board practices and matters. Mr. Gui Youquan, the chief accountant and joint company secretary of the Company, has been designated as the primary contact person at the Company which would work and communicate with Ms. Kam Mei Ha Wendy on the Company's corporate governance and secretarial and administrative matters.

For the year ended 31 December 2020, Mr. Gui Youquan and Ms. Kam Mei Ha Wendy have undertaken not less than 15 hours of relevant professional training respectively in compliance with Rule 3.29 of the Listing Rules.

GENERAL MEETING

In 2020, the Company convened two general meetings.

On 30 June 2020, the 2020 annual general meeting was convened on-site and Shareholders holding an aggregate of 286,678,232 Shares, representing 89.62% of the Company's total issued shares, attended the meeting.

On 30 December 2020, the 2020 extraordinary general meeting of the Company was held on-site and Shareholders holding an aggregate of 268,925,932 Shares, representing 84.07% of the Company's total issued shares, attended the meeting.

The convening, notifying, holding and voting procedures of the meetings are in compliance with the relevant provisions of the Company Law and the Articles of Association.

SHAREHOLDERS' RIGHTS

The Company engages with shareholders through various communication channels.

To safeguard Shareholders' 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.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Convening a General Meeting

According to the Articles of Association, to convene an extraordinary general meeting or a shareholders' class meeting, the shareholders shall follow the following procedures:

(I) The shareholders individually or jointly holding more than 10% of the voting shares at the meeting sought to be held (hereinafter referred to as the "**Proposing Shareholders**") may sign one or several written requests of identical form of content requesting the Board of Directors to convene an extraordinary general meeting or a class meeting and stating the subject of the meeting. The abovementioned shareholding shall be calculated as of the day on which the written request is made. The Board of Directors shall, in accordance with laws, administrative regulations and the Articles, provide a written feedback on whether to agree or not to convene such extraordinary general meeting within ten (10) days upon receipt of such proposal.

(II) In the event that the Board of Directors agrees to convene the extraordinary general meeting, a notice on the convocation of such meeting shall be given within five (5) days after the resolution being made by the Board of Directors. Changes made to the original proposal in the notice shall be approved by relevant shareholders.

(III) In the event that the Board of Directors refuses to convene the extraordinary general meeting, or gives no feedback within ten (10) days after receiving the proposal, the Proposing Shareholders shall have the right to propose, in written form, the convocation of an extraordinary general meeting to the Board of Supervisors.

(IV) In the event that the Board of Supervisors agrees to convene the extraordinary general meeting, a notice on the convocation of such meeting shall be given within five (5) days after receiving the proposal. Changes made to the original proposal in the notice shall be approved by relevant shareholders.

(V) If the Board of Supervisors fails to give a notice on the convocation of extraordinary general meeting within time limit, it shall be deemed having no intention to convene and preside over the meeting. In this case, the shareholders individually or jointly holding more than 10% of the Company's shares for more than ninety consecutive days shall have the right to convene and preside over the meeting by themselves. The convocational procedure shall, to the extent possible, be identical to procedures according to which meeting is to be convened by the Board of Directors.

All reasonable expenses incurred for such meeting convened by the shareholders as a result of the failure of the Board of Directors and the Board of Supervisors to convene a meeting at the above requests shall be borne by the Company and deducted from the amount owned by the Company to the delinquent directors and supervisors.

CORPORATE GOVERNANCE REPORT (CONTINUED)

Putting Forward Proposals at General Meetings

According to the Articles of Association, to convene the shareholders' general meeting, the shareholders individually or jointly holding more than 3% of the total voting shares shall be entitled to propose new resolutions in writing to the Company. The Company shall incorporate the matters falling within the scope of duties of the shareholders' general meeting into the agenda of such meeting for the consideration.

The contents of the aforesaid proposal shall be in conformity with relevant laws, administrative regulations and the Articles, within the scope of duties of the shareholders' general meeting and with a clear agenda and specific resolutions.

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:	Room 418, South 4th Floor, Building 1, No. 66 Changwa Middle Street, Haidian District, Beijing, China (For the attention of the Joint Company Secretary)
Fax:	+86 10 68512374
Email:	guiyouquan@circ.com.cn

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.

INVESTOR RELATIONS

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 annual general meeting, directors (or their delegates as appropriate) are available to meet shareholders and answer their enquiries.

During the year under review, the Company has amended its Articles of Association. Details of the amendments are set out in the circular dated 2 June 2020 to the shareholders. An up to date version of the Company's Articles of Association is also available on the Company's website and the Stock Exchange's website.

CORPORATE GOVERNANCE REPORT (CONTINUED)

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. The Company does not have any pre-determined dividend payout ratio. Depending on the financial conditions of the Company and the Group and the conditions and factors as set out in the Dividend Policy, dividends may be proposed and/or declared by the Board during a financial year and any final dividend for a financial year will be subject to the Shareholders' approval. Such details have been disclosed in the section "Management Discussion and Analysis - Dividend Policy" of the annual report of the Company.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

EXECUTIVE DIRECTORS

Mr. Meng Yanbin (孟琰彬), aged 52, is currently an executive Director, chairman of the Board, party committee secretary and legal representative of the Company. Before joining the Company, from August 1990 to November 2011, Mr. Meng worked as a technical cadre, assistant director and deputy director of the institution office, director and assistant to the president of the foreign trade office, and manager of the foreign trade company and vice president at Faculty 5 of Research Institute of Physical and Chemical Engineering of Nuclear Industry ("**IPCE**"). From November 2011 to January 2017, he served as the general manager and deputy secretary of the party committee of China Nuclear (Tianjin) Machinery Co., Ltd. Mr. Meng has served as secretary of the party committee of the Company since January 2017, has served as executive Director, chairman of the Board and legal representative of the Company since February 2017, and has served as chairman of the Board and secretary of the party committee of China Baoyuan Investment Co., Ltd. since January 2020.

Mr. Meng received a Bachelor's Degree in Mechanical Design and Manufacturing at the Mechanical Engineering Department II of the Northeastern University (previously known as Northeastern Institute of Technology) in August 1990, and a master's degree in business administration from Tianjin University in July 2002. Mr. Meng qualified as an assistant engineer in August 1991 and a senior engineer in May 2001. He was awarded the Tianjin Patent Excellence Award (Mobile Radioactive Wastewater Treatment Equipment) and the IPCE Science and Technology Award (First Class) (Mobile Radioactive Wastewater Treatment Equipment) in July 2009 and September 2009, respectively. Mr. Meng was awarded the Special Allowance Expertise Award from the State Council in May 2011 and was selected to participate in the New Entrepreneurs Training Project in Tianjin in January 2014. He was granted Labor Medals by the Tianjin Municipal Defense Industry and Tianjin Government in March 2015 and April 2015, respectively. Mr. Meng has served as a tutor for the student innovative entrepreneurial practice at the Mechanical Engineering Department of Tsinghua University since September 2015. Since August 2016, 2018 and July 2019, he has been a council member of Tianjin Institute of Industrial Engineering (天津市工業工程學會理事), a council member of Chinese Nuclear Society and a vice president of the Precision Radiotherapy and Brachytherapy Branch of Chinese Nuclear Society (中國核學會精準放療與近距離治療分會), respectively.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Mr. Wang Suohui (王鎖會), aged 46, is the executive director, general manager and deputy secretary of the party committee of the Company. Before joining the Company, from July 1997 to March 1999, Mr. Wang served as assistant engineer of the Fourth Research and Design Engineering Corporation of CNNC. From March 1999 to June 2002, he served as supervising engineer of CNNC Star Construction Project Management Co, Ltd. From June 2002 to December 2007, he successively served as a designer, director of the equipment room of the medical office and general manager assistant of the equipment supervision department of the Fourth Research and Design Engineering Corporation of CNNC. From October 2006 to March 2008, he worked at the construction division of the Comprehensive Planning Department of CNNC (中核集團公司綜合計劃部建設處) (on secondment). From March 2008 to March 2011, he served as the principal staff member of construction division of the Comprehensive Planning Department of CNNC and from March 2011 to January 2017, he served as a deputy chief of the ability construction session and chief of business planning session of division of plan and development of CNNC. Mr. Wang served as deputy general manager of the Company from January 2017 to October 2020. He has been serving as the deputy general manager of China Isotope & Radiation Corporation (presiding over the work) since October 2020. Mr. Wang was the chairman of the board of directors of CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. (中核同興(北京)核技術有限公司) from May 18, 2017 to January 2021. From May 2017 to April 2019, he also served as the chairman of the board of directors of BINE High-Tech Co., Ltd.(中核比尼(北京)核技術有限公司). From January 2018 to April 2019, he served as a director of CNNC (Taizhou) Irradiation Technology Co. Ltd. (中核(泰州)輻照科技有限公司). Since May 2018, he has been serving as the director and vice chairman of CNNC Nuclide Medical Investment Co., Ltd. (中核核素醫療投資有限公司). In March 2019, he has also served as the director and chairman of CNNC Accuray (Tianjin) Medical Technology Co., Ltd. (中核安科銳(天津)醫療科技有限責任公司). Mr. Wang has served as the general manager and executive director of the Company since 25 February 2021.

Mr. Wang obtained a Bachelor's Degree in Chemical Equipment and Mechanisms from College of Mechanical Engineering of Hebei University of Science and Technology in June 1997. He received a Master's Degree in Nuclear Energy and Nuclear Technology Engineering from Tsinghua University in December 2009. Mr. Wang is a professorship senior engineer. Since May 2019, he has been serving as the deputy chairman of the Radioactive Medicine and Radiation Protection Branch (放射醫學與輻射防護分會) (the Radioactive Medicine and Radiation Protection Alliance (放射醫學與輻射防護聯盟)) of China Isotope and Radiation Industry Association.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Mr. Du Jin (杜進), aged 55, is currently an executive Director and chief engineer of the Company. Before joining the Company, from August 1986 to May 1997, Mr. Du served as engineer and deputy director of Section 51 of the Isotope Department of CIAE. From May 1995 to August 1995, he studied at MAP Medical Technologies, Finland. From March 1996 to September 1996, as a visiting scholar, he worked at the Radioisotope Department of Japan Atomic Energy Research Institute. From June 1997 to January 2002, Mr. Du worked as senior researcher at MAP Medical Technologies Oy, Finland. From February 2002 to June 2006, he served as researcher at the Isotope Department of CIAE, and as a professor of the Joint Radiopharmaceutical Laboratory of Peking University Health Science Center. Mr. Du served as researcher, deputy chief engineer and manager of the technical development division of the Company and its predecessor, China Isotope, from June 2006 to May 2016. He has served as the chief engineer of the Company since May 2016, and served as executive director of the Company since February 2017. From January 2017 to June 2018, Mr. Du served as a director of Shanghai GMS Pharmaceutical, and a director of HTA from April 2016 to April 2019.

Mr. Du received a Bachelor's Degree in Organic Chemistry Engineering from Wuhan Institute of Technology in July 1986 and a master's degree in inorganic and analytical chemistry from University of Jyvaskyla in Finland in December 1998. He received a doctorate in inorganic and analytical chemistry from University of Jyvaskyla in Finland in August 2001. Mr. Du was awarded second prize in the National Defense Science and Technology Award in November 2002. In 2016, he was awarded the Special Allowance Expertise from the State Council. Mr. Du has been the deputy director of the Isotope Specialty Committee of the China Isotopes and Radiation Industry Association since June 2012 and an adjunct researcher with the Isotope Institute of China Nuclear Energy Science Academy since January 2013. He has been a member of the Eighth Committee and a standing committee member of the Ninth Committee of the Nuclear Chemistry and Radiochemistry Chapter of the Chinese Nuclear Society from March 2013 to August 2018 and since September 2018 respectively. Mr. Du has been a member of the Editorial Board of Nuclear Chemistry and Radiochemistry since November 2013 and has served as deputy editor-in-chief of the Fifth and Sixth Editorial Board of Isotope since October 2014. Since October 2014, he has also served as deputy director of the Sixth Council of the Isotope Branch of China Nuclear Society. From May 2015 to November 2017, Mr. Du served as the deputy leader of the radiopharmaceutical group of the 10th Committee of the Chinese Society Nuclear Medicine. Since December 2015, he has been a standing member of the First and Second Cancer Nuclear Medicine Professional Committee of Chinese Anti-Cancer Association. He has also been a member of the National Committee for Nuclear Energy Standardization (SAC/TC58) and vice committee director of the Radioisotope Technical Committee (SAC/TC58/SC4) since July 2015. From December 2016 to January 2021, he has been a member of the Fourth Committee on Science and Technology of CNNC and a deputy director of the Specialized Committee of Nuclear Technology Industrialization. Since January 2021, he has served as a committee member of the Fifth Committee on Science and Technology of CNNC. Since September 2018, he has been a vice president of the first Council of the Radiopharmaceuticals Branch of China Nuclear Society. Since January 2019, he has been a deputy leader of the nuclear professional group of the nuclear technology application of the China Commission of Science, Technology and Industry for National Defense (中國國防科技工業科學技術委員會核領域核技術應用專業組). Since April 2019, he has been a member of the tenth Editorial Board of the Chinese Journal of Nuclear Medicine and Molecular Imaging.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

NON-EXECUTIVE DIRECTORS

Mr. Liu Zhonglin (劉忠林), aged 52, is currently a non-executive director and vice chairman of the Company. Before joining the Company, Mr. Liu served as accountant, deputy chief, chief of the finance division, director of finance and auditing division, deputy chief accountant and chief accountant of the Sixth Design and Research Institute of China Weapon Industry from July 1990 to December 2010. From December 2010 to July 2012, he served as the chief accountant of China Weapon Industry Northern Engineering Design Institute Co., Ltd. (中國兵器工業北方工程設計研究院有限公司). From July 2012 to July 2015, he served as the chief accountant of Shandong Special Industrial Group. From July 2015 to date, he served as chief accountant of CIAE. Mr. Liu has been a Supervisor of the Company since February 2017.

Mr. Liu received a Bachelor's Degree in financial accounting from Shenyang Institute of Technology in July 1990. Mr. Liu is a senior accountant at researcher level, and a PRC certified public accountant. Mr. Liu was awarded the title of "New Long March Pioneer in North Design Research Institute" (北方設計研究院新長征突擊手) in April 1993. He participated in the Knowledge Contest of Accounting Rules in Hebei Province on behalf of the State Commission of Science and Technology for National Defense Industry (國防科工委) and obtained third prize in June 1995, and was awarded the title of "Outstanding Communist Party Member in North Design Research Institute" in 1999 and 2000.

Mr. Chen Shoulei (陳首雷), aged 55, is currently a non-executive director and vice chairman of the Company. Before joining the Company, from October 1986 to December 2007, Mr. Chen served as assistant accountant, accountant of the finance division, vice section chief of the finance section, acting deputy chief, deputy chief, chief of the finance division, and director of the financial assets division in the Fifth Institute of the Nuclear Industry. From January 2008 to January 2013, Mr. Chen served worked as deputy director and senior accountant in the financial division of China Nuclear Power Engineering. From January 2013 to March 2016, Mr. Chen served worked as director of the supervision and audit division of China Nuclear Power Engineering. From February 2017 to March 2019, Mr. Chen was a shareholder representative supervisor of the Company. Since March 2016, Mr. Chen has been the chief accountant of Nuclear Power Institute of China.

Mr. Chen received a Bachelor's Degree in Auditing (Accounting) from Wuhan University in July 1986. Mr. Chen was qualified as an assistant accountant in October 1989 and was certified as an accountant in November 1993 and a senior accountant on March 2000.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Ms. Chang Jinyu (常晉峪), aged 49, is a non-executive Director of the Company. She served as an engineer of the Structural Design Department of Hangzhou Dongfang Communication Metalworking Factory (杭州東方通信金工分廠) from July 1994 to January 1997. She acted as the deputy general manager of the Project Department of Shanghai Galaxy Digital Investment Co., Ltd. (上海星河數碼投資有限公司) from June 2000 to April 2005. She was the senior manager of the Investment Planning Department of SIIC (上實集團) from April 2005 to April 2006, the assistant supervisor and supervisor of the Business Administration Department of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from April 2006 to April 2010, the supervisor of the Investment Department of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from April 2010 to March 2013, and the assistant general manager of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司) from March 2013 to March 2014. Since March 2014, she has been the executive deputy general manager (part-time) of Shanghai Road and Bridge Development Co., Ltd. (上海路橋發展有限公司). Since August 2017, she has been the deputy general manager (part-time) of SIIC Management (Shanghai) Limited (上實管理(上海)有限公司). Since September 2018, she has been the deputy general manager of Shanghai Galaxy Digital Investment Co., Ltd. (上海星河數碼投資有限公司) as well as the chairperson of SIIC Hangtai Galaxy Energy Co., Ltd. (上實航太星河能源有限公司).

In July 1994, Ms. Chang graduated from Shanghai Jiao Tong University majoring in mechanical design and process and obtained a bachelor's degree in Engineering. In June 2000, she graduated from Shanghai University of Finance and Economics majoring in money and banking and obtained a master's degree in Finance.

Ms. Liu Xiuhong (劉修紅), aged 53, is currently a non-executive director of the Company. From 1997 to 1999, she served as deputy chief of the infrastructure finance section of the finance bureau of the headquarters of CNNC. From 1999 to December 2004, she served as chief of the financial management section and deputy director of the finance division of China Nuclear Engineering and Construction Corporation (CNEC). From January 2005 to September 2014, she served as chief financial officer of China Nuclear Energy Technology Corporation Limited. From October 2014 to July 2018, she served as director of the audit division of CNEC. From August 2018 to November 2019, she served as secretary and deputy director of the system engineering division of CNNC. Since November 2019, she has been serving as full-time director of CNNC, and director of China National Nuclear Power Co., Ltd. (Shanghai Stock Exchange: 601985) and CNNC SUFA Technology Industry Co., Ltd. (Shenzhen Stock Exchange: 000777).

Ms. Liu graduated from the Department of Investment Economics of the Dongbei University of Finance and Economics and obtained a bachelor's degree in infrastructure finance and credit in July 1989. In June 2011, she graduated from the School of Economics and Management of the Tsinghua University with a master's degree in business administration for senior management.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

INDEPENDENT NON-EXECUTIVE DIRECTORS

Mr. Hui Wan Fai (許雲輝), aged 44, is currently an independent non-executive Director of the Company. Before joining the Company, Mr. Hui acted as a auditor in PricewaterhouseCoopers from 1998 to 2000; a global management trainee in Hutchison Whampoa Limited from 2000 to 2001; bond market manager of ICEA FINANCE Capital Limited (工商東亞資本有限公司) from 2001 to 2003; head of specific investment division (China) of Mellon HBV Alternative Strategies LLC from 2005 to 2006. From August 2006 to July 2010, Mr. Hui served as a managing director of Pacific Alliance Group, and from June 2010 to March 2012, he served as a managing director of The Blackstone Group (HK) Limited. Mr. Hui has been an independent non-executive director of the Greentown China Holdings Limited (Hong Kong Stock Exchange Stock Code: 3900) since April 2012. Mr. Hui has been the managing partner of PAG Consulting Ltd since March 2012. Mr. Hui obtained a Bachelor's Degree in Business Administration from The University of Hong Kong in 1998 and a Master's Degree in International and Public Affairs from The University of Hong Kong in 2002. He also obtained a Master's Degree in Business Administration from Institut Européen d'Administration des Affaires (INSEAD) in 2004.

Mr. Hui is a member of the Association of Chartered Certified Accountants, United Kingdom and holds the qualifications of the Chartered Financial Analyst from the Association for Investment Management and Research as well as the Associate of HKICS from the Hong Kong Institute of Company Secretaries. Mr. Hui is a permanent resident of Hong Kong and is now ordinarily resident in Hong Kong.

Mr. Tian Jiahe (田嘉禾), aged 70, is an independent non-executive Director of the Company. Before joining the Company, he was a resident physician of the Radiology Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from January 1976 to October 1976, a physician-in-charge and associate chief physician of the Isotopes Office of the Radiology Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from October 1976 to June 1987, a chief physician and professor of the Nuclear Medicine Department of The General Hospital of the People's Liberation Army (解放軍總醫院) from June 1987 to November 2000, and a chief physician of the Medical Imaging Centre of The General Hospital of the People's Liberation Army (解放軍總醫院) from November 2000 to December 2017. Since December 2017, he has been a deputy chief of the Professor Board of the Nuclear Medicine Department, member of the Party Committee and head of the Medical Imaging Centre of The General Hospital of the People's Liberation Army (解放軍總醫院).

In December 1975, Mr. Tian Jiahe graduated from School of Radiology of the Medical School of Jilin University (吉林醫科大學) and obtained a bachelor's degree in Medicine. In December 1980, he graduated from The University of New South Wales, Australia (澳大利亞新南威爾士大學) with a master's degree in Medicine.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Ms. Chen Jingshan (陳景善), aged 51, is an independent non-executive Director of the Company. Before joining the Company, Ms. Chen was a staff in Beijing Foreign Trade Import and Export Corporation from October 1992 to December 1995; from January 1996 to February 1998, she was a legal assistant in Beijing Jingrong Law Company (北京市京融律師事務所); from April 2005 to November 2007, she acted as tutor in Law School of Waseda University in Japan; from October 2007 to August 2014, she acted as an assistant professor in China University of Political Science and Law; since September 2014, she has been acting as a professor and PhD Tutor in China University of Political Science and Law.

Ms. Chen obtained a Bachelor's Degree in Law Profession from Law School of China University of Political Science and Law in July 1992, a Master's Degree in Law Profession in Law School of Waseda University in Japan in April 2002, and a PhD in Law Profession in Law School of Waseda University in Japan in November 2007.

Mr. Lu Chuang (盧闖), aged 40, is an independent non-executive Director of the Company. Before joining the Company, Mr. Lu was a teacher in the School of Accounting of Central University of Finance and Economics from July 2007 to March 2008; from March 2008 to May 2010, he was a teacher in the School of Accounting and a laboratory director in the School of Accounting of Central University of Finance and Economics; from May 2010 to November 2015, he acted as the deputy director of Finance Department of Central University of Finance and Economics; since November 2015, he has been acting as a professor of the School of Accounting, Central University of Finance and Economics.

In June 2001, Mr. Lu obtained a Bachelor's Degree in Specialization of Certified Public Accountants from the School of Accounting of Beijing Technology and Business University; in June 2004, he obtained a Master's Degree in Accounting from the Department of Accounting of Renmin University of China; in June 2007, he obtained a PhD in Financial Management from the Department of Finance of Renmin University of China.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

SUPERVISORS

Chairman of the Board of Supervisors

Mr. Zhang Qingjun (張慶軍), aged 50, is a Supervisor and chairman of the Board of Supervisors of the Company. Before joining the Company, from August 1991 to October 2010, Mr. Zhang served as an accountant, assistant director, deputy director, and director in the finance division of the Fourth Research and Design Engineering Corporation of CNNC. From August 2005 to February 2007, he worked at the audit division of CNNC on secondment. From October 2010 to June 2012, he worked as deputy director of the finance division of CNNC. From May 2011 to October 2012, Mr. Zhang served as the Supervisor of the Company. From June 2012 to March 2015, he worked as chief accountant of Sichuan Environmental Protection Engineering (821 Plant), and he has served as deputy director of the finance division of CNNC since March 2015 to date. Mr. Zhang has also served as a Supervisor and chairman of the Board of Supervisors since February 2017.

Mr. Zhang graduated from the Shijiazhuang Management Officer Academy in June 1998. He graduated from the Renmin University of China in July 2009. Mr. Zhang is a senior accountant, certified public accountant and certified asset appraiser. He has also served as a supervisor of Hualong Pressurized Water Reactor Technology Corporation, Ltd. since January 2016 and the chairman of the board of supervisors of Zhonghe New Energy Company Limited (中核新能源有限公司) from September 2017 to September 2019, and has also been serving as a director of CNNC Finance Company Limited since December 2020 to date. Mr. Zhang won second prize in the 2013 National Defense Science and Technology Industry Enterprise Management Innovation Achievement Award (中國國防科技工業企業管理創新成果二等獎) and second prize in the CNNC Management Innovation Achievement Award (中核集團管理創新成果二等獎).

Supervisors

Mr. Zhang Guoping (張國平), aged 49, is a Supervisor of the Company. Before joining the Company, Mr. Zhang graduated from Zhejiang University in July 1992 with a bachelor's degree in thermal energy and power engineering. Since then until April 2001, he worked with the Second Institution of Nuclear Power Institute of China (中國核動力研究設計院二所), specialising in the experiment and research of power equipment. From May 2001 to September 2017, Mr. Zhang worked at the scientific technology office of the Second Institution of Nuclear Power Institute of China (中國核動力研究設計院二所), specialising in the management of scientific research projects, and as director of the scientific technology office from June 2009 to September 2017. From October 2017 to November 2020, Mr. Zhang has been the deputy director of the asset operation and management office of Nuclear Power Institute of China. He has been the deputy director of Business Development Division of Nuclear Power Institute of China since November 2020.

Mr. Zhao Nanfei (趙南飛), aged 41, is currently a Supervisor of the Company. Before joining the Company, Mr. Zhao worked in Beijing Chaoneng Yuheng Group Co., Ltd. from 2001 to 2007; from 2007 to 2008, he worked in HTA Co., Ltd.; from 2009 to 2018, he acted as chief officer of Project Section of Industrial Development Division in China Institute of Atomic Energy; since 2018, he has worked as deputy chief of Industrial Development Division in China Institute of Atomic Energy. Mr. Zhao obtained a bachelor's degree in Materials Physics Profession from Beijing University of Science and Technology in 2001. Mr. Zhao is a senior engineer.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Mr. Li Zhenhua (李振華), aged 35, is an employee representative Supervisor of the Company and being appointed as an employee representative Supervisor of the Company on 26 January 2021. Before joining the Company, he worked as an assistant engineer in the second medical department of HTA Co., Ltd. from August 2007 to October 2011; an engineer in the ionization chamber of Beijing Radiation Safety Technology Center (北京市輻照安全技術中心) from October 2011 to December 2012; a supervisor and senior engineer in the chemical environmental protection department of Yangjiang Nuclear Power Co., Ltd. from December 2012 to July 2018; a supervisor and senior engineer in the Company's technology development department from July 2018 to December 2020, and a senior supervisor and senior engineer in the Company's Technology and Information Department since December 2020. Mr. Li graduated from Sichuan University majoring in chemistry and obtained a bachelor's degree in science in July 2007. Mr. Li is also a senior engineer.

Mr. Zhang Jian (張建), aged 36, is an employee representative Supervisor of the Company and being appointed as an employee representative Supervisor of the Company on 26 January 2021. Before joining the Company, he was mainly responsible for financial management of overseas projects at China Petroleum Pipeline Engineering Co., Ltd. from July 2007 to December 2017. He served as the finance supervisor in Beijing Mineral Resources Development Co., Ltd. (北京城市礦產資源開發有限公司) from December 2017 to June 2018, and has been the supervisor of the Company's financial management department since June 2018. Mr. Zhang graduated from Renmin University of China majoring in accounting and obtained a bachelor's degree in management in July 2007. Mr. Zhang is also an accountant.

SENIOR MANAGEMENT

Mr. Wu Jian (武健) resigned as general manager of the Company on 30 November 2020 due to adjustment of his work arrangements.

Mr. Wu Laishui (吳來水) resigned as chief accountant, chief legal officer and joint company secretary of the Company on 30 November 2020 due to adjustment of his work arrangements.

Mr. Wang Suohui (王鎖會), aged 46, was appointed as the executive director and general manager of the Company on 25 February 2021. Please refer to the section above headed "Biographical Detail of Directors, Supervisors and Senior Management – Executive Directors" for details of his biography.

Mr. Du Jin (杜進), aged 55, is an executive Director and chief engineer of the Company. Please refer to the section above headed "Biographical Details of Directors, Supervisors and Senior Management – Executive Directors" for details of his biography.

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Mr. Fan Guomin (范國民), aged 50, is a deputy general manager of the Company. Before joining the Company, Mr. Fan served as the team leader of the fire source team in Section 52 at the Isotope Department of CIAE from July 1995 to July 2001. He served as director of the sales division in the Isotope Department of CIAE from July 2001 to March 2003, and as the director of the marketing division, assistant president, vice president and senior engineer of Isotope Division of HTA from March 2003 to June 2012. He also served as the deputy general manager and senior engineer of Headway from June 2012 to September 2012. From September 2012 to May 2016, he served as the general manager of Headway. Mr. Fan has served as the deputy general manager of the Company since May 2016. Mr. Fan served as the chairman of the board of directors of HTA from June 2017 to April 2019, and the chairman of the board of directors of CNGT from July 2017 to April 2019. From March 2017 to March 2018, he served as the chairman of the board of directors of Headway. From March 2016 to April 2020, he has been the director and deputy chairman of Beijing Clae-riar Rediosotope Technique Co., Ltd. Since January 2017, he has been the deputy chairman of Shanghai GMS Pharmaceutical. Since April 2017, he has been the director and deputy chairman of Shenzhen CICAM Manufacturing Co., Ltd.

Mr. Fan received a Bachelor's Degree in Science (Radiochemistry) from College of Chemistry of Sichuan University (formerly known as Sichuan United University) in July 1995. Mr. Fan is a qualified senior engineer. Since May 2018, he has been the vice president of Beijing Radiation Safety Research Association (北京市輻射安全研究會). Since November 2020, he has been a council member of Nuclear Medicine of Chinese Nuclear Society.

Mr. Gui Youquan (桂友泉), aged 46, is the chief accountant, chief legal officer and joint company secretary of the Company. Before joining the Company, Mr. Gui worked in the audit section of Nuclear Power Qinshan Joint Venture Company Limited from July 1997 to May 2001. From May 2001 to August 2001, he worked in the finance division of Ningbo Bird Co., Ltd. From June 2004 to January 2008, he served as project manager and supervisor of the general system section of the finance division of China Netcom Group Corporation Limited. From January 2008 to October 2008, he served as senior supervisor (deputy-section-head level) and assistant manager of the general system section of the finance division of China Netcom Group Corporation Limited. From October 2008 to June 2009, he served as assistant manager (deputy-section-head level) of the general budget section of the finance division of China United Network Communications Corporation Limited. From June 2009 to July 2014, he served as deputy chief and chief of the finance section of Hainan Nuclear Power Co., Ltd. From July 2014 to February 2017, he served as chief accountant of Jiangsu Nuclear Power Corporation. From February 2017 to November 2020, he served as chief accountant of CNNC Medical Industry Management Company. Mr. Gui has served as the Company's chief accountant, chief legal officer and joint company secretary since November 2020.

Mr. Gui obtained a master's degree in accounting from the Renmin University of China in June 2004. Mr. Gui is a senior accountant, CPA, and ACCA. Since November 2020, he has been a member of the investment decision committee of Beijing Tongfu Innovation Industrial Investment Fund Partnership Enterprise (Limited Partnership).

BIOGRAPHICAL DETAILS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT (CONTINUED)

Mr. Li Chao (李超), aged 38, is the deputy general manager of the Company. Before joining the Company, Mr. Li was engaged in postdoctoral research in the Department of Chemistry of the University of Cambridge in the UK from October 2008 to September 2009. From September 2009 to March 2011, he was engaged in postdoctoral research in the Department of Genetics of the Harvard University in the US. From March 2011 to September 2013, he worked as researcher at Harvard University's WYSS Institute of Bioinspired Engineering. From September 2013 to July 2016, he served as deputy general manager of Eastern Air Logistics Co., Ltd. From July 2016 to November 2020, he served as deputy general manager of CNNC Investment Co., Ltd. During this period from July 2017 to August 2020, he was appointed as deputy director of the management committee of Ganjiang New District in Jiangxi Province. Mr. Li has been the deputy general manager of the Company since November 2020.

Mr. Li obtained a bachelor's degree in computer science from the University of Birmingham in the UK in July 2005, and a doctorate degree in chemistry from the University of Cambridge in October 2008. Mr. Li has been the director and chairman of CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. since December 2020.

JOINT COMPANY SECRETARIES

Mr. Wu Laishui (吳來水) resigned as chief accountant, chief legal officer and joint company secretary of the Company on 30 November 2020 due to adjustment of his work arrangements.

Mr. Gui Youquan (桂友泉), aged 46, was appointed as the chief accountant and joint company secretary of the Company on 30 November 2020. Please refer to the section above headed "Biographical Details of Directors, Supervisors and Senior Management – Executive Directors" for details of his biography.

Ms. Kam Mei Ha Wendy (甘美霞), aged 52, is a joint company secretary of the Company. Ms. Kam is an executive director of Corporate Services Division of Tricor Services Limited and a fellow member of both The Chartered Governance Institute (formerly "The Institute of Chartered Secretaries and Administrators") and The Hong Kong Institute of Chartered Secretaries. Ms. Kam has over 29 years of experience in corporate secretarial area.

DIRECTORS' REPORT

1. PRINCIPAL BUSINESS

The Group is primarily engaged in the research, development, manufacturing and sale of diagnostic and therapeutic radiopharmaceuticals and radioactive source products for medical and industrial applications. The Group provides irradiation service for sterilisation purpose and EPC service for the design, manufacturing and installation of gamma ray irradiation facilities and independent clinical laboratory services to hospitals and other medical institutions.

2. BUSINESS REVIEW

The business review of the Group is set out in the section headed "Management Discussion and Analysis" in this annual report.

3. SUBSEQUENT EVENTS

The subsequent events of the Group is set out in the section headed "Management Discussion and Analysis" in this annual report.

4. FINANCIAL PERFORMANCE

The profits for the year ended 31 December 2020 of the Company and the financial position of the Company then ended are set out in the "Consolidated Statement of Profit or Loss and Other Comprehensive Income" and the "Consolidated Statement of Financial Position" in this annual report, respectively.

5. MAJOR RISKS AND OUTLOOK

The operation of the Group is subject to certain risks and uncertainties, some of which are beyond the control of the Group. These risks and uncertainties include domestic and foreign economic trends, the PRC credit policy and foreign exchange policy, movements in relevant laws, rules and law enforcement policies, etc, together with some uncertainties that are unknown and immaterial but will be proved to be material in the future. The discussion and analysis as required by Schedule 5 to the Companies Ordinance (Cap. 622 of the Laws of Hong Kong), including a fair review of the business of the Group, a discussion of the principal risks and uncertainties facing the Group, and an indication of likely future development in the Group's business, can be found in the "Chairman's Statement", "Management Discussion and Analysis" and "Notes to the Financial Statements" sections of this annual report respectively. The above sections form part of this report.

DIRECTORS' REPORT (CONTINUED)

6. DIVIDEND

The Board resolved to declare a final dividend of RMB0.1803 per Share (inclusive of tax) for 2020 (the "**2020 Final Dividend**") to Shareholders whose names appear on the register of members of the Company on 25 May 2021, with a total cash dividend to be distributed of RMB57,673,444.47. The 2020 Final Dividend is expected to be paid in RMB to holders of Domestic Shares and in Hong Kong dollars to holders of H Shares before 26 July 2021. Dividend payable in Hong Kong dollars will be converted from RMB based on the average median price of the exchange rate of Hong Kong dollars against RMB as quoted by the PBOC for the five business days preceding the date of the dividend payment (inclusive). The above dividend distribution proposal is subject to the review and approval by Shareholders at the AGM to be held on 12 May 2021. Details of the dividend distribution will be published after the AGM.

The AGM will be convened by the Company on 12 May 2021. The register of members of the Company will be closed from Friday, 7 May 2021 to Wednesday, 12 May 2021 (both dates inclusive) and from Thursday, 20 May 2021 to Tuesday, 25 May 2021 (both dates inclusive), during which periods no transfer of Shares will be registered. Shareholders whose names appear on the register of members of the Company on 12 May 2021 will be entitled to attend and vote at the AGM. Shareholders whose names appear on the register of members of the Company on 25 May 2021 will be entitled to receive the 2020 Final Dividend. In order to be qualified as Shareholders to attend and vote at the AGM, Shareholders of the Company must lodge all transfers of shares accompanied by the relevant share certificates with the Company's H Share Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong (for holders of H Shares) or the Company's registered office at Room 418, South 4th Floor, Building 1, No. 66, Changwa Middle Street, Haidian District, Beijing, China (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Thursday, 6 May 2021. In order to be qualified as Shareholders to receive the 2020 Final Dividend (subject to the approval by Shareholders at the AGM), Shareholders must lodge all transfers of shares accompanied by the relevant share certificates with the Company's H Share Registrar (see the address above) (for holders of H Shares) or the Company's registered office (see the address above) (for holders of Domestic Shares) for registration no later than 4:30 p.m. on Tuesday, 18 May 2021.

According to a circular (Guo Shui Han [2011] No. 348) issued by the state administration of taxation on 28 June 2011, and relevant laws and regulations, if individual holders of H Shares are residents of Hong Kong or Macau or countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 10%, the Company will withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of less than 10%, the Company will nonetheless withhold and pay individual income tax at the rate of 10% on behalf of such Shareholders. In such a case, if the relevant Shareholders would like a refund of the additional amount withheld, the Company will apply for the agreed preferential tax treatment provided that information required by the applicable tax treaty notice(s) is submitted to the Company's H Share registrar in Hong Kong, Computershare Hong Kong Investor Services Limited. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of more than 10% but less than 20%, the Company will withhold and pay individual income tax at the actual tax rate stipulated in the relevant tax treaty. If individual holders of H Shares are residents of countries which have entered into a tax treaty with the PRC stipulating a dividend tax rate of 20%, or countries which have not entered into any tax treaty with the PRC, or under any other circumstances, the Company will withhold and pay individual income tax at the rate of 20% on behalf of such Shareholders.

DIRECTORS' REPORT (CONTINUED)

7. PROPERTY, PLANT AND EQUIPMENT

Details of the changes in the property, plant and equipment of the Company are set out in Note 11 to the "Financial Statements" in this annual report.

8. SHARE CAPITAL

At the end of the Reporting Period, the total number of Shares of the Company was 319,874,900 Shares, comprising 239,906,100 Domestic Shares, representing 75.00% of the issued Shares, and 79,968,800 H Shares, representing 25.00% of the issued Shares.

On 6 July 2018, the Company issued 79,968,700 H Shares with par value of RMB1.00 per share at a price of HK$21.6 per share by way of initial public offering to Hong Kong and overseas investors. On 3 August 2018, the over-allotment option granted by the Company was partially exercised. The Company issued and allotted an aggregate of 100 H Shares at HK$21.6 each. After the issuance and allotment of these H Shares, the registered and issued ordinary Shares of the Company increased to 319,874,900 Shares.

9. RESERVES

Details of the changes in the reserves of the Company during the year are set out in the "Consolidated Statement of Changes in Equity" in this annual report.

10. DISTRIBUTABLE RESERVES

As of 31 December 2020, we had RMB1,243.3 million in retained profits, as determined under IFRS, available for distribution.

11. USE OF PROCEEDS FROM THE INITIAL PUBLIC OFFERING

Details of the use of proceeds from the initial public offering of the Group are set out in the section headed "Management Discussion and Analysis" in this annual report.

12. MAJOR CUSTOMERS AND SUPPLIERS

The Group understands the importance of maintaining good relationship with its employees, customers and suppliers so as to meet its current or long-term business goals. During the year ended 31 December 2020, there were no material and substantive disputes between the Group and its employees, customers and suppliers.

During the year ended 31 December 2020, revenue from our sales to the five largest customers of the Company accounted for approximately 2.8%, 1.2%, 1.2%, 1.1% and 1.1% of the total revenue of the Company, respectively, totally representing 7.4% of the total revenue of the Company. For the year ended 31 December 2020, the purchase amount from the five largest suppliers of the Company accounted for approximately 5.2%, 4.6%, 4.5%, 2.8% and 2.8% of the aggregate amount of goods procurement and subcontracting purchase and other costs of the Company, respectively, totally representing 19.9% of the total cost of the Company. None of the Shareholders (other than CNNC), which, to the best knowledge of the Company, own more than 5% of the share capital of the Company, has any interest in the above five largest customers or five largest suppliers. The Company does not constitute a dependence on minority customers and suppliers.

DIRECTORS' REPORT (CONTINUED)

13. SUBSIDIARIES, JOINT VENTURES AND ASSOCIATES

Details of the major subsidiaries, joint ventures and associates of the Company for the year ended 31 December 2020 are set out in Notes 13, 15 and 14 to the "Financial Statements" in this annual report, respectively.

14. DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

The biographical details of the current Directors, Supervisors and senior management of the Company is set out in the section headed "Biographical Details of Directors, Supervisors and Senior Management" in this annual report.

15. INTERESTS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT IN CONTRACTS

Save as the service contracts, no Directors, Supervisors and senior management or entities connected with Directors, Supervisors and senior management of the Company have material interests, either directly or indirectly, in any transaction, arrangement or contract of significance to the Company to which the Company, any of its subsidiaries or fellow subsidiaries or its holding company is a party during the Reporting Period based on the information available to the Company.

16. REMUNERATIONS OF DIRECTORS, SUPERVISORS AND SENIOR MANAGEMENT

In 2020, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to Directors by the Company was RMB3.865 million.

In 2020, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to Supervisors by the Company was RMB0.835 million.

In 2020, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) paid to senior management by the Company was RMB3.127 million.

In 2020, the total amount of fees, salaries, allowances, discretionary bonuses, retirement scheme contributions and other benefits in kind (if applicable) received by five highest-paid individuals (excluding Directors and Supervisors) was RMBB3.409 million.

During the Track Record Period, no incentive payment for joining or having joined the Company was paid or payable to any Directors, Supervisors or the five highest paid individuals by the Company. During the Track Record Period, no remuneration was paid or payable by the Company to any Directors, former Directors, Supervisors, former Supervisors or the five highest paid individuals as compensation for termination of their management positions in any subsidiaries of the Company.

DIRECTORS' REPORT (CONTINUED)

During the Track Record Period, none of the Directors or Supervisors gave up or agreed to give up any remuneration or benefits-in-kind. Save as disclosed above, during the Track Record Period, no other amounts were paid or payable to any Directors, Supervisors or the five highest paid individuals by the Company or any of its subsidiaries.

According to our remuneration policies, the Remuneration and Appraisal Committee will take into account various factors in evaluating the remuneration amount payable to Directors, Supervisors and the relevant employees, including salaries paid by comparable companies, and the term, commitment, duties and performance of the Directors, Supervisors and senior management (as the case may be). In accordance with the arrangements currently in effect, the aggregate amounts of remuneration (excluding any discretionary bonus) paid by the Company to the Directors and Supervisors are approximately RMB3.337 million and RMB0.835 million for the year ended 31 December 2020, respectively.

17. DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S RIGHTS TO ACQUIRE SHARES OR DEBENTURES

As of 31 December 2020, none of the Company, controlling Shareholders of the Company or the companies under the same controlling Shareholders with the Company was a party to any arrangement to entitle the Company's Directors, Supervisors and senior management or their respective minor children to acquire benefits by means of the acquisition of shares or debentures of the Company or any other body corporate.

18. DIRECTORS' AND SUPERVISORS' SERVICE CONTRACTS

Each of executive Director, non-executive Director and independent non-executive Director has entered into a service contract with the Company for a fixed term of three years commencing from the Listing Date. These service agreements may be terminated pursuant to their respective terms and may be renewed in accordance with the Articles of Association and applicable laws, rules and regulations.

Supervisors have entered into contracts with the Company in respect of, among other things, compliance with relevant laws and rules, the Articles of Association and the arbitration provisions.

None of the Directors and Supervisors has a service contract with the Company or any of its subsidiaries which is not determinable within one year without the payment of compensation (other than statutory compensation).

19. DIRECTORS', SUPERVISORS' AND SENIOR MANAGEMENT'S INTEREST AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As of 31 December 2020, based on the information available to the Company and to the best knowledge of the Directors, none of the Directors, Supervisors and chief executive of the Company had any interest and short position in the shares, underlying shares or debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO) which will have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they are taken or deemed to have under such provisions of the SFO), or which will be required, pursuant to section 352 of the SFO, to be entered in the register referred to therein or which will be required to be notified to the Company and the Stock Exchange pursuant to the Model Code.

DIRECTORS' REPORT (CONTINUED)

20. APPROVED INDEMNITY PROVISIONS

During the year ended 31 December 2020, the Company had arranged Directors', Supervisors' and officers' liability insurance for all Directors, Supervisors and senior management. These insurances provided protection to the liability incurred from related cost, fees, expense and legal actions resulting from corporate activities. Except for such insurances, the Company has no valid indemnity provisions (as defined in Companies (Directors' Report) Regulation (Chapter 622D of the Laws of Hong Kong) approved during the Reporting Period and at the time of approval of this report.

21. MANAGEMENT CONTRACTS

No contracts concerning the management and/or administration of the whole or any substantial part of the business of the Company were entered into or existed during the Reporting Period, except for the employment contracts.

22. SUBSTANTIAL SHAREHOLDERS' AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES AND UNDERLYING SHARES

Substantial Shareholders' Interests and Short Positions in Shares and Underlying Shares

To the best knowledge of the Company, as of 31 December 2020, the following persons (other than the Directors, Supervisors and chief executive of the Company) had interests or short positions in the Shares or underlying Shares of our Company which are required to be disclosed to our Company and the Stock Exchange pursuant to the provisions of Divisions 2 and 3 of Part XV of the SFO, or interests or short positions which are required to be entered in the register pursuant to Section 336 of SFO, or, directly or indirectly, be interested in 5% or more of the nominal value of any class of our share capital:

Shareholder	Class of Shares	Nature of interest	Number of Shares held[6]	Approximate percentage of shareholding in the relevant class of Shares (%)	Approximate percentage of shareholding in the total share capital of our Company (%)
CNNC[1]	Domestic Shares	Beneficial owner/Interest of controlled corporation	236,150,233(L)	98.43(L)	73.83
CIAE[1]	Domestic Shares	Beneficial owner	58,534,835(L)	24.40(L)	18.30
NPIC[1]	Domestic Shares	Beneficial owner	46,994,835(L)	19.59(L)	14.69
CNNC Fund[1]	Domestic Shares	Beneficial owner	18,779,342(L)	7.83(L)	5.87
Shanghai Industrial Investment (Holdings) Company Limited ("**SIIC**")[2]	H SHARES	Interest of controlled corporation	17,522,600(L)	21.91(L)	5.48
Shanghai Industrial Investment Treasury Company Limited[2]	H SHARES	Interest of controlled corporation	9,516,600(L)	11.90(L)	2.98
Shanghai Investment Holdings Limited[2]	H SHARES	Interest of controlled corporation	9,516,600(L)	11.90(L)	2.98

DIRECTORS' REPORT (CONTINUED)

Shareholder	Class of Shares	Nature of interest	Number of Shares held[6]	Approximate percentage of shareholding in the relevant class of Shares (%)	Approximate percentage of shareholding in the total share capital of our Company (%)
Shanghai Industrial Holdings Limited ("**SIHL**")[2]	H SHARES	Interest of controlled corporation	9,516,600(L)	11.90(L)	2.98
S.I. Infrastructure (Holdings) Limited[2]	H SHARES	Interest of controlled corporation	9,516,600(L)	11.90(L)	2.98
Sure Advance Holdings Limited ("**Sure Advance**")[2]	H SHARES	Beneficial owner	9,516,600(L)	11.90(L)	2.98
Shanghai Shangshi (Group) Co., Ltd. ("**Shanghai Shangshi**")[2]	H SHARES	Interest of controlled corporation	8,006,000(L)	10.01(L)	2.50
Shanghai Pharmaceuticals Holding Co. Ltd ("**SPH**")[2]	H SHARES	Interest of controlled corporation	8,006,000(L)	10.01(L)	2.50
Shanghai Pharmaceuticals (HK) Investment Limited ("**SPH HK**")[2]	H SHARES	Beneficial owner	8,006,000(L)	10.01(L)	2.50
Beijing State-owned Assets Management Co., Ltd.[3]	H SHARES	Interest of controlled corporation	10,899,000(L)	13.63(L)	3.41
Beijing Industrial Developing Investment Management Co., Ltd.[3]	H SHARES	Beneficial owner	10,899,000(L)	13.63(L)	3.41
China Structural Reform Fund Corporation Limited	H SHARES	Beneficial owner	8,155,000(L)	10.20(L)	2.55
Serenity Capital Management, Ltd.[4]	H SHARES	Investment manager	4,801,600(L)	6.00(L)	1.50
Serenity Investment Master Fund Limited[4]	H SHARES	Beneficial owner	4,801,600(L)	6.00(L)	1.50
Pandanus Associates Inc. ("**Pandanus Associates**")[5]	H SHARES	Interest of controlled corporation	7,270,600(L)	9.09(L)	2.27
Pandanus Partners L.P. ("**Pandanus Partners**")[5]	H SHARES	Interest of controlled corporation	7,270,600(L)	9.09(L)	2.27
FIL Limited ("**FIL**")[5]	H SHARES	Interest of controlled corporation	7,270,600(L)	9.09(L)	2.27
Fidelity China Special Situations PLC	H SHARES	Beneficial owner	5,651,600(L)	7.07(L)	1.77
The Bank of New York Mellon Corporation	H SHARES	Interest of controlled corporation	6,146,240(L) 5,911,400(P)	7.69(L) 7.39(P)	1.92 1.85
Invesco Advisers, Inc.	H SHARES	Investment manager	4,895,200(L)	6.12(L)	1.53
China Structural Reform Fund Corporation Limited	H SHARES	Beneficial owner	4,765,400(L)	5.96(L)	1.49
Postal Savings Bank of China Co., Ltd.	H SHARES	Beneficiary of a trust	4,765,400(L)	5.96(L)	1.49

DIRECTORS' REPORT (CONTINUED)

Shareholder	Class of Shares	Nature of interest	Number of Shares held(6)	Approximate percentage of shareholding in the relevant class of Shares (%)	Approximate percentage of shareholding in the total share capital of our Company (%)
CCB (Beijing) Investment Funds Management Co., Ltd. (建信(北京)投資基金管理有限責任公司)	H SHARES	Interest of controlled corporation	4,765,400(L)	5.96(L)	1.49
CCB Trust Co., Ltd.	H SHARES	Interest of controlled corporation	4,765,400(L)	5.96(L)	1.49
Morgan Stanley	H SHARES	Interest of controlled corporation	4,062,396(L)	5.08(L)	1.27
Invesco Corporate Class Inc.	H SHARES	Person having security interest in shares	4,012,800(L)	5.02(L)	1.25

Notes:

1. CNNC directly holds 106,676,903 Domestic Shares of the Company, representing approximately 44.47% of the domestic share capital of our Company. Each of CIAE and NPIC is a public institute controlled and managed by CNNC and holds 58,534,835 and 46,994,835 Domestic Shares, representing approximately 24.40% and 19.59% of the domestic share capital of our Company, respectively. CNNC Fund is a non-wholly-owned subsidiary of CNNC and holds 18,779,342 Domestic Shares, representing approximately 7.83% of the domestic share capital of our Company. Each of CNNC 404 Company Limited ("**404 Company**") and China Baoyuan Investment Co., Ltd. ("**Baoyuan Investment**") is a wholly-owned subsidiary of CNNC and holds 3,755,868 Domestic Shares and 1,408,450 Domestic Shares, respectively, representing approximately 1.57% and 0.59% of the domestic share capital of our Company, respectively. By virtue of the SFO, CNNC is deemed to be interested in the Domestic Shares held by CIAE, NPIC, CNNC Fund, 404 Company and Baoyuan Investment, which in aggregate representing approximately 98.43% of the domestic share capital of our Company.

2. By virtue of the SFO, SIIC is deemed to be interested in the 17,522,600 H Shares in total, of which 9,516,600 H Shares and 8,006,000 H Shares are held by Sure Advance and SPH HK, each being a controlled corporation of SIIC. SIIC holds 100% equity interest in Shanghai Industrial Investment Treasury Company Limited, while Shanghai Industrial Investment Treasury Company Limited directly held 100% equity interest in Shanghai Investment Holdings Limited, which in turn holds approximately 55.13% equity interest in SIHL. SIHL directly holds 100% equity interest in S.I. Infrastructure (Holdings) Limited, which directly held 100% equity interest in Sure Advance. In addition, SIIC directly holds 100% equity interest in Shanghai Shangshi, which directly held 35.56% equity interest in SPH, while SPH directly holds 100% equity interest in SPH HK.

3. Beijing Industrial Developing Investment Management Co., Ltd. is a direct wholly-owned subsidiary of Beijing State-owned Assets Management Co., Ltd.. By virtue of the SFO, Beijing State-owned Assets Management Co., Ltd. is deemed to be interested in the 10,899,000 H Shares held by Beijing Industrial Developing Investment Management Co., Ltd.

4. Serenity Investment Master Fund Limited is 100% controlled by Serenity Capital Management, Ltd. By virtue of the SFO, Serenity Capital Management, Ltd. is deemed to be interested in the 4,801,600 H Shares held by Serenity Investment Master Fund Limited.

DIRECTORS' REPORT (CONTINUED)

5. FIL Investment Management (Hong Kong) Limited and FIL Investment Management (Singapore) Limited are wholly-owned by FIL Asia Holdings Pte Limited, a wholly-owned subsidiary of FIL. FIL Investments International is wholly-owned by FIL Holdings (UK) Limited, a wholly-owned subsidiary of FIL. Pandanus Partners, which is wholly-owned by Pandanus Associates, holds 37.01% equity interest in FIL. By virtue of the SFO, FIL, Pandanus Partners and Pandanus Associates are deemed to be interested in the 6,135,400 H Shares, 420,200 H Shares and 715,000 H Shares held by FIL Investment Management (Hong Kong) Limited, FIL Investment Management (Singapore) Limited and FIL Investments International respectively.

6. (L) represented long position, (P) represented lending pool.

Save as disclosed herein, as of 31 December 2020, the Company is not aware of any other person (other than the Directors, Supervisors and chief executive of the Company) who has an interest or short position, which would be required to be disclosed to our Company and the Stock Exchange under the provisions of Divisions 2 and 3 of Part XV of the SFO, or interests or short positions registered on the register pursuant to Section 336 of SFO, or, directly or indirectly, be interested in 5% or more of the nominal value of any class of our Company's share capital.

23. INTEREST OF DIRECTORS IN COMPETING BUSINESSES

None of the Directors and their associates directly or indirectly has any interest in the businesses which constitute or may constitute competition with the business of the Company.

24. COMPETING BUSINESSES

CNNC, the controlling Shareholder of the Group, (for the purpose of the descriptions in this sub-section, excluding the Group), is principally engaged in the scientific research and development, construction and production operations in nuclear power, nuclear power generation, nuclear fuel, natural uranium, nuclear environmental protection, non-nuclear civilian products, new energy sources, etc. Although some of the retained businesses of CNNC constitute competition with the Company, such competition is limited.

CNNC's Interests in Certain Excluded Entities

As of 31 December 2020, CNNC was entitled to exercise, or control the exercise of, 10% or more of the voting power at the general meeting of the following entities carrying out business which competes, or is likely to compete, directly or indirectly with our principal businesses (the "**Excluded Entities**"):

DIRECTORS' REPORT (CONTINUED)

	Name of the Excluded Entities	Equity interest held by CNNC (as of 31 December 2020)	Principal business	Excluded business	Reason for exclusion
1	China Institute for Radiation Protection ("**CIRP**")	Not applicable, CIRP is a public institute directly controlled and managed by CNNC	Research, development and application in aspects of radiation protection, nuclear emergency and safety, radiological medicine and environmental medicine, nuclear environmental science, radioactive waste management and nuclear facility decommissioning, irradiation technology, environmental protection technology, nuclear electronic information technology, biological material technology, diagnosis and treatment of occupational disease and also provides technical support to national functional departments with respect to radiation protection and nuclear safety.	Irradiation services	The excluded business involves non-operating state-owned assets, which is impractical to be isolated
2	CIAE	Not applicable, CIAE is a public institute directly controlled and managed by CNNC	Nuclear physics research, reactor engineering research and design, radiochemical research, fast reactor research and design, isotope research, nuclear technology application and research, radiation safety research	Radioactive sources and reactor irradiation services	The excluded business involves non-operating state-owned assets, which is impractical to be isolated

DIRECTORS' REPORT (CONTINUED)

	Name of the Excluded Entities	Equity interest held by CNNC (as of 31 December 2020)	Principal business	Excluded business	Reason for exclusion
3	NPIC	Not applicable, NPIC is a public institute directly controlled and managed by CNNC	Nuclear power engineering design, integrated equipment supply of nuclear steam supply system, reactor operation and applied research, reactor engineering experimental research, nuclear fuel and materials research, isotope production and nuclear technology services and applications	Isotope, reactor irradiation services and sales of radioactive-source-based instruments	The excluded business involves non-operating state-owned assets, which is impractical to be isolated
4	404 Company	100%	Nuclear research and production, uranium conversion, reprocessing of spent fuel, decommission of nuclear facilities and radioactive waste treatment and disposal	Radioactive sources and recycling of radioactive sources	404 Company is mainly engaged in the scientific research and production in the military industry, and the excluded business is not the principal business of 404 Company and is impractical to be isolated
5	China Nuclear Energy Industry Corporation ("**CNEIC**")	100%	Import and export trade of uranium products, nuclear fuel cycling equipment and nuclear power technologies and equipment	Import agency services for radioactive isotopes, radioactive therapeutic apparatus	CNEIC is an integrated platform for the import and export of nuclear power equipment of CNNC, the excluded business is not the principle business of CNEIC and is impractical to be isolated
6	Yunke Pharm	47.89%	Technical research of radiopharmaceuticals, product development, production and sales, technical consultancy and technical services	iodine-125 sealed source and Yunke injection	The controlling shareholder of Yunke Pharm is a listed company which is an Independent Third Party. CNNC has no control over its decision-making process

DIRECTORS' REPORT (CONTINUED)

Production and Sale of the Raw Materials of Isotopes

Each of CIAE, NPIC and 404 Company is capable of producing the raw materials of isotopes by using its respective nuclear reactors and other facilities. However, as of the Latest Practicable Date, none of CIAE, NPIC and 404 Company produces or plans to produce isotope raw materials. To avoid the potential competition between us and CIAE, NPIC and 404 Company, each of CIAE, NPIC and 404 Company has undertaken to us that if it starts to produce isotope raw materials, the Company will be the exclusive sales agent for such isotope raw materials. The Company will fully comply with the relevant requirements of the Listing Rules (including but not limited to Chapter 14A of the Listing Rules) when it enters into transactions with CIAE, NPIC and/or 404 Company.

Save as disclosed above, neither our controlling Shareholder nor any of our Directors was, as of 31 December 2020, interested in any business which competes or is likely to compete, directly or indirectly, with the Group's principal business and would otherwise require disclosure under Rule 8.10 of the Listing Rules.

Non-competition Undertaking

To avoid the potential competition between CNNC and the Group, CNNC issued a non-competition undertaking (the "**Non-competition Undertaking**") to the Company on 16 June 2018, pursuant to which CNNC shall not, and shall procure that its associates (excluding the Group and Yunke Pharm) not to, engage in any business which, directly or indirectly, competes with the business of the Company, including nuclear medicine products and application service, radioactive source products and application service, irradiation and irradiation facilities related services, independent clinical laboratory services, etc. (the "**Restricted Business**") within the period during which (i) the H Shares of the Company are listed on the Stock Exchange (including the circumstances under which trading of our H Shares is suspended in accordance with the Listing Rules), and (ii) CNNC and its associates (excluding the Group and Yunke Pharm) may, individually or collectively, exercise or control the exercise of not less than 30% of the voting rights or are deemed as the controlling Shareholders of the Group.

The above Non-competition Undertaking does not apply in the following circumstances:

(i) CNNC having interests in any member of the Group; and

(ii) CNNC having interests in a company other than the Group, provided that:

  (a) any business (or its related assets) carried out or engaged by such company accounts for less than 10% of the Group's consolidated income and consolidated assets as shown in the most recent audited accounts of the Group;

  (b) CNNC and its associates (excluding the Group) have no right to appoint majority of the directors of such company. In addition, there must be at least one shareholder of such company holding more interest than the total interest held by CNNC and its associates, or the company is controlled by a third party; and

  (c) CNNC and its associates (excluding the Group) have not controlled the Board.

DIRECTORS' REPORT (CONTINUED)

(iii) To the extent that CNNC and/or its associates do not control Yunke Pharm, CNNC and/or its associates directly or indirectly holding the equity interests of Yunke Pharm.

In addition, each of CIRP, CIAE, NPIC, 404 Company and CNEIC entered into non-competition undertaking with the Company on 12 August 2016, 1 August 2016, 5 August 2016, 18 August 2016 and 18 August 2016, respectively.

The independent non-executive Directors of the Company have reviewed the compliance and execution of the Non-competition Undertaking and consider that, other than the Company, the above all parties to the Non-competition Undertaking had complied with their respective non-competing undertakings during the Reporting Period.

25. CONNECTED TRANSACTIONS

Connected Persons

As of 31 December 2020, the following entities with whom we have entered into certain transactions in our ordinary and usual business are our connected persons:

a. CNNC

CNNC directly and indirectly through CIAE, NPIC, CNNC Fund, 404 Company and Baoyuan Investment, holds 73.83% equity interests of our total issued share capital. Therefore, CNNC and its associates will constitute our connected persons under Chapter 14A of the Listing Rules.

b. CNNC Tongxing

The Company and CNNC (through one of its subsidiary) hold 51% and 49% equity interests in CNNC Tongxing, respectively. CNNC is our controlling Shareholder. Therefore, CNNC Tongxing and its associates will constitute our connected subsidiary under Chapter 14A.16 of the Listing Rules.

c. Headway

The Company and CNNC hold 54.1% and 27.9% equity interests in Headway, respectively. CNNC is our controlling Shareholder. Therefore, Headway is a connected subsidiary of the Company under Rule 14A.16(1) of the Listing Rules, and Headway and its subsidiaries will constitute our connected persons under Chapter 14A of the Listing Rules.

DIRECTORS' REPORT (CONTINUED)

d. *CNNC Finance Company Limited ("**CNNCFC**")*

CNNCFC was established on 21 July 1997 by CNNC and CNNC's 25 member units, with a registered capital of RMB2,009.6 million. CNNCFC is a non-bank financial institution which strengthens the centralised management of fund within the CNNC group, improves the fund utilisation efficiency and the financial management services for CNNC groups' member units. The business scope includes: (i) providing financial and financing consultancy, credit certification and related consultancy and agency services to members of the CNNC group; (ii) assisting members of the CNNC group in collection and payment of transaction funds; (iii) providing guarantees to members of the group; (iv) providing entrusted loan and entrusted investment services to members of the CNNC group; (v) providing bill acceptance and discount services to members of the CNNC group; (vi) processing the settlement of internal fund transfers among members of the CNNC group and providing solution plans for relevant settlement and clearing; (vii) taking deposits from members of the CNNC group; (viii) providing loan and finance leases to members of the CNNC group; (ix) conducting inter-borrowings among finance companies; (x) issuing corporate bonds; (xi) underwriting the corporate bonds issued by members of the CNNC group; (xii) equity investments in financial institutions; and (xiii) investments in negotiable securities.

e. *CNNC Financial Leasing Co., Ltd. ("**CNNC Financial Leasing Company**")*

CNNC Financial Leasing Company was established in Pilot Free Trade Zone (Shanghai) on 22 December 2015. It is a sino-foreign leasing company, jointly established by CNNC and other 10 companies, including CNNC Shenzhen Xie He Kong Co. Ltd. (Hong Kong), with registered capital of RMB1 billion. The business scope of CNNC Financial Leasing Company includes: (i) financial leasing; (ii) leasing; (iii) purchase of leased property from domestic and overseas sellers; (iv) treatment of residual value of, and maintenance of, leased property; (v) consultation and guarantee for leasing transactions; and (vi) factoring business associated with principal businesses.

f. *CIAE*

CIAE is one of the Shareholders of the Company, and a second-level entity actually controlled and managed by CNNC as the Company. It is mainly engaged in nuclear physics research, reactor engineering research and design, radiochemical research, fast reactor research and design, isotope research, nuclear technology application and research, radiation safety research.

g. *Beijing Yuanke Technology Development Co., Ltd.*

Beijing Yuanke Technology Development Co., Ltd. is a company incorporated in the PRC with limited liability, and a platform company engaged in the transfer use of research result and foreign investment management by CIAE.

DIRECTORS' REPORT (CONTINUED)

h. *Hynergy Industrial Funds Management Co., Ltd. ("**Hynergy Industrial Funds**")*

Hynergy Industrial Funds was established on 18 November 2016 with a registered capital of RMB200 million. It is registered with the Asset Management Association of China as a private equity fund manager. Hynergy Industrial Funds was initiated by CNNC Capital Holdings Limited ("**CNNC Capital**") and jointly funded and established by China Aerospace Science and Technology Corporation (中國航天科技集團公司) (a joint strategic alliance partner), China Development Bank, China Life Insurance (Group) Company (中國人壽保險（集團）公司) and Agricultural Bank of China. It is held as to 35% by CNNC Capital, as to 20% by China Development Bank Capital Corporation Ltd. (國開金融有限責任公司) and as to 15% by each of China Life Asset Management Company Limited (中國人壽資產管理有限公司), China Aerospace Investment Holdings Ltd. (航天投資控股有限公司) and ABCI Corporate Management Co., Ltd (農銀國際企業管理有限公司).

i. *CNNC Capital*

CNNC Capital was established in July 2016 and is a wholly-owned subsidiary of CNNC, with a registered capital of RMB7.08 billion. As a specialised management platform for the financial sector of CNNC, CNNC Capital is positioned as a center of industrial finance risk control, industrial finance investment control, industrial financial resource allocation and industrial finance business collaboration of CNNC.

j. *CNNC SUFA Technology Industry Co., Ltd. ("**CNNC Technology**")*

CNNC Technology was established in 1952 as a technology-based manufacturing company engaged in research, development, design, manufacture and sales of industrial valves. It provides valve system resolutions to players in sectors of oil, natural gas, oil refining, nuclear power, electricity power, metallurgy, chemical engineering, shipbuilding, papermaking and medicine. It was listed on Shenzhen Stock Exchange in 1997, making itself the first listed company as a subsidiary of CNNC in the valve industry in China. Currently, CNNC is the de facto controlling person of CNNC Technology.

k. *Guizhou Nuclear Industry Xinyuan Industry Co., Ltd. ("**Xinyuan Industry**")*

Xinyuan Industry was established on 29 March 2000 and is mainly engaged in the development and application of chemical products, mineral resource (uranium), metallurgical products, rare metal and non-ferrous metal. CNNC, the controlling Shareholder, holds 100% equity interest in Xinyuan Industry through its wholly-owned subsidiary China National Uranium Co., Ltd. ("**CNUC**"). Therefore, Xinyuan Industry is a connected person of the Company.

l. *Xinjiang Mining and Metallurgy Bureau of Nuclear Industry ("**XMMB**")*

XMMB was established in October 1964. It is a public institution directly under CNNC, and is principally responsible for managing the uranium mining and metallurgy enterprises in Xinjiang, with its businesses controlled and managed by CNUC, a wholly-owned subsidiary of CNNC. Therefore, XMMB is a connected person of the Company.

DIRECTORS' REPORT (CONTINUED)

Connected Transactions in 2020

A. *Non-exempt Continuing Connected Transactions undertaken during the Reporting Period*

Reference is made to the property, equipment leasing and related services framework agreement with CNNC ("**Leasing Agreement**") dated 16 June 2018, the Products and Services Supply Framework Agreement with CNNC (the "**Supply Agreement**") dated 16 June 2018, the Products and Services Purchase Framework Agreement with CNNC (the "**Purchase Agreement**") dated 16 June 2018, the Cobalt-60 Radioactive Sources Supply and Related Services Framework Agreement with CNNC Tongxing (the "**Cobalt-60 Supply Agreement**") dated 16 June 2018, the Carbon-14 Raw Materials Supply Framework Agreement with Headway (the "**Carbon-14 Supply Agreement**") dated 16 June 2018, and the Financial Services Framework Agreement with CNNC (the "**Financial Services Agreement**") dated 28 June 2019 in the section headed "Connected Transactions – Non-exempt Continuing Connected Transactions" in the Prospectus which constitute continuing connected transactions of the Group.

The above-mentioned agreements were entered into in the ordinary and usual course of business of the Group, the pricing policies of which are determined through arm-length's negotiation based on production costs and current market prices, and the specific terms are concluded on normal commercial terms and fair and reasonable, and in the interests of the Company and the Shareholders as a whole. In addition, the Company has established (1) the reporting, approval and, if necessary, selection & verification procedures, to ensure that the agreed prices and terms of the continuing connected transactions are no less favourable than those that may be granted by the relevant members of the Group to independent third parties or be granted by independent third parties to the relevant members of the Group (if applicable), and are in compliance with the pricing policies; and (2) the procedures and policies for the purpose of identifying the connected persons and monitoring the annual caps of continuing connected transactions, and strictly followed internal control measures to manage connected transactions.

DIRECTORS' REPORT (CONTINUED)

The annual caps and actual amount of continuing connected transactions incurred in 2020 are as follows:

		Annual caps for the year ended 31 December 2020 (RMB' 000)	Actual amount incurred for the year ended 31 December 2020 (RMB' 000)
1	Leasing Agreement	40,000	26,550
2	Supply Agreement	140,000	53,330
3	Purchase Agreement	144,560	114,914
4	Exclusive Sales Agreement	67,320	–
5	Cobalt-60 Supply Agreement	27,560	13,811
6	Consulting Agreement	24,700	21,730
7	Carbon-14 Supply Agreement	18,480	18,338
8	Financial Services Agreement		
	• Deposit services		
	(a) Maximum daily outstanding balance	3,082,666	1,998,993
	(b) Interest income	45,778	13,993
	• Settlement, entrusted loans and other financial services		
	(a) Maximum daily outstanding balance of entrusted loans provided by our Group through CNNCFC	500,000	154,000
	(b) Service fees for settlement, entrusted loans and other financial services	150	37.5
	• Finance leasing services	248,980	25,833

DIRECTORS' REPORT (CONTINUED)

1. Leasing Agreement

Parties: CNNC (the lessor and service provider); and the Company (the lessee and service recipient).

Principal Terms: The Company entered into a leasing agreement with CNNC on 16 June 2018, pursuant to which we will rent or use a number of properties and equipment from CNNC and/or its associates, and CNNC and/or its associates will provide us with supporting services relating to the properties and equipment and other services. Such properties and equipment are mainly used for our production, operation and management, including but not limited to: (i) office buildings, land and office facilities; (ii) production plants (mainly used to produce technetium-99m labeled injections, fluorine-18-FDG injections and iodine-125 sealed source etc.); (iii) production facilities in relation to waste liquid and gas emissions and treatment services and others; (iv) production equipment (mainly high-power accelerator); (v) common areas and facilities (including kindergarten, water and electricity facilities and other facilities); and (vi) services associated with employee education, safety production and research and development of technologies. The term of the Leasing Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed upon by both parties.

2. Supply Agreement

Parties: CNNC (the purchaser); and the Company (the supplier).

Principal Terms: The Company entered into a supply agreement with CNNC on 16 June 2018, pursuant to which CNNC and/or its associates would purchase the following products from the Group: radioactive source products, radioactive instruments and pharmaceuticals. The Group will also provide detection, recycling, transportation, reloading and other ancillary services related to the sales of such products and research and development services related to research and development projects. The term of the Supply Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed upon by both parties.

DIRECTORS' REPORT (CONTINUED)

3. **Purchase Agreement**

Parties:	The Company (the purchaser); and CNNC (the supplier).
Principal Terms:	The Company entered into a purchase agreement with CNNC on 16 June 2018, pursuant to which CNNC and/or its associates will provide the Group: (i) various types of raw and auxiliary materials, production equipment and other products; (ii) transportation containers (including related design and manufacturing services); (iii) technical testing services; (iv) encapsulation and processing services of cobalt-60 radioactive sources; and (v) scientific research services related to high-end irradiation research and development. The term of the Purchase Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed upon by both parties.

4. **Cobalt-60 Supply Agreement**

Parties:	The Company (the purchaser); and CNNC Tongxing (the supplier).
Principal Terms:	The Company entered into a cobalt-60 supply agreement with CNNC Tongxing on 16 June 2018, pursuant to which the Group will purchase cobalt-60 radioactive sources from CNNC Tongxing and/or its associates, and CNNC Tongxing and/or its associates will provide related services such as transportation and reloading in connection with the sales of cobalt-60 radioactive sources. The term of the Cobalt-60 Supply Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed upon by both parties.

DIRECTORS' REPORT (CONTINUED)

5. Consulting Agreement

Parties: CNNC Tongxing (the service receiver); and the Company (the service provider).

Principal Terms: The Company entered into a consulting agreement with CNNC Tongxing on 16 June 2018, pursuant to which the Company will provide technical support and consulting services to CNNC Tongxing and/or its associates relating to the distribution channels and customer resources of cobalt-60 radioactive sources, and CNNC Tongxing and/or its associates will pay us consultation service fees. The term of the Consulting Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed upon by both parties.

6. Carbon-14 Supply Agreement

Parties: Headway (the purchaser); and the Company (the supplier).

Principal Terms: The Group entered into a carbon-14 supply agreement with Headway on 16 June 2018, pursuant to which the Group will provide Headway and/or its associates with carbon-14 as the raw materials for production of carbon-14 breath-testing medicine boxes. The Group will also provide ancillary services such as packaging and transportation relating to provision of the carbon-14 raw materials. The term of the Carbon-14 Raw Materials Supply Agreement commenced on the Listing Date and will expire on 31 December 2020, subject to renewal as may be agreed on by both parties.

DIRECTORS' REPORT (CONTINUED)

7. Financial Services Agreement

Parties: The Company (service recipient); and CNNC (service provider).

Principal Terms: The Company renewed the Financial Services Agreement with CNNC on 28 June 2019, pursuant to which CNNC and/or its associates will provide the Group with, among other things, (i) deposits and related services (the "**Deposit Services**"); (ii) entrusted loan, settlement, foreign exchange and other services (the "**Settlement, Entrusted Loan and Other Financial Services**"); and (iii) financial leasing service (the "**Financial Leasing Service**") for certain assets used in the operation of the Group. The Financial Services Agreement commenced on 28 June 2019, and expired on the date of 2019 AGM of the Company convened in early 2020..

B. Non-exempt Continuing Connected Transactions entered during the Reporting Period

The property, equipment leasing and related services framework agreement with CNNC ("**2020 Leasing Agreement**") dated 30 November 2020, the Products and Services Supply Framework Agreement with CNNC (the "**2020 Supply Agreement**") dated 30 November 2020, the Products and Services Purchase Framework Agreement with CNNC (the "**Purchase Agreement**") dated 30 November 2020, the Cobalt-60 Radioactive Sources Supply and Related Services Framework Agreement with CNNC Tongxing (the "**2020 Cobalt-60 Supply Agreement**") dated 30 November 2020, the consulting services fee framework agreement (the "**2020 Consulting Agreement**") with CNNC Tongxing dated 30 November 2020, the Carbon-14 Raw Materials Supply Framework Agreement with Headway (the "**2020 Carbon-14 Supply Agreement**") dated 30 November 2020, the Financial Services Framework Agreement with CNNC (the "**2020 Financial Services Agreement**") dated 22 April 2020 and the Engineering Construction Services Framework Agreement" with CNNC ("**2020 Engineering Construction Services Agreement**") dated 22 April 2020 constitute continuing connected transactions of the Group.

The above-mentioned agreements were entered into in the ordinary and usual course of business of the Group, the pricing policies of which are determined through arm-length's negotiation based on production costs and current market prices, and the specific terms are concluded on normal commercial terms and fair and reasonable, and in the interests of the Company and the Shareholders as a whole. In addition, the Company has established (1) the reporting, approval and, if necessary, selection & verification procedures, to ensure that the agreed prices and terms of the continuing connected transactions are no less favourable than those that may be granted by the relevant members of the Group to independent third parties or be granted by independent third parties to the relevant members of the Group (if applicable), and are in compliance with the pricing policies; and (2) the procedures and policies for the purpose of identifying the connected persons and monitoring the annual caps of continuing connected transactions, and strictly followed internal control measures to manage connected transactions.

DIRECTORS' REPORT (CONTINUED)

1. **2020 Leasing Agreement**

Parties:	CNNC (the lessor and service provider); and the Company (the lessee and service recipient).
Principal Terms:	The Company entered into a leasing agreement with CNNC on 30 November 2020, pursuant to which we will rent or use a number of properties and equipment from CNNC and/or its associates, and CNNC and/or its associates will provide us with supporting services relating to the properties and equipment and other services. Such properties and equipment are mainly used for our production, operation and management, including but not limited to: (i) office buildings, land and office facilities; (ii) production plants (mainly used to produce technetium-99m labeled injections, fluorine-18-FDG injections and iodine-125 sealed source etc.); (iii) production facilities in relation to waste liquid and gas emissions and treatment services and others; (iv) production equipment (mainly high-power accelerator); (v) common areas and facilities (including kindergarten, water and electricity facilities and other facilities); and (vi) services associated with employee education, safety production and research and development of technologies. The term of the Leasing Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Leasing Agreement are RMB70 million, RMB70 million and RMB70 million, respectively.

DIRECTORS' REPORT (CONTINUED)

2. **2020 Supply Agreement**

Parties:	CNNC (the purchaser); and the Company (the supplier).
Principal Terms:	The Company entered into a supply agreement with CNNC on 30 November 2020, pursuant to which CNNC and/or its associates would purchase the following products from the Group: radioactive source products, radioactive instruments and pharmaceuticals. The Group will also provide detection, recycling, transportation, reloading and other ancillary services related to the sales of such products and research and development services related to research and development projects. The term of the Supply Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Supply Agreement are RMB100 million, RMB110 million and RMB120 million, respectively.

3. **2020 Purchase Agreement**

Parties:	The Company (the purchaser); and CNNC (the supplier).
Principal Terms:	The Company entered into a purchase agreement with CNNC on 30 November 2020, pursuant to which CNNC and/or its associates will provide the Group: (i) various types of raw and auxiliary materials, production equipment and other products; (ii) transportation containers (including related design and manufacturing services); (iii) technical testing services; (iv) encapsulation and processing services of cobalt-60 radioactive sources; and (v) scientific research services related to high-end irradiation research and development. The term of the Purchase Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Purchase Agreement are RMB170 million, RMB180 million and RMB190 million, respectively.

DIRECTORS' REPORT (CONTINUED)

4. **2020 Cobalt-60 Supply Agreement**

Parties:	The Company (the purchaser); and CNNC Tongxing (the supplier).
Principal Terms:	The Company entered into a cobalt-60 supply agreement with CNNC Tongxing on 30 November 2020, pursuant to which the Group will purchase cobalt-60 radioactive sources from CNNC Tongxing and/or its associates, and CNNC Tongxing and/or its associates will provide related services such as transportation and reloading in connection with the sales of cobalt-60 radioactive sources. The term of the Cobalt-60 Supply Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Cobalt-60 Supply Agreement are RMB30 million, RMB35 million and RMB40 million, respectively.

5. **2020 Consulting Agreement**

Parties:	CNNC Tongxing (the service receiver); and the Company (the service provider).
Principal Terms:	The Company entered into a consulting agreement with CNNC Tongxing on 30 November 2020, pursuant to which the Company will provide technical support and consulting services to CNNC Tongxing and/or its associates relating to the distribution channels and customer resources of cobalt-60 radioactive sources, and CNNC Tongxing and/or its associates will pay us consultation service fees. The term of the Consulting Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed upon by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Consulting Agreement are RMB25 million, RMB25 million and RMB25 million, respectively.

DIRECTORS' REPORT (CONTINUED)

6. **2020 Carbon-14 Supply Agreement**

Parties:	Headway (the purchaser); and the Company (the supplier).
Principal Terms:	The Group entered into a carbon-14 supply agreement with Headway on 30 November 2020, pursuant to which the Group will provide Headway and/or its associates with carbon-14 as the raw materials for production of carbon-14 breath-testing medicine boxes. The Group will also provide ancillary services such as packaging and transportation relating to provision of the carbon-14 raw materials. The term of the Carbon-14 Raw Materials Supply Agreement commenced on 1 January 2021 and will expire on 31 December 2023, subject to renewal as may be agreed on by both parties.
Proposed Annual Caps:	For each of the three years ending 31 December 2023, the proposed annual caps of 2020 Carbon-14 Supply Agreement are RMB22 million, RMB23 million and RMB24 million, respectively.

7. **2020 Financial Services Agreement**

Parties:	The Company (service recipient); and CNNC (service provider).
Principal Terms:	The Company renewed the Financial Services Agreement with CNNC on 22 April 2020, pursuant to which CNNC and/or its associates will provide the Group with, among other things, (i) deposits and related services (the "**Deposit Services**"); (ii) entrusted loan, settlement, foreign exchange and other services (the "**Settlement, Entrusted Loan and Other Financial Services**"); and (iii) financial leasing service (the "**Financial Leasing Service**") for certain assets used in the operation of the Group. The 2020 Financial Services Framework Agreement will be effective on 30 June 2020 and will expire on the date of 2022 AGM of the Company to be convened in early 2023.

DIRECTORS' REPORT (CONTINUED)

Proposed Annual Caps:

Nature of the transaction	Proposed annual caps for the period from the date of the 2019 annual general meeting of the Company to the date of the 2020 annual general meeting of the Company *(RMB' 000)*	Proposed annual caps for the period from the date of the 2020 annual general meeting of the Company to the date of the 2021 annual general meeting of the Company *(RMB' 000)*	Proposed annual caps for the period from the date of the 2021 annual general meeting of the Company to the date of the 2022 annual general meeting of the Company *(RMB' 000)*
• Deposit Services			
(a) Maximum daily outstanding balance	3,082,666	3,082,666	3,082,666
(b) Interest income	45,778	45,778	45,778
• Settlement, Entrusted Loans and Other Financial Services			
(a) Maximum daily outstanding balance of entrusted loans provided by the Group through CNNCFC	500,000	500,000	500,000
(b) Service fees for settlement, entrusted loans and other financial services	150	150	150
• Finance Leasing Service	248,980	248,980	248,980

DIRECTORS' REPORT (CONTINUED)

8. 2020 Engineering Construction Services Agreement

Parties: CNNC (the supplier), and the Company (the purchaser).

Principal Terms: The Company and CNNC agreed that CNNC and/or its associates will provide engineering construction services to the Company and its Subsidiaries according to the Engineering Construction Services Framework Agreement and on normal commercial terms, including: (i) EPC services and construction services ("**Construction Services**"); (ii) equipment procurement, manufacturing and installation services ("**Equipment Services**"); and (iii) engineering consultation services such as engineering consultation, management and supervision services and survey and design services ("**Consultation Services**"). The 2020 Engineering Construction Services Agreement will be effective from the signing date and expire on 31 December 2022, subject to renewal as may be agreed on by both parties.

Proposed Annual Caps:

Nature of transaction	**Year ended 31 December 2020 Annual cap** *(RMB' 000)*	**Year ended 31 December 2021 Annual cap** *(RMB' 000)*	**Year ended 31 December 2022 Annual cap** *(RMB' 000)*
Construction Services	40,000	80,000	150,000
Equipment Services	20,000	20,000	40,000
Consultation services	20,000	40,000	40,000

DIRECTORS' REPORT (CONTINUED)

C. Non-exempt Discontinued Connected Transactions

1. Connected transaction in relation to the capital increase in Nanchang High-Tech by HTA

Parties to the Capital Increase Agreement: HTA Co., Ltd. ("**HTA**") and Jiangxi Nuclear Industry Economic and Technology Development Co., Ltd. ("**Jiangxi Nuclear Industry**").

The principal terms: Pursuant to the Capital Increase Agreement, both parties have agreed to increase the capital to Nanchang Atomic High-Tech Pharmaceuticals Co., Ltd. ("**Nanchang High-Tech**") according to their current proportions of shareholdings. The proportion of shareholding will remain unchanged after the completion of the capital increase. The total consideration payable by HTA to Nanchang High-Tech under the Capital Increase Agreement is RMB15,470,000, which will be funded by the internal resources of HTA. The total consideration payable by HTA Industry to Nanchang High-Tech under the Capital Increase Agreement is RMB6,630,000, which will be funded by the internal resources of Jiangxi Nuclear Industry.

2. Amendment to the Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership) Partnership Agreement

On 30 November 2020, the Company had made amendment to several terms of the Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership) Partnership Agreement with Beijing Tongchuang High-tech Investment Partnership (Limited Partnership), CNNC Capital Holdings Limited, Beijing Science & Technology Innovation Fund (Limited Partnership), National Junmin Integration Industry Investment Fund Co., Ltd., and Beijing Daxing Development Guidance Fund (Limited Partnership).

DIRECTORS' REPORT (CONTINUED)

Annual Review of Continuing Connected Transactions

The independent non-executive Directors have reviewed the aforesaid continuing connected transactions for the year ended 31 December 2020 and confirmed that such transactions were entered into:

(i) in the ordinary and usual course of business of the Company;

(ii) on normal commercial terms or better and in the interests of the Shareholders of the Company as a whole; and

(iii) according to the proposed annual caps that are fair and reasonable and in the interests of the Company and the Shareholders as a whole.

Confirmation from the Independent Auditor

Pursuant to Chapter 14A.56 of the Listing Rules, the Company's auditor was engaged by the Board to report on the Group's continuing connected transactions in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) "Assurance Engagements Other than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. Based on the work performed, the auditor of the Company confirmed to the Board of Directors of the Company that the aforesaid continuing connected transactions:

(1) have been approved by the Board of Directors of the Company;

(2) involving the provision of goods and services by the Group were priced in accordance with the pricing policies of the Group stipulated under the relevant agreements governing such transactions;

(3) have been entered into in accordance with the relevant agreements governing such transactions; and

(4) have not exceeded the relevant annual cap as disclosed in the Prospectus.

The auditor has issued his unqualified letter containing his findings and conclusions in respect of the continuing connected transactions disclosed by the Group in pages 73 to 89 of this annual report in accordance with rule 14A.56 of the Listing Rules. A copy of the auditor's letter has been provided by the Company to the Stock Exchange.

DIRECTORS' REPORT (CONTINUED)

26. PURCHASE, SALE AND REDEMPTION OF THE LISTED SECURITIES OF THE COMPANY

Neither the Company nor any of its subsidiaries has purchased, sold or redeemed any of the Company's listed securities for the year ended 31 December 2020.

27. EQUITY-LINKED AGREEMENT

During the Reporting Period, the Company and its subsidiaries did not enter into any agreements in relation to equity-linked products or participate in any arrangement to purchase equity-linked financial products.

28. ARRANGEMENT FOR PRE-EMPTIVE RIGHT AND SHARE OPTION SCHEME

According to the Articles of Association and relevant laws of China, Shareholders of the Company have no pre-emptive right. During the Reporting Period, the Company has no arrangement for pre-emptive right or share option scheme.

29. BANK BORROWINGS

Details of the bank borrowings of the Company are set out in Note 22 to the "Financial Statements" in this annual report.

30. REMUNERATION AND EQUITY-INCENTIVE POLICY

The review of the Group's employee and remuneration policy is set out in the section headed "Management Discussion and Analysis" in this annual report.

CIRC held 2019 AGM and the 2020 third Board meeting on 30 June 2020, at which the Implementation of China Isotope & Radiation Corporation of Plan for First Tranche of Share Appreciation Rights and Initial Grant Scheme was considered and approved. The initial grant of stock appreciation rights completed successfully on 30 June 2020 (the "Grant Date"). This is a major breakthrough that CIRC has made in equity incentive reform since its H shares IPO on 6 July 2018.

CIRC has steadily promoted the equity incentive reform since 2019, in order to accelerate the building of development platform for industrial applications of nuclear technology. Previously, the Plan for First Tranche of Share Appreciation Rights and Initial Grant Scheme of China Isotope & Radiation Corporation has been formally approved by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council. The reviews of the Party committee, the Board of Supervisors and the Board of Directors have been completed successively, and the relevant procedures such as internal public notification have been carried out in accordance with the Articles of Association and the regulations of state-owned assets supervision and management. In the morning of 30 June 2020, the Plan and the Initial Grant Scheme were approved at the general meeting of CIRC, and the Board of the Company was authorized to handle the related grant. Subsequently, the Board went through the decision-making process, resolved that the grant date was 30 June 2020, and completed the actual grant. The number of Participants for the initial grant is 162, the total number of the appreciation rights granted is 8,607,700 accounting for 2.69% of the total shares, and the price of actual grant is HK$22.20.

DIRECTORS' REPORT (CONTINUED)

31. EMPLOYEE RETIREMENT BENEFITS

Details of the employee retirement benefits of the Company are set out in Note 27 to the "Financial Statements" in this annual report.

32. DONATIONS

Party organizations at all levels throughout the system have donated RMB1.5 million to Hubei Province for the purpose of epidemic prevention, and Party members have donated more than RMB0.2 million voluntarily. Beijing branch, HTA, CNGT and other units were mobilized to donate 2,000 sets of medical protective clothing, 16,000 sets of N95 medical masks and 38,000 sets of medical disposable masks to more than 30 units such as hospitals in Hubei and Nanjing First Hospital. At the same time, 68,000 disposable medical masks were donated overseas, making positive contributions to the fight against the epidemic in more than 20 countries and regions including the United Kingdom, France, Germany and Pakistan.

CIRC helped Xianhe Town Central Primary School (仙河鎮中心小學) in Xunyang County, Shaanxi Province to establish a reading corner "Little Seed of Nuclear(小核苗)"; helped Hefan Village (河畈村) in Tongcheng to improve the infrastructure construction in the village, and to solve the travel difficulties of poor villagers; helped Sanxin Village (三新村) to get rid of poverty, promote the development of characteristic mushroom industry, and increase residents' income; helped Shiyao Village (石窑村) to build poverty alleviation workshops and bases to promote the employment of local villagers; carried out free clinic activities of healthcare for poverty alleviation, and provided free breath test for helicobacter pylori for citizens in Wuhan and other places.

33. COMPLIANCE WITH THE CORPORATE GOVERNANCE CODE

The Company has complied with all applicable code provisions set out in the Corporate Governance Code during the Reporting Period. Details are set out in the "Corporate Governance Report" of this annual report.

34. INDEPENDENT AUDITOR

As resolved at the 2019 AGM of the Company held on 30 June 2020, KPMG was appointed as the international auditor of the Company for the year 2020, to provide relevant overseas audit and review services under the IFRSs, and at the extraordinary general meeting held on 30 December 2020, Jonten Certified Public Accountants (中天運會計師事務所) was appointed as the domestic auditor for the year 2020. The resolutions regarding appointment of auditors of the Company for the 2021 financial report will be proposed at the forthcoming AGM for consideration and approval.

DIRECTORS' REPORT (CONTINUED)

35. COMPLIANCE WITH RELEVANT LAWS

After the listing on the main board of the Stock Exchange, the Company is subject to the Company Law, the Listing Rules, the SFO and other related laws and regulations at home and abroad. The Company complies with the following key regulatory requirements:

The State-owned Assets Supervision and Administration Commission of the State Council, the Supervisory Board for Key Large State-Owned Enterprises and other Chinese government departments (including but not limited to Ministry of Finance, State Administration of Taxation, National Audit Office of the People's Republic of China, State Administration for Market Regulation of the People's Republic of China, People's Bank of China, State Administration of Foreign Exchange, Ministry of Human Resources and Social Security of the People's Republic of China and subsidiary organs thereof) have made inquiries and on-site inspection or off-site survey to the Company's compliance with Chinese laws and regulations in terms of state-owned assets management, financial condition and business operation, solvency status, tax payment, foreign exchange management, labour and social welfare, etc.

Compliance with the Listing Rules and the SFO, including but not limited to fulfilling the followings: safe-keeping the register of interests in shares and short positions and the register of interests and short positions of Directors, Supervisors and chief executives, disclosure of inside information etc. The Company has implemented internal control to ensure its compliance with such laws and regulations. To the best of our knowledge, there are not any legal or regulatory procedures or issues that may, in the opinion of the Directors, have material adverse effects on the business, financial condition, business performance or prospects of the Company as of the end of Reporting Period.

36. ENVIRONMENTAL POLICIES AND PERFORMANCE

The Group recognises the importance of environmental protection and has adopted stringent measures for environmental protection in order to ensure our compliance to the prevailing environmental protection laws and regulations. Adhering to the concept of green environmental protection, the Group has also promoted green operations and advocated the concept of green office. Environmental protection, energy conservation and emissions reduction and reasonable and efficient utilisation of resources have been consistently implemented in the daily operation activities of the Group. The Group has also been working on reducing its energy use, consumption and wastage by actively promoting recycling concept, including using less paper and saving electric power and use of water. Going forward, the Group will continue to develop sustainable policies and designs to reduce its environmental impact not only internally within its offices but also externally in the regions it operates in. Discussion on the environmental policies and performance of the Group set out in the "Environmental, Social and Governance Report" for 2020 will be published before 31 May 2021.

DIRECTORS' REPORT (CONTINUED)

37. COMPLIANCE WITH THE OFAC UNDERTAKINGS

During the Reporting Period, the Company has requested its subsidiaries to conduct overseas business in accordance with the Detailed Rules on the Work of the Overseas Risk Management Committee of China Isotope & Radiation Corporation. The Company has kept the relevant OFAC undertakings in the Reporting Period and will continue doing so in the future daily operation.

38. PUBLIC FLOAT

As of the date of this annual report, the shares of the Company held by the public accounted for 25% of the total shares of the Company, which complied with the requirements of the Listing Rules as the capital structure of the Company maintained sufficient public float.

39. REVIEW OF ANNUAL REPORT

The Audit and Risk Management Committee of the Company has reviewed the Company's annual results of 2020, and the financial statements for the year ended 31 December 2020 prepared in accordance with International Financial Reporting Standards.

40. INFORMATION ON TAX REDUCTION AND EXEMPTION FOR HOLDERS OF H SHARES

40.1 Individual investors

According to the Notice on the Management of Personal Income Tax Imposed after the Abolition of Guo Shui Fa [1993] No. 045 Document issued by the State Administration of Taxation (Guo Shui Han [2011] No. 348) (《國家稅務總局關於國稅發[1993]045號文件廢止後有關個人所得稅徵管問題的通知》(國稅函[2011]348號)), the dividend received by foreign resident individual shareholders from the issuance of shares in Hong Kong by domestic non-foreign invested enterprises is subject to the payment of individual income tax according to the items of "interests, dividend and bonus income", which shall be withheld by the withholding agents according to the relevant laws. The foreign resident individual shareholders who hold the shares issued by domestic non-foreign invested enterprises in Hong Kong are entitled to the relevant preferential tax treatment pursuant to the provisions in the tax agreements signed between the countries where they reside and China or the tax arrangements between Mainland and Hong Kong (Macau). The tax rate for dividends under the relevant tax agreements and tax arrangements is generally 10%, and for the purpose of simplifying tax administration, domestic non-foreign invested enterprises issuing shares in Hong Kong may, when distributing dividends, generally withhold individual income tax at the rate of 10%, and are not obligated to file an application. If the tax rate for dividends is not equal to 10%, the following provisions shall apply: (1) for citizens from countries which have entered into tax agreements/arrangements stipulating a tax rate of lower than 10%, the withholding agents will file applications on their behalf to seek entitlement of the relevant agreed preferential treatments, and upon approval by the tax authorities, the excess tax amounts withheld will be refunded; (2) for citizens from countries which have entered into tax agreements/arrangements stipulating a tax rate of higher than 10% but lower than 20%, the withholding agents will withhold the individual income tax at the agreed-upon effective tax rate when distributing dividends, and are not obligated to file an application; (3) for citizens from countries without tax agreements or are under other situations, the withholding agents will withhold the individual income tax at a tax rate of 20% when distributing dividends.

According to the Arrangements for the Avoidance of Double Taxation and Prevention of Tax Evasion in Mainland China and Hong Kong (Guo Shui Han [2006] No. 884) (《內地和香港特別行政區關於對所得避免雙重徵稅和防止偷漏稅的安排》(國稅函[2006]884號)) signed on 21 August 2006 in relation to income tax, the Chinese government may impose tax on dividends payable by

DIRECTORS' REPORT (CONTINUED)

the Chinese companies to Hong Kong residents, but the tax should not exceed 10% of the total dividend payable; if Hong Kong residents directly hold at least 25% equity interest in the Chinese company, the relevant tax shall not exceed 5% of the total dividend payable by the Chinese company.

40.2 Enterprise

According to the Enterprise Income Tax law of the People's Republic of China (《中華人民共和國企業所得稅法》) and the Regulations on the Implementation of the Enterprise Income Tax Law of the People's Republic of China (《中華人民共和國企業所得稅法實施條例》) effective on 1 January 2008, if non-resident enterprises establish no organisations and sites within the territory of China, or though they have established certain organisations and sites but the dividends and bonuses received have actually not correlated to the organisations and sites established, such enterprises shall pay the corporate income tax at the rate of 10% of its income from the Chinese territory. The withholding tax may be relieved under an applicable double taxation treaty.

According to the Notice on the Withholding Corporate Income Tax on the Dividends Distributed by the Chinese Resident Enterprise to Foreign H Share Non-resident Enterprise Shareholders (Guo Shui Han [2008] No. 897) (《關於中國居民企業向境外H股非居民企業股東派發股利代扣代繳企業所得稅有關問題的通知》(國稅函[2008]897號)) issued by the State Administration of Taxation and effective on 6 November 2008, when the Chinese resident enterprises distribute dividends of 2008 and subsequent years to foreign H share non-resident enterprise shareholders, they shall pay the withholding enterprise income tax at the unified rate of 10%. Such withholding tax may be reduced pursuant to applicable tax avoidance under the double taxation treaty.

Pursuant to the provisions in the Notice on Tax Policy Regarding Shanghai-Hong Kong Stock Connect Pilot Programs (Cai Shui [2014] No. 81) (《關於滬港股票市場交易互聯互通機制試點有關稅收政策的通知》(財稅[2014]81號)) issued by the Ministry of Finance, the State Administration of Taxation and CSRC, for the dividends obtained by mainland individual investors from investing in H-shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H-share companies shall withhold individual income tax at the tax rate of 20%. For the dividends obtained by mainland securities investment funds by investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, the individual income tax will be levied pursuant to the provisions mentioned above. For the dividends obtained by mainland enterprise investors from investing in shares listed in Hong Kong Stock Exchange through Shanghai-Hong Kong Stock Connect, such H-share companies shall not withhold and pay any income taxes on the dividends, as the income taxes shall be reported and paid by the investing enterprises on their own. Meanwhile, for the dividends obtained by mainland resident enterprises from holding relevant H shares for consecutive 12 months, the corporate income taxes shall be exempted according to laws.

Pursuant to the current practices of Inland Revenue Department of Hong Kong, no taxes shall be levied for the dividends distributed by the Company. The Shareholders of the Company shall pay the relevant taxes and/or be entitled to tax relieves pursuant to the above provisions.

By order of the Board of Directors
Meng Yanbin
Chairman of the Board
30 March 2021

SUPERVISORS' REPORT

1. BASIC COMPOSITION OF THE BOARD OF SUPERVISORS

1.1 Basic information

As of 31 December 2020, the Board of Supervisors consists of five members, namely Mr. Zhang Qingjun, Mr. Liu Zhonglin, Mr. Zhang Guoping, Mr. Zhang Jian and Mr. Li Zhenhua, among whom Mr. Zhang Qingjun is the chairman of the Board of Supervisors, Mr. Li Zhenhua and Mr. Zhang Jian are employee representative supervisors. The term of office of supervisors is three years. Supervisors can be re-appointed upon re-election after the term of office expires.

1.2 Changes in supervisors

The Company held an employee meeting on 26 March 2020 and elected Mr. Li Zhenhua and Mr. Zhang Jian as the employee representative supervisors of the Company. Mr. Li Guoxiang and Mr. Zhang Yiming resigned as the Company's employee representative supervisors on the same day.

2 MEETINGS OF THE BOARD OF SUPERVISORS

In 2020, the Board of Supervisors convened two meetings, details of which are as follows:

1. The first meeting of the second session of the Board of Supervisors for 2020 was held on 22 April 2020. Mr. Zhang Qingjun, the chairman of the Board of Supervisors, served as the convener. 19 resolutions were considered and approved at the meeting, including the 2019 Work Report of the Board of Supervisors, the 2019 Work Report of the Board of Directors, the 2019 Work Report of the General Manager, the 2020 Comprehensive Risk Control Report, the 2019 Internal Control Evaluation Report, the 2019 Work Report of Audit and Risk Management Department, the resolution on the Proposed Amendments to the Articles of Association, the resolution on the Proposed Amendments to the Rules of Procedures for General Meetings, the resolution on the Proposed Amendments to the Rules of Procedures for Meetings of the Board, the 2019 final accounts of the Company, the Announcement of Annual Results for 2019, the resolution on the Proposal of the Board to Declare and Distribute Final Dividend of RMB0.1389 per share (inclusive of tax) for the Year Ended 31 December 2019, the 2020 financial budget plan of the Company, the resolution on the financial services agreement proposed to be entered into between the Company and China Nuclear National Corporation (with a term commencing on the date or the date of passing of this resolution until 2022 annual general meeting to be held by the Company in 2023), the transactions contemplated thereunder and the proposed annual caps of the services to be provided thereunder, the resolution on the framework agreement on the continuing connected transactions of engineering construction entered into between the Company and CNNC, the resolution on the grant of the General Mandate to the Directors to allot, issue and deal with, either separately or concurrently, additional Domestic Shares and/or H Shares of the Company representing up to the limit of 20% of each of the total number of the Domestic Shares and/or H Shares respectively in issue as at the date of or the date of passing such resolution, the resolution on the amendments to the Plan for First Tranche of Share Appreciation Rights of China Isotope & Radiation Corporation, the proposal of the Board at the general meeting to authorize the Board to handle matters relating to the Plan for First Tranche of Share Appreciation Rights, and the appointment of domestic and oversea auditors and accountants for the year, and two resolutions including the Annual Report of China Isotope & Radiation Corporation for 2019 and the Environmental, Social and Governance Report of CIRC for 2019 were also reviewed at the meeting.

SUPERVISORS' REPORT (CONTINUED)

2. The second meeting of the second session of the Board of Supervisors of CIRC for 2019 was held on 28 August 2020. Mr. Zhang Qingjun, the chairman of the Board of Supervisors, served as the convener. Two resolutions were considered and approved at the meeting, including the Announcement of Interim Results of China Isotope & Radiation Corporation for 2020 and the Interim Report of China Isotope & Radiation Corporation for 2020.

3. BOARD OF SUPERVISORS' PRESENCE ON OTHER MEETINGS

In 2020, the Supervisors of the Company attended five Board meetings, the 2019 AGM and the 2020 extraordinary general meeting.

4. BASIC EVALUATION OF THE BOARD OF SUPERVISORS ON PERFORMANCE OF THE BOARD AND SENIOR MANAGEMENT

During the Reporting Period, with the supervision on the Directors and senior management of the Company, the Board of Supervisors was of the view that the Board of the Company was able to duly perform its duties in strict compliance with the requirements under the Company Law, the Listing Rules, the Articles of Association and the relevant laws and regulations, and to operate in accordance with laws. The major business decision making procedures of the Company were legitimate and effective. The Directors and senior management of the Company performed their duties in strict accordance with the State laws and regulations, the Articles of Association and resolutions of the general meeting and the Board. The Board of Supervisors was not aware of any irregularities of Directors and senior management that are not in the interests of the Company and the Shareholders or have violated laws and regulations.

5. INDEPENDENT OPINIONS OF THE BOARD OF SUPERVISORS ON OPERATION OF THE COMPANY

5.1 Independent opinions on the financial position of the Company

The financial report of the year is prepared in accordance with International Financial Reporting Standards and has been audited by KPMG, which reflected the actual financial position and operation results of the Company.

5.2 Independent opinions on disclosure of information by the Company

During the Reporting Period, the Board of Supervisors attended the general meeting and the Board meeting and listened to the report about information disclosure. The Board of Supervisors believed that the information disclosure procedures were in compliance with the Administrative Measures on Information Disclosure of China Isotope & Radiation Corporation《(中國同輻股份有限公司信息披露管理辦法》) and complied with the regulatory requirements of the place in which the Company listed.

SUPERVISORS' REPORT (CONTINUED)

5.3 Independent opinions on the connected transactions of the Company

During the Reporting Period, the Board of Supervisors conducted supervision on the connected transactions of the Company and was of the view that the approval and disclosure procedure of the connected transactions of the Company were in compliance with the relevant laws and regulations such as the Listing Rules and requirements of the Articles of Association, and the pricing of which was fair and reasonable.

5.4 Independent opinions on the management and use of proceeds of the Company

During the Reporting Period, the Board of Supervisors conducted supervision on the management and use of proceeds of the Company. The Board of Supervisors believed that the Company managed and used the proceeds in strict compliance with the Listing Rules.

6. WORKING PLAN

In 2021, the Board of Supervisors will strictly comply with the relevant requirements under the Company Law, Securities Law of the PRC, Listing Rules and Articles of Association to further perfect the corporate governance structure of the Company as a legal person and improve the standard of corporate governance. The Board of Supervisors will continually strengthen the implementation of supervision and conduct effective supervision with focus on procuring the implementation of the resolutions passed at the general meeting and the Board meeting, major operational decisions of the Company and financial inspection. It will step up its efforts in supervision of major acquisition of assets, external investment, management and use of proceeds and disclosure of information so as to better safeguard the interests of Shareholders.

By order of the Board of Supervisors
Zhang Qingjun
Chairman of the Board of Supervisors
30 March 2021

INDEPENDENT AUDITOR'S REPORT

INDEPENDENT AUDITOR'S REPORT TO THE SHAREHOLDERS OF
CHINA ISOTOPE & RADIATION CORPORATION
(Incorporated in the People's Republic of China with limited liability)

OPINION

We have audited the consolidated financial statements of China Isotope & Radiation Corporation ("the Company") and its subsidiaries ("the Group") set out on pages 103 to 198, which comprise the consolidated statement of financial position as at 31 December 2020, 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 31 December 2020 and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards ("IFRSs") issued by the International Accounting Standards Board ("IASB") 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 Hong Kong Institute of Certified Public Accountants ("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 People's Republic of China, 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.

INDEPENDENT AUDITOR'S REPORT (CONTINUED)

KEY AUDIT MATTERS (CONTINUED)

Revenue recognition	
Refer to Note 4 to the consolidated financial statements and the accounting policies in Note 2(w)(i).	
The Key Audit Matter	**How the matter was addressed in our audit**
The Group is principally engaged in research, development, manufacturing and sale of a broad range of pharmaceuticals and radioactive source products, and also design, manufacturing, construction and installation of gamma ray irradiation facilities, provision of irradiation service for sterilisation purpose as well as independent clinical laboratory services. The amount of sales of goods recognised for the year ended 31 December 2020 is RMB3,519 million and accounted for 82% of total revenue. The revenue from sales of goods is recognised when the customer obtains control of the promised goods in the contract. We identified the recognition of revenue as a key audit matter because the revenue is one of the key performance indicators of the Group and the Group's business is diversified and from different segments. Therefore, there is inherent risk of material misstatement in revenue recognition.	Our audit procedures to assess the timing of revenue recognition included the following: • obtaining an understanding of and assessing the design, implementation and operating effectiveness of management's key internal controls in relation to revenue recognition; • inspecting the terms of sales contracts with customers from each segment, on a sample basis, and evaluating the conditions of goods acceptance as to whether control over the goods has been passed and performance obligation is satisfied when the Group recognises the revenue, and assessing the Group's timing and value of recognition of revenue with reference to the requirements of the prevailing accounting standards; • inspecting goods delivery notes and logistics records, on a sample basis, to assess whether revenue transactions recorded just before and after the financial year end date had been recognised in the appropriate financial period on the basis of the terms of sale as set out in the sales contracts; • comparing revenue transactions, on a sample basis, with invoices, goods delivery notes and other relevant underlying documentation as applicable; • inspecting underlying documentation for manual journal entries relating to revenue which were recorded during the year and which met specific risk-based criteria.

INDEPENDENT AUDITOR'S REPORT (CONTINUED)

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 IFRSs issued by the IASB 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.

INDEPENDENT AUDITOR'S REPORT (CONTINUED)

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.

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.

INDEPENDENT AUDITOR'S REPORT (CONTINUED)

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

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

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

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

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

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 Ho Ying Man, Simon.

KPMG
Certified Public Accountants

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

30 March 2021

CONSOLIDATED STATEMENT OF PROFIT OR LOSS

for the year ended 31 December 2020

(Expressed in Renminbi ("RMB")

	Note	2020 RMB'000	2019 RMB'000
Revenue	4	**4,274,183**	3,988,904
Cost of sales		**(1,658,196)**	(1,159,577)
Gross profit		**2,615,987**	2,829,327
Other income	5	**79,294**	68,711
Selling and distribution expenses		**(1,442,556)**	(1,687,501)
Administrative expenses		**(604,098)**	(509,268)
Impairment (loss)/gain on trade and other receivables		**(22,173)**	19,325
Profit from operations		**626,454**	720,594
Finance costs	6(a)	**(46,656)**	(18,758)
Share of profits less losses of associates		**(12,028)**	2,141
Share of profits of joint ventures		**28,393**	29,830
Profit before taxation	6	**596,163**	733,807
Income tax	7	**(120,640)**	(108,882)
Profit for the year		**475,523**	624,925
Attributable to:			
Equity shareholders of the Company		**213,582**	329,030
Non-controlling interests		**261,941**	295,895
Profit for the year		**475,523**	624,925
Earnings per share	8		
Basic and diluted (RMB)		**0.67**	1.03

The notes on page 111 to 198 form part of these financial statements. Details of dividends payable to equity shareholders of the Company attributable to the profit for the year are set out in Note 31(b).

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

for the year ended 31 December 2020

(Expressed in RMB)

	2020 RMB'000	2019 RMB'000
Profit for the year	**475,523**	624,925
Other comprehensive income for the year (after tax and reclassification adjustments):		
Item that may be reclassified subsequently to profit or loss:		
Exchange differences on translation of share of profits less losses of an associate	**(1,805)**	1,141
Items that will not be reclassified to profit or loss:		
Remeasurement of net defined benefit liability	**(513)**	(2,622)
Equity investments at FVOCI-net movement in fair value reserve (non-recycling)	**(10,858)**	16,801
Other comprehensive income for the year	**(13,176)**	15,320
Total comprehensive income for the year	**462,347**	640,245
Attributable to:		
Equity shareholders of the Company	**200,517**	344,381
Non-controlling interests	**261,830**	295,864
Total comprehensive income for the year	**462,347**	640,245

The notes on page 111 to 198 form part of these financial statements.

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

at 31 December 2020

(Expressed in RMB)

	Note	2020 RMB'000	2019 RMB'000
Non-current assets			
Property, plant and equipment	11	**2,210,150**	1,987,037
Investment property		**20,768**	22,425
Intangible assets	12	**148,363**	108,382
Goodwill	16	**43,875**	43,875
Interests in associates	14	**65,263**	61,543
Interests in joint ventures	15	**552,748**	529,396
Long-term receivables	30(c)	**35,440**	33,784
Unquoted equity investments	17	**137,014**	151,492
Deferred tax assets	29(b)	**200,556**	265,045
		3,414,177	3,202,979
Current assets			
Inventories	18	**590,025**	444,364
Trade and bill receivables	19	**2,368,502**	2,187,746
Prepayments, deposits and other receivables	20	**256,095**	263,400
Cash at bank and on hand	21	**2,556,493**	2,744,883
		5,771,115	5,640,393
Current liabilities			
Bank loans	22(b)	**90,220**	191,215
Trade payables	24	**199,503**	173,556
Accruals and other payables	25	**2,327,407**	2,368,775
Lease liabilities	26	**29,907**	27,809
Provisions	30	**73,906**	69,598
Income tax payable	29(a)	**51,226**	98,220
		2,772,169	2,929,173
Net current assets		**2,998,946**	2,711,220
Total assets less current liabilities		**6,413,123**	5,914,199

CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

at 31 December 2020

(Expressed in RMB)

	Note	2020 RMB'000	2019 RMB'000
Non-current liabilities			
Bank loans	22(a)	72,762	97,235
Corporate bond	23	499,784	499,682
Deferred income		59,146	55,084
Lease liabilities	26	56,971	57,659
Defined benefit retirement obligation	27(a)	53,503	52,094
Deferred tax liabilities	29(b)	14,186	18,383
Provisions	30	125,861	119,814
Other long-term payables		25,300	10,815
		907,513	910,766
Net assets		5,505,610	5,003,433
Capital and reserves	31		
Share capital		319,875	319,875
Reserves		3,571,323	3,439,471
Total equity attributable to equity shareholders of the Company		3,891,198	3,759,346
Non-controlling interests		1,614,412	1,244,087
Total equity		5,505,610	5,003,433

Approved and authorised for issue by the board of directors on 30 March 2021.

Name: Meng Yanbin
Position: chairman of the board

Name: Gui Youquan
Position: chief accountant

The notes on page 111 to 198 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

for the year ended 31 December 2020

(Expressed in RMB)

	Note	Share capital RMB'000 Note 31(c)	Capital reserve RMB'000 Note 31(d)(i)	PRC statutory reserve RMB'000 Note 31(d)(ii)	Fair value reserve (non-recycling) RMB'000 Note 31(d)(iii)	Other reserve RMB'000 Note 31(d)(iv)	Exchange reserve RMB'000 Note 31(d)(v)	Retained profits RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
		Attributable to equity shareholders of the Company									
Balance at 31 December 2018		319,875	2,153,406	112,901	23,400	24,235	3,287	833,331	3,470,435	832,741	4,303,176
Effect on acquisition of a subsidiary under common control		–	32,636	–	–	–	–	(1,018)	31,618	3,599	35,217
Balance at 1 January 2019 (restated)		319,875	2,186,042	112,901	23,400	24,235	3,287	832,313	3,502,053	836,340	4,338,393
Changes in equity for 2019:											
Profit for the year		–	–	–	–	–	–	329,030	329,030	295,895	624,925
Other comprehensive income		–	–	–	16,801	–	1,141	(2,591)	15,351	(31)	15,320
Total comprehensive income		–	–	–	16,801	–	1,141	326,439	344,381	295,864	640,245
Capital injections from non-controlling equity owners of subsidiaries		–	–	–	–	–	–	–	–	212,919	212,919
Acquisition of a subsidiary under common control		–	(46,093)	–	–	–	–	–	(46,093)	(4,909)	(51,002)
Capital injection in a subsidiary		–	(1,778)	–	–	–	–	–	(1,778)	1,778	–
Acquisition of subsidiaries		–	–	–	–	–	–	–	–	4,994	4,994
Appropriation of maintenance and production funds		–	–	–	–	18,848	–	(18,848)	–	–	–
Utilisation of maintenance and production funds		–	–	–	–	(9,953)	–	9,953	–	–	–
Appropriation to reserves		–	–	12,775	–	–	–	(12,775)	–	–	–
Dividends	31(b)	–	–	–	–	–	–	(39,217)	(39,217)	–	(39,217)
Distributions by subsidiaries to non-controlling equity owners		–	–	–	–	–	–	–	–	(102,899)	(102,899)
Balance at 31 December 2019		319,875	2,138,171	125,676	40,201	33,130	4,428	1,097,865	3,759,346	1,244,087	5,003,433

The notes on page 111 to 198 form part of these financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (CONTINUED)

for the year ended 31 December 2020

(Expressed in RMB)

		Attributable to equity shareholders of the Company									
	Note	Share capital RMB'000 Note 31(c)	Capital reserve RMB'000 Note 31(d)(i)	PRC statutory reserve RMB'000 Note 31(d)(ii)	Fair value reserve (non-recycling) RMB'000 Note 31(d)(iii)	Other reserve RMB'000 Note 31(d)(iv)	Exchange reserve RMB'000 Note 31(d)(v)	Retained profits RMB'000	Sub-total RMB'000	Non-controlling interests RMB'000	Total equity RMB'000
Balance at 31 December 2019 and 1 January 2020		319,875	2,138,171	125,676	40,201	33,130	4,428	1,097,865	3,759,346	1,244,087	5,003,433
Changes in equity for 2020:											
Profit for the year		-	-	-	-	-	-	213,582	213,582	261,941	475,523
Other comprehensive income		-	-	-	(10,858)	-	(1,805)	(402)	(13,065)	(111)	(13,176)
Total comprehensive income		-	-	-	(10,858)	-	(1,805)	213,180	200,517	261,830	462,347
Capital injections from non-controlling equity owners of subsidiaries		-	-	-	-	-	-	-	-	182,029	182,029
Capital injection in a subsidiary		-	(24,594)	-	-	360	-	-	(24,234)	24,234	-
Appropriation of maintenance and production funds		-	-	-	-	22,292	-	(22,292)	-	-	-
Utilisation of maintenance and production funds		-	-	-	-	(11,869)	-	11,869	-	-	-
Appropriation to reserves		-	-	12,918	-	-	-	(12,918)	-	-	-
Dividends	31(b)	-	-	-	-	-	-	(44,431)	(44,431)	-	(44,431)
Distributions by subsidiaries to non-controlling equity owners		-	-	-	-	-	-	-	-	(97,768)	(97,768)
Balance at 31 December 2020		319,875	2,113,577	138,594	29,343	43,913	2,623	1,243,273	3,891,198	1,614,412	5,505,610

The notes on page 111 to 198 form part of these financial statements.

CONSOLIDATED CASH FLOW STATEMENT

for the year ended 31 December 2020

(Expressed in RMB)

	Note	2020 RMB'000	2019 RMB'000
Cash flows from operating activities			
Profit before taxation		**596,163**	733,807
Adjustments for:			
Depreciation and amortisation	6(c)	**171,825**	131,683
Impairment loss on property, plant and equipment	6(c)	**4,152**	3,848
Government grants	5	**(23,634)**	(7,967)
Interest income	5	**(39,158)**	(37,565)
Finance costs	6(a)	**46,656**	18,758
Dividend income on unquoted equity investments	5	**(7,792)**	(10,162)
Net loss on disposal of property, plant and equipment	5	**1,113**	977
Share of profits less losses of associates		**12,028**	(2,141)
Share of profits of joint ventures		**(28,393)**	(29,830)
Changes in working capital:			
Increase in inventories	18	**(145,661)**	(97,953)
Increase in trade and bill receivables	19	**(180,756)**	(417,543)
Increase in prepayments, deposits and other receivables		**(10,501)**	(60,324)
Increase in trade payables	24	**25,947**	3,038
(Decrease)/increase in accruals and other payables		**(42,952)**	514,419
(Decrease)/increase in defined benefit retirement obligation	27	**(880)**	3,354
Increase in provisions		**4,756**	2,802
Increase in other long-term payables		**12,722**	16
Cash generated from operations		**395,635**	749,217
Income tax paid	29(a)	**(103,722)**	(147,326)
Net cash generated from operating activities		**291,913**	601,891
Investing activities			
Increase in deposits with banks	21	**(255,210)**	(60,264)
Withdrawal of deposits with banks	21	**157,636**	16,319
Payments for purchase of investment property, plant and equipment, lease prepayments and intangible assets		**(409,923)**	(590,668)
Payment for acquisition of an unquoted equity investment		**–**	(3,600)
Payments for purchase of interests in associates		**(21,640)**	(13,760)
Payment for purchase of interest in a joint venture		**–**	(480,000)
Payments for acquisition of subsidiaries		**–**	(121,368)
Proceeds from disposal of property, plant and equipment		**3,660**	32,944
Dividends received from associates		**21,173**	23,923
Dividends received from joint ventures	15	**5,041**	23,351
Dividends received from unquoted equity investments		**13,163**	10,162
Government grants received		**27,696**	17,426
Interests received		**34,507**	37,070
Net cash used in investing activities		**(423,897)**	(1,108,465)

The notes on page 111 to 198 form part of these financial statements.

CONSOLIDATED CASH FLOW STATEMENT (CONTINUED)

for the year ended 31 December 2020

(Expressed in RMB)

	Note	2020 RMB'000	2019 RMB'000
Financing activities			
Net proceeds from issuing of corporate bond		–	499,682
Capital injections from non-controlling equity owners of subsidiaries		182,029	212,919
Proceeds from bank loans	21(b)	149,210	216,950
Repayments of bank loans	21(b)	(274,678)	(83,500)
Capital element of lease rentals paid	21(b)	(26,583)	(23,969)
Interest element of lease rentals paid	21(b)	(4,297)	(3,356)
Interest paid on corporate bond	21(b)	(19,000)	–
Other finance costs paid	21(b)	(21,310)	(13,560)
Dividends paid by the Company to equity shareholders	31(b)(ii)	(44,431)	(100,220)
Dividends paid by subsidiaries to non-controlling equity owners		(97,188)	(114,257)
Net cash (used in)/generated from financing activities		(156,248)	590,689
Net (decrease)/increase in cash and cash equivalents		(288,232)	84,115
Cash and cash equivalents at 1 January	21	2,640,314	2,557,524
Effect of foreign exchange rate changes		(480)	(1,325)
Cash and cash equivalents at 31 December	21	2,351,602	2,640,314

The notes on page 111 to 198 form part of these financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in RMB unless otherwise indicated)

1 ORGANISATION

China Isotope & Radiation Corporation (the "Company") was established on 4 December 2007 in the People's Republic of China (the "PRC") as a state-owned enterprise with limited liability. The Company was converted into a joint stock company with limited liability on 6 December 2011(the "Conversion"). China National Nuclear Corporation ("CNNC"), China Institute of Atomic Energy ("CIAE") and Nuclear Power Institute of China ("NPIC") held 51.93%, 26.92% and 21.15% equity interests in the Company, respectively, immediately after the Conversion. On 14 March 2017, the Company issued 39,906,000 ordinary shares to CNNC, five related parties under CNNC, Beijing Aerospace Industry Investment Fund LLP and China Aerospace Investment Co., Ltd. (collectively as "Shareholders before listing") at an aggregated consideration of RMB850,000,000.

On 6 July 2018, the Company issued 79,968,700 H shares with par value of RMB1.00 per share at a price of HKD21.6 per share by way of initial public offering to Hong Kong and overseas investors. On 3 August 2018, the over-allotment option granted by the Company was partially exercised. The Company issued and allotted an aggregate of 100 H shares at HKD21.6 each. After the issuance and allotment of these shares, the registered and issued ordinary shares of the Company increased to 319,874,900 shares with 79,968,800 H shares being listed on The Stock Exchange of Hong Kong Limited (the "Stock Exchange").

2 SIGNIFICANT ACCOUNTING POLICIES

(a) Statement of compliance

These financial statements have been prepared in accordance with all applicable International Financial Reporting Standards ("IFRSs"), which collective term includes all applicable individual International Financial Reporting Standards, International Accounting Standards ("IASs") and Interpretations issued by the International Accounting Standards Board ("IASB") and the applicable disclosure 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. Significant accounting policies adopted by the Group are disclosed below.

The IASB has issued certain amendments to IFRSs that are first effective or available for early adoption for the current accounting period of the Group. Note 2(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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(b) Basis of preparation of the financial statements

The consolidated financial statements for the year ended 31 December 2020 comprise the Company and its subsidiaries (together referred as the "Group") and the Group's interest in associates and joint ventures.

The measurement basis used in the preparation of the financial statements is the historical cost basis except that the equity investments (see Note 2(g)) are stated at their fair value.

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

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

Judgements made by management in the application of IFRSs that have significant effect on the financial statements and major sources of estimation uncertainty are discussed in Note 3.

(c) Changes in accounting policies

The Group has applied the following amendments to IFRSs issued by the IASB to these financial statements for the current accounting period:

- Amendments to IFRS 3, *Definition of a Business*
- Amendments to IFRS 16, *Covid-19-Related Rent Concessions*

None of these developments have had a material effect on how the Group's results and financial position for the current or prior years have been prepared or presented in this financial report. The Group has not applied any new standard or interpretation that is not yet effective for the current accounting period.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(d) Subsidiaries and non-controlling interests

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

An investment in a subsidiary is consolidated into the consolidated financial statements from the date that control commences until the date that control ceases. Intra-group balances, transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full in preparing the consolidated financial statements. Unrealised losses resulting from intra-group transactions are eliminated in the same way as unrealised 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 involving entities not under common control, 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 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 recognised.

When the Group loses control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value and this amount is regarded as the fair value on initial recognition of a financial asset or, when appropriate, the cost on initial recognition of an interest in an associate and a joint venture (see Note 2(e)).

In the Company's statements of financial position, an investment in a subsidiary is stated at cost less impairment losses (see Note 2(l)), unless the investment is classified as held for sale.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(e) Associates and joint ventures

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.

A joint venture is an arrangement whereby the Group or Company and other parties contractually agree to share control of the arrangement, and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements under the equity method, unless it is classified as held for sale. Under the equity method, the investment is initially recorded at cost, adjusted for any excess of the Group's share of the acquisition-date fair values of the investee's identifiable net assets over the cost of the investment (if any). The cost of the investment includes purchase price, other costs directly attributable to the acquisition of the investment, and any direct investment into the associate or joint venture that forms part of Group's equity investment. Thereafter, the investment is adjusted for the post acquisition change in the Group's share of the investee's net assets and any impairment loss relating to the investment (see Notes 2(f) and 2(l)). At each reporting date, the Group assesses whether there is any objective evidence that the investment is impaired Any acquisition-date excess over cost, the Group's share of the post-acquisition, post-tax results of the investees and any impairment losses for the year are recognised in the consolidated statement of profit or loss, whereas the Group's share of the post-acquisition post-tax items of the investees' other comprehensive income is recognised in the consolidated statement of profit or loss and other comprehensive income.

When the Group's share of losses exceeds its interest in the associate or the joint venture, 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 or the joint venture (after applying the ECL model to such other long-term interests where applicable (see Note 2(l)(i)).

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(e) Associates and joint ventures (continued)

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

(f) Goodwill

Goodwill represents the excess of

(i) the aggregate of the fair value of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the Group's previously held equity interest in the acquiree; over

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

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

Goodwill is stated at cost less accumulated impairment losses. Goodwill arising on a business combination is allocated to each cash-generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the combination and is tested annually for impairment (see Note 2(l)).

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

(g) Other investments in equity securities

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(g) Other investments in equity securities (continued)

Equity investments:

An investment in equity securities is classified as FVPL 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 recognised in other comprehensive income. Such elections are made on an instrument-by-instrument basis, but may only be made if the investment meets the definition of equity from the issuer's perspective. Where such an election is made, the amount accumulated in other comprehensive income remains in the fair value reserve (non-recycling) until the investment is disposed of. At the time of disposal, the amount accumulated in the fair value reserve (non-recycling) is transferred to retained earnings. It is not recycled through profit or loss. Dividends from an investment in equity securities, irrespective of whether classified as at FVPL or FVOCI, are recognised in profit or loss as other income in accordance with the policy set out in Note 2(w)(v).

(h) Investment property

Investment property are land and/or buildings which are owned or held under a leasehold interest (see Note 2(k)) to earn rental income and/or for capital appreciation. Investment property are stated at cost less accumulated depreciation and impairment losses (see Note 2(l)). The investment property are depreciated in accordance with the accounting policy set out in Note 2(i). Rental income from investment property are accounted for as described in Note 2(w)(iv).

(i) Other property, plant and equipment

The following items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see Note 2(l)):

– interests in leasehold land and buildings where the Group is the registered owner of the property interest;

– right-of-use assets arising from leases over 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 2(k)).

The cost of self-constructed items of property, plant and equipment includes the cost of materials, direct labour, 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 and borrowing costs (see Note 2(y)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(i) Other property, plant and equipment (continued)

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

Depreciation is calculated to write-off the cost or valuation 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:

Buildings and plants	10 – 45 years
Machinery and equipment	3 – 20 years
Office equipment	3 – 15 years
Motor vehicles and others	1 – 20 years
Leasehold improvement	2 – 20 years
Right-of-use assets	Over the term of lease

Where parts of an item of property, plant and equipment have different useful lives, the cost or valuation 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.

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

(j) Intangible assets (other than goodwill)

Expenditure on research activities is recognised as an expense in the period in which it is incurred. Expenditure on development activities is capitalised if the product or process is technically and commercially feasible and the Group has sufficient resources and the intention to complete development. The expenditure capitalised includes the costs of materials, direct labor, and an appropriate proportion of overheads and borrowing costs, where applicable (see Note 2(y)). Capitalised development costs are stated at cost less accumulated amortisation and impairment losses (see Note 2(l)). Other development expenditure is recognised as an expense in the period in which it is incurred.

Intangible assets that are acquired by the Group are stated at cost less accumulated amortisation (where the estimated useful life is finite) and impairment losses (see Note 2(l)).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(j) Intangible assets (other than goodwill) (continued)

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

Patents and know-how	10 – 20 years
Royalty	10 years
Software and others	3 – 12 years
Customer relationship	7 years

Both the period and method of amortisation are reviewed annually.

(k) Leased assets

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

(i) As a lessee

Where the contract contains lease component(s) and non-lease component(s), the Group has elected 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 recognises a right-of-use asset and a lease liability, except for short-term leases that have a lease term of 12 months or less and leases of low-value assets which, for the Group are primarily laptops and office furniture. When the Group enters into a lease in respect of a low-value asset, the Group decides whether to capitalise the lease on a lease-by-lease basis. The lease payments associated with those leases which are not capitalised are recognised as an expense on a systematic basis over the lease term.

Where the lease is capitalised, the lease liability is initially recognised at the present value of the lease payments payable over the lease term, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, using a relevant incremental borrowing rate. After initial recognition, the lease liability is measured at amortised cost and interest expense is calculated using the effective interest method. 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Leased assets (continued)

(i) As a lessee (continued)

The right-of-use asset recognised when a lease is capitalised is initially measured at cost, which comprises the initial amount of the lease liability plus any lease payments made at or before the commencement date, and any initial direct costs incurred. Where applicable, the cost of the right-of-use assets also includes an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, discounted to their present value, less any lease incentives received. The right-of-use asset is subsequently stated at cost less accumulated depreciation and impairment losses (see Notes 2(i) and 2(l)(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.

The lease liability is also remeasured when there is a change in the scope of a lease or the consideration for a lease that is not originally provided for in the lease contract ("lease modification") that is not accounted for as a separate lease. In this case the lease liability is remeasured based on the revised lease payments and lease term using a revised discount rate at the effective date of the modification. The only exceptions are any rent concessions which arose as a direct consequence of the COVID-19 pandemic and which satisfied the conditions set out in paragraph 46B of IFRS16 Leases. In such cases, the Group took advantage of the practical expedient set out in paragraph 46A of IFRS16 and recongnised the change in consideration as if it were not a lease modification.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(k) Leased assets (continued)

(ii) As a lessor

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

When a contract contains lease and non-lease components, the Group allocates the consideration in the contract to each component on a relative stand-alone selling price basis. The rental income from operating leases is recognised in accordance with Note 2(w)(iv).

When the Group is an intermediate lessor, the sub-leases are classified as a finance lease or as an operating lease with reference to the right-of-use asset arising from the head lease. If the head lease is a short-term lease to which the Group applies the exemption described in Note 2(k)(i), then the Group classifies the sub-lease as an operating lease.

(l) Credit losses and impairment of assets

(i) Credit losses from financial instruments and contract assets

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

– financial assets measured at amortised cost (including cash and cash equivalents, trade and bill receivables and other receivables); and

– contract assets as defined in IFRS15 (see Note 2(n)).

Other financial assets measured at fair value, including equity and debt securities measured at FVPL and equity securities designated at FVOCI (non-recycling) 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).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and contract assets (continued)

Measurement of ECLs (continued)

The expected cash shortfalls are discounted using the following discount rates where the effect of discounting is material:

– fixed-rate financial assets, trade and other receivables: effective interest rate determined at initial recognition or an approximation thereof;

– variable-rate financial assets: current effective interest rate;

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

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

ECLs are measured on either of the following bases:

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

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

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and contract 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 recognised as an impairment gain or loss in profit or loss. The Group recognises an impairment gain or loss for all financial instruments with a corresponding adjustment to their carrying amount through a loss allowance account, except for investments in debt securities that are measured at FVOCI (recycling), for which the loss allowance is recognised in other comprehensive income and accumulated in the fair value reserve (recycling).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(i) Credit losses from financial instruments and contract assets (continued)

Basis of calculation of interest income

Interest income recognised in accordance with Note 2(w)(vi) is calculated based on the gross carrying amount of the financial asset unless the financial asset is credit-impaired, in which case interest income is calculated based on the amortised cost (i.e. the gross carrying amount less loss allowance) of the financial asset.

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

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

– significant financial difficulties of the debtor;

– a breach of contract, such as a default or 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 lease receivable or contract asset is written off (either partially or in full) to the extent that there is no realistic prospect of recovery. This is generally the case when the Group determines that the debtor does not have assets or sources of income that could generate sufficient cash flows to repay the amounts subject to the write-off.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(ii) Credit losses from financial guarantees issued

Financial guarantees are contracts that require the issuer (i.e. the guarantor) to make specified payments to reimburse the beneficiary of the guarantee (the "holder") for a loss the holder incurs because a specified debtor fails to make payment when due in accordance with the terms of a debt instrument.

Financial guarantees issued are initially recognised within "trade and other payables" at fair value, which is determined by reference to fees charged in an arm's length transaction for similar services, when such information is obtainable, or to interest rate differentials, by comparing the actual rates charged by lenders when the guarantee is made available with the estimated rates that lenders would have charged, had the guarantees not been available, where reliable estimates of such information can be made. Where consideration is received or receivable for the issuance of the guarantee, the consideration is recognised in accordance with the Group's policies applicable to that category of asset. Where no such consideration is received or receivable, an immediate expense is recognised in profit or loss.

Subsequent to initial recognition, the amount initially recognised as deferred income is amortised in profit or loss over the term of the guarantee as income from financial guarantees issued.

The Group monitors the risk that the specified debtor will default on the contract and recognises a provision when ECLs on the financial guarantees are determined to be higher than the amount carried in "trade and other payables" in respect of the guarantees (i.e. the amount initially recognised, less accumulated amortisation).

To determine ECLs, the Group considers changes in the risk of default of the specified debtor since the issuance of the guarantee. A 12-month ECL is measured unless the risk that the specified debtor will default has increased significantly since the guarantee is issued, in which case a lifetime ECL is measured. The same definition of default and the same assessment of significant increase in credit risk as described in Note 2(l)(i) apply.

As the Group is required to make payments only in the event of a default by the specified debtor in accordance with the terms of the instrument that is guaranteed, an ECL is estimated based on the expected payments to reimburse the holder for a credit loss that it incurs less any amount that the Group expects to receive from the holder of the guarantee, the specified debtor or any other party. The amount is then discounted using the current risk-free rate adjusted for risks specific to the cash flows.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets

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

– property, plant and equipment, including right-of-use assets (other than property carried at revalued amounts);

– intangible assets;

– goodwill; and

– investments in subsidiaries, associates and joint ventures in the Company's statement of financial position.

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

– Calculation of recoverable amount

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

– Recognition of impairment losses

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(l) Credit losses and impairment of assets (continued)

(iii) Impairment of other non-current assets (continued)

– Reversals of impairment losses

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

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

(iv) Interim financial reporting and impairment

Under the Rules Governing the Listing of Securities on the Stock Exchange, the Group is required to prepare an interim financial report in compliance with IAS 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 2(l)(i) and (ii)).

Impairment losses recognised 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 recognised had the impairment been assessed only at the end of the financial year to which the interim period relates.

(m) Inventories and other 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 realisable value.

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(m) Inventories and other contract costs (continued)

(i) Inventories (continued)

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

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

(ii) Other contract costs

Other contract costs are either the incremental costs of obtaining a contract with a customer or the costs to fulfil a contract with a customer which are not capitalised as inventory (see Note 2(m)(i)), property, plant and equipment (see Note 2(i)) or intangible assets (see Note 2(j)).

Incremental costs of obtaining a contract are those costs that the Group incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained e.g. an incremental sales commission. Incremental costs of obtaining a contract are capitalised when incurred if the costs relate to revenue which will be recognised in a future reporting period and the costs are expected to be recovered. Other costs of obtaining a contract are expensed when incurred.

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

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

Amortisation of capitalised contract costs is charged to profit or loss when the revenue to which the asset relates is recognised. The accounting policy for revenue recognition is set out in Note 2(w).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(n) Contract assets and contract liabilities

A contract asset is recognised when the Group recognises revenue (see Note 2(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 2(l)(i) and are reclassified to receivables when the right to the consideration has become unconditional (see Note 2(o)).

A contract liability is recognised when the customer pays consideration before the Group recognises the related revenue (see Note 2(w)). A contract liability would also be recognised if the Group has an unconditional right to receive consideration before the Group recognises the related revenue. In such cases, a corresponding receivable would also be recognised (see Note 2(o)).

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

When the contract includes a significant financing component, the contract balance includes interest accrued under the effective interest method (see Note 2(w)).

(o) Trade and other receivables

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

Receivables are stated at amortised cost using the effective interest method less allowance for credit losses (see Note 2(l)(i)).

(p) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value, having been within three months of maturity at acquisition. Cash and cash equivalents are assessed for ECL in accordance with the policy set out in Note 2(l)(i).

(q) Trade and other payables

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(r) Interest-bearing borrowings

Interest-bearing borrowings are measured initially at fair value less transaction costs. Subsequent to initial recognition, interest-bearing borrowings are stated at amortised cost using the effective interest method. Interest expense is recognised in accordance with the Group's accounting policy for borrowing costs (see Note 2(y)).

(s) Employee benefits

(i) Short-term employee benefits and contributions to defined contribution retirement plans

Salaries, annual bonuses, paid annual leave, contributions to defined contribution retirement plans and the cost of non-monetary benefits 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 benefit retirement plan obligations

The Group's net obligation in respect of defined benefit retirement plans is calculated separately for each plan by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine the present value and the fair value of any plan assets is deducted. The calculation is performed by a qualified actuary using the projected unit credit method. When the calculation results in a benefit to the Group, the recognised asset is limited to the present value of economic benefits available in the form of any future refunds from the plan or reductions in future contributions to the plan.

Service cost and net interest expense (income) on the net defined benefit liability (asset) are recognised in profit or loss and allocated to "administrative expenses". Current service cost is measured as the increase in the present value of the defined benefit obligation resulting from employee service in the current period. When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised. Net interest expense (income) for the period is determined by applying the discount rate used to measure the defined benefit obligation at the beginning of the reporting period to the net defined benefit liability (asset). The discount rate is the yield at the end of the reporting period on high quality corporate bonds that have maturity dates approximating the terms of the Group's obligations.

When the benefits of a plan are changed, or when a plan is curtailed, current service cost for the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognised as an expense in profit or loss at the earlier of when the plan amendment or curtailment occurs and when related restructuring costs or termination benefits are recognised.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(s) Employee benefits (continued)

(ii) Defined benefit retirement plan obligations (continued)

Remeasurements arising from defined benefit retirement plans are recognised in other comprehensive income and reflected immediately in retained earnings. Remeasurements comprise actuarial gains and losses, the return on plan assets (excluding amounts included in net interest on the net defined benefit liability (asset)) and any change in the effect of the asset ceiling (excluding amounts included in net interest on the net defined benefit liability (asset)).

(iii) Cash-settled share-based payments arrangement

Where the employees have to meet vesting conditions before becoming unconditionally entitled to the options, the total estimated fair value of the options is spread over the vesting period, taking into account the probability that the options will vest.

During the vesting period, the number of share options that is expected to vest is reviewed. Any resulting adjustment to the cumulative fair value recognised in prior years is charged/credited to profit or loss for the year of the review. On vesting date, the amount recognised as an expense is adjusted to reflect the actual number of options that vest.

(iv) Termination benefits

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

(t) Income tax

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

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(t) Income tax (continued)

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

The limited exceptions to recognition of deferred tax assets and liabilities are those temporary differences arising from goodwill not deductible for tax purpose, 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 recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the 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 utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it comes probable that sufficient taxable profits will be available.

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(t) 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 Company or 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 Company or the Group intends either to settle on a net basis, or to realise 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 realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

(u) Provisions, contingent liabilities and onerous contracts

(i) Provisions and contingent liabilities

Provisions are recognised for liabilities of uncertain timing or amount when the Company or 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.

(ii) Onerous contracts

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(v) Obligations for reclamation

The Group's obligations for reclamation consist of estimated expenditures for retirement of its radioactive production facilities in accordance with the relevant rules and regulations in the PRC. The Group estimates its liabilities for reclamation based on detailed calculations of the amount and timing of the future expenditures to perform the required work. Estimated expenditures have taken into account of inflation, then discounted at a discount rate that reflects current market assessments of the time value of money and the risks specific to the liability such that the amount of provision reflects the present value of the expenditures expected to be required to settle the obligation. The Group records a corresponding asset associated with the liability for reclamation of radioactive production facilities, which is included in property, plant and equipment. The obligation and corresponding asset are recognised in the period in which the liability is incurred. The asset is depreciated using the straight-line method over the expected useful life of radioactive production facilities and the liability is accreted to the projected spending date. As changes in estimates occur (such as changes in estimated costs or changes in timing of the performance of reclamation activities), the revisions to the obligation and the corresponding asset are remeasured at the appropriate discount rate and any gain or loss on remeasurement is recognised in profit or loss.

(w) Revenue and other income

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

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 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 recognised when the customer takes possession of and accepts the products. If the products are a partial fulfilment of a contract covering other goods and/or services, then the amount of revenue recognised is an appropriate proportion of the total transaction price under the contract, allocated between all the goods and services promised under the contract on a relative stand-alone selling price basis.

(ii) Construction contracts

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

When the outcome of a construction contract can be reasonably measured, revenue from the contract is recognised progressively over time using the cost-to-cost method, i.e. based on the proportion of the actual costs incurred relative to the estimated total costs.

The likelihood of the Group earning contractual bonuses for early completion or suffering contractual penalties for late completion are taken into account in making these estimates, such that revenue is only recognised to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognised will not occur.

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

If at any time the costs to complete the contract are estimated to exceed the remaining amount of the consideration under the contract, then a provision is recognised in accordance with the policy set out in Note 2(u)(ii).

(iii) Rendering of services

Revenue from irradiation services and other services rendered is recognised upon the delivery or performance of the services.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(w) Revenue and other income (continued)

(iv) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal installments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Contingent rentals are recognised as income in the accounting period in which they are earned.

(v) Dividends

– Dividend income from unlisted investments is recognised when the shareholder's right to receive payment is established.

– Dividend income from listed investments is recognised when the share price of the investment goes ex-dividend.

(vi) Interest income

Interest income is recognised as it accrues under the effective interest method using the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to the gross carrying amount of the financial asset. For financial assets measured at amortised cost or FVOCI (recycling) that are not credit-impaired, the effective interest rate is applied to the gross carrying amount of the asset. For credit-impaired financial assets, the effective interest rate is applied to the amortised cost (i.e. gross carrying amount net of loss allowance) of the asset (see Note 2(l)(i)).

(vii) Government grants

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(x) Translation of foreign currencies

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

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.

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 are translated into RMB at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised 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 recognised.

(y) Borrowing costs

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

The capitalisation of borrowing costs as part of the cost of a qualifying asset commences when expenditure for the asset is being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use or sale are in progress. Capitalisation of borrowing costs is suspended or ceases when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are interrupted or complete.

(z) Related parties

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

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

2 SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

(z) Related parties (continued)

(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.

(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.

(aa) Segment reporting

Operating segments, and the amounts of each segment item reported in the consolidated 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 in the consolidated financial statements 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

3 ACCOUNTING JUDGMENTS AND ESTIMATES

Note 32(d) contains information about the assumptions and their risk factors relating to fair value of financial instruments. Other key sources of estimation uncertainty are as follows:

(a) Depreciation

Property, plant and equipment and investment property are depreciated on a straight-line basis over their estimated useful lives, after taking into account the estimated residual values, if any. The Group reviews the estimated useful lives and residual values, if any, of the property, plant and equipment and investment property regularly in order to determine the amount of depreciation expense to be recorded during any reporting period. The determination of useful lives and residual values, if any, are based on the historical experience with similar assets and taking into account anticipated technological changes. The depreciation expense for future periods is adjusted if there are significant changes from previous estimates.

(b) Recognition of deferred tax assets

Deferred tax assets in respect of unused tax losses and deductible temporary differences are recognised and measured based on the expected manner of realisation or settlement of the carrying amount of the assets, using tax rates enacted or substantively enacted at the end of reporting period. In determining the carrying amounts of deferred assets, expected taxable profits are estimated which involves a number of assumptions relating to the operating environment of the Group and require a significant level of judgment exercised by the directors. Any change in such assumptions and judgment would affect the carrying amounts of deferred tax assets to be recognised and hence the net profit in future years.

(c) Obligation for reclamation

The estimation of the liabilities for reclamation and disposal of the radioactive production facilities involves the estimates of the amount and timing of future expenditures as well as rate of inflation and the discount rate used for reflecting current market assessments of the time value of money and the risks specific to the liability. The Group considers the factors including future production plan, useful life of relevant assets, and level of radioactivity to determine the scope, amount and timing of reclamation and disposal of the radioactive production facilities to be performed. Determination of the effect of these factors involves judgments from the Group and the estimated liabilities may turn out to be different from the actual expenditure to be incurred. The discount rate used by the Group may also be altered to reflect the changes in the market assessments of the time value of money and the risks specific to the liability, such as change of the borrowing rate and inflation rate in the market. As changes in estimates occur (such as changes in estimated costs, or changes in timing of the performance of reclamation activities), the revisions to the obligation will be remeasured at the appropriate discount rate and any gain or loss on remeasurement is recognised in profit or loss.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

4 REVENUE AND SEGMENT REPORTING

(a) Revenue

The Group is principally engaged in research, development, manufacturing and sale of a broad range of pharmaceuticals and radioactive source products, also design, manufacturing, construction and installation of gamma ray irradiation facilities, provision of irradiation service for sterilisation purpose, and sale of radiation therapy equipment as well as independent clinical laboratory services.

(i) Disaggregation of revenue

Disaggregation of revenue from contracts with customers by major products or service lines is as follows:

	2020 **RMB'000**	2019 RMB'000
Revenue from contracts with customers within the scope of IFRS 15		
Disaggregated by major products of service lines		
– sales of pharmaceuticals	**2,970,402**	3,300,985
– sales of radioactive source products	**412,300**	331,838
– sales of radiation therapy equipment	**136,366**	72,492
– irradiation services	**96,351**	74,946
– technical services	**142,927**	91,908
– revenue from construction contracts	**6,271**	10,067
– independent clinical laboratory services	**129,375**	74,262
– others	**380,191**	32,406
	4,274,183	3,988,904

Disaggregation of revenue from contracts with customers by the timing of revenue recognition is disclosed in Note 4(b).

The Group's customer base is diversified and there is no customer with whom transactions have exceeded 10% of the Group's revenue in 2020 and 2019. Details of the concentration of credit risk arising from the Group's customers are set out in Note 32(a).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

4 REVENUE AND SEGMENT REPORTING (CONTINUED)

(a) Revenue (continued)

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

As at 31 December 2020, the aggregated amount of the transaction price allocated to the remaining performance obligations under the Group's existing contracts is RMB10,746,000 (2019: RMB463,500). This amount mainly represents revenue expected to be recognised in the future from construction contracts entered into by the customers with the Group. The Group will recognise the expected revenue in future when or as the work is completed, which is expected to occur within the next 12 months.

The Group has applied the practical expedient in paragraph 121 of IFRS 15 to its sales contracts such that the above information does not include information about revenue that the Group will be entitled to when it satisfies the remaining performance obligations under the sales contracts that had an original expected duration of one year or less.

The above amount also does not include any amounts of completion bonuses that the Group may earn in the future by meeting the conditions set out in the Group's construction contracts with customers, unless at the reporting date it is highly probable that the Group will satisfy the conditions for earning those bonuses.

(b) Segment reporting

The Group manages its businesses by divisions, which are mainly organised by business lines (products and services). 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 resource allocation and performance assessment, the Group has presented the following five reportable segments. No operating segments have been aggregated to form the following reportable segments.

- Pharmaceuticals: manufacturing and sale of a range of imaging diagnostic and therapeutic radio pharmaceuticals imaging, UBT diagnostic kits and test analyzers, in vitro immunoassay diagnostic reagents and kits and other products.

- Radioactive source products: sale of medical and industrial radioactive source products and technical services.

- Irradiation: provision of irradiation services to manufacturers of medical facilities, pharmaceuticals, cosmetics and food in the PRC for sterilization purposes, and also design, manufacturing and installation of gamma ray irradiation facilities to irradiation service providers.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

4 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

- Radiation therapy equipments and related services: sale of radiation therapy equipments and provision of related maintenance services.

- Independent clinical laboratory services and other businesses: provision of independent clinical laboratory services for customers, sale of radiation therapy equipment and other miscellaneous services.

(i) Segment results, assets and liabilities

For the purposes of assessing segment performance and allocating resources among segments, the Group's senior executive management monitors the results attributable to each reportable segment on the following basis:

Revenue and expenses are allocated to the reportable segments with reference to revenue generated by those segments and the expenses incurred by those segments. The measure used for reporting segment profit is gross profit. The Group's other income and expense items, such as other income, selling and distribution expenses, administrative and other operating expenses, and assets and liabilities, are not measured under individual segments. Accordingly, neither information on segment assets and liabilities nor information concerning capital expenditure, interest income and interest expenses is presented.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

4 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(i) Segment results, assets and liabilities (continued)

Disaggregation of revenue from contracts with customers by timing of revenue recognition, as well as information regarding the Group's reportable segments as provided to the Group's most senior executive management for the purposes of resource allocation and assessment of segment performance for the years ended 31 December 2020 and 2019 is set out below.

	Year ended 31 December 2020					
	Pharmaceuticals RMB'000	Radioactive source products RMB'000	Irradiation RMB'000	Radiation therapy equipments and related services RMB'000	Independent clinical medical and laboratory services and other businesses RMB'000	Total RMB'000
Disaggregated by timing of revenue recognition						
Point in time	2,979,582	452,058	96,351	136,366	509,566	4,173,923
Over time	–	–	6,271	93,989	–	100,260
Revenue from external customers	2,979,582	452,058	102,622	230,355	509,566	4,274,183
Inter-segment revenue	614	19,307	59	3,493	1,777	25,250
Reportable segment revenue	2,980,196	471,365	102,681	233,848	511,343	4,299,433
Reportable segment profit (gross profit)	2,159,867	214,106	49,346	71,708	128,888	2,623,915

	Year ended 31 December 2019					
	Pharmaceuticals RMB'000	Radioactive source products RMB'000	Irradiation RMB'000	Radiation therapy equipments and related services RMB'000	Independent clinical medical and laboratory services and other businesses RMB'000	Total RMB'000
Disaggregated by timing of revenue recognition						
Point in time	3,311,097	379,121	74,946	72,492	106,668	3,944,324
Over time	–	–	10,067	34,513	–	44,580
Revenue from external customers	3,311,097	379,121	85,013	107,005	106,668	3,988,904
Inter-segment revenue	3,231	22,574	–	–	13,497	39,302
Reportable segment revenue	3,314,328	401,695	85,013	107,005	120,165	4,028,206
Reportable segment profit (gross profit)	2,545,571	185,414	32,925	26,828	43,603	2,834,341

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

4 REVENUE AND SEGMENT REPORTING (CONTINUED)

(b) Segment reporting (continued)

(ii) Reconciliations of reportable segment profit (gross profit)

	2020 **RMB'000**	2019 RMB'000
Reportable segment profit (gross profit)	**2,623,915**	2,834,341
Elimination of inter-segment profit (gross profit)	**(7,928)**	(5,014)
Consolidated gross profit	**2,615,987**	2,829,327

(iii) Geographic information

All of the Group's operations are carried out and most of the Group's customers are located in the PRC. The Group's non-current assets, including property, plant and equipment, investment property, lease prepayments and intangible assets are all located or allocated to operations located in the PRC.

5 OTHER INCOME

	2020 **RMB'000**	2019 RMB'000
Interest income	**39,158**	37,565
Government grants	**23,634**	7,967
Dividend income	**7,792**	10,162
Rental income from operating leases	**6,555**	5,872
Net foreign exchange (loss)/gain	**(1,710)**	2,317
Net loss on disposal of property, plant and equipment	**(1,113)**	(977)
Others	**4,978**	5,805
	79,294	68,711

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

6 PROFIT BEFORE TAXATION

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

(a) Finance costs

	2020 RMB'000	2019 RMB'000
Interest on bank loans	21,374	14,341
Interest on corporate bond	19,102	–
Interest on lease liabilities	4,297	3,490
Less: interest expense capitalised into construction in progress	(5,619)	(5,849)
	39,154	11,982
Interest accretion on reclamation obligations, net	3,963	3,738
Interest cost on defined benefit retirement plans (Note 27)	1,776	1,521
Interest cost on long-term payables	1,763	1,517
	46,656	18,758

The borrowing costs have been capitalised a rate of 4.75% per annum (2019: 4.99%).

(b) Staff costs

	2020 RMB'000	2019 RMB'000
Salaries, wages and other benefits	472,865	462,823
Cash settled share-based payment expenses (Note 28)	12,738	–
Contributions to defined contribution retirement plans (Note 27(b))	6,090	56,687
Expenses recognised in respect of defined benefit retirement plans (Note 27(a))	1,049	937
	492,742	520,447

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

6 PROFIT BEFORE TAXATION (CONTINUED)

(c) Other items

	2020 RMB'000	2019 RMB'000
Depreciation#		
– property, plant and equipment (Note 11)	151,808	121,755
– investment property	1,241	1,516
Amortisation#		
– intangible assets (Note 12)	18,776	8,412
Recognise/(reverse) impairment losses		
– trade and bill receivables (Note 32(a))	19,565	(19,718)
– prepayments, deposits and other receivables	2,608	393
– property, plant and equipment (Note 11)	4,152	3,848
Auditors' remuneration		
– audit services	3,418	3,123
Research and development costs (other than amortisation costs)	148,161	102,717
Increase in provisions for reclamation obligations (Note 30)	4,347	2,391
Cost of inventories # (Note 18(b))	1,477,564	996,054

Cost of inventories includes RMB310,985,000 (2019: RMB286,551,000) relating to staff costs, depreciation and amortisation expenses, which are also included in the respective total amounts disclosed separately above or in Note 6(b) for each of these types of expenses.

7 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS

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

	2020 RMB'000	2019 RMB'000
Current tax		
Provision for the year	75,382	159,407
(Over)/under provision in respect of prior years	(18,654)	4,983
	56,728	164,390
Deferred tax		
Origination and reversal of temporary differences	63,912	(55,508)
	120,640	108,882

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

7 INCOME TAX IN THE CONSOLIDATED STATEMENT OF PROFIT OR LOSS (CONTINUED)

(b) Reconciliation between tax expense and accounting profit at applicable tax rates:

	2020	2019
	RMB'000	RMB'000
Profit before taxation	**596,163**	733,807
National tax on profit before taxation at PRC statutory tax rate	**149,041**	183,452
Tax effect of non-deductible expenses	**7,507**	7,723
Tax effect of non-taxable income	**(6,039)**	(10,533)
Tax effect of unused tax losses and temporary differences not recognised	**27,318**	22,432
Tax concessions (Note (ii))	**(50,614)**	(80,822)
Tax effect of unused tax losses and temporary differences not recognised in previous year but utilised in current year	**(4,134)**	(975)
(Over)/under provision in respect of prior years	**(18,654)**	4,983
Tax effect of changes in tax rate	**17,041**	(15,464)
Others	**(826)**	(1,914)
Actual tax expense	**120,640**	108,882

Notes:

(i) The Company and its subsidiaries established in the PRC are subject to PRC Corporate Income Tax rate of 25% (2019: 25%).

(ii) Certain subsidiaries of the Group are approved High and New Technology Enterprises and subject to a preferential PRC Corporate Income Tax rate of 15% during the approved period, subject to fulfillment of recognition criteria.

8 EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit attributable to ordinary equity shareholders of the Company of RMB213,582,000 (2019: RMB329,030,000) and the weighted average of 319,874,900 ordinary shares (2019: 319,874,900 ordinary shares), calculated as follows:

Weighted average number of ordinary shares

	2020	2019
Ordinary shares at 1 January	**319,874,900**	319,874,900
Effect of issue of ordinary shares	**–**	–
Weighted average number of ordinary shares at 31 December	**319,874,900**	319,874,900

The Company did not have any potential dilutive shares in existence during the years ended 31 December 2020 and 2019. Accordingly, diluted earnings per share is the same as basic earnings per share.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

9 DIRECTORS' AND SUPERVISORS' EMOLUMENTS

Directors' and supervisors' 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 31 December 2020					
	Directors' and supervisors' fees RMB'000	Salaries, allowances and benefits in kind RMB'000	Discretionary bonuses RMB'000	Retirement scheme contributions RMB'000	Cash settled share-based payment expenses RMB'000	Total RMB'000
Executive directors						
Mr. Meng Yanbin	–	–	762	18	182	962
Mr. Wu Jian	–	419	774	61	182	1,436
Mr. Du Jin	–	402	535	55	164	1,156
Non-executive directors						
Ms. Liu Xiuhong (appointed on 30 December 2020)	–	–	–	–	–	–
Mr. Chen Zongyu (resigned on 30 November 2020)	–	–	–	–	–	–
Mr. Zhou Liulai	–	–	–	–	–	–
Mr. Chen Shoulei	–	–	–	–	–	–
Ms. Chang Jinyu	–	–	–	–	–	–
Independent non-executive directors						
Mr. Meng Yan	150	–	–	–	–	150
Mr. Hui Wan Fai	161	–	–	–	–	161
Mr. Guo Qingliang	–	–	–	–	–	–
Mr. Tian Jiahe	–	–	–	–	–	–
Supervisors						
Mr. Li Zhenhua (appointed on 26 March 2020)	–	190	108	16	–	314
Mr. Zhang Jian (appointed on 26 March 2020)	–	199	103	18	–	320
Mr. Li Guoxiang (resigned on 26 March 2020)	–	79	–	10	–	89
Mr. Zhang Yiming (resigned on 26 March 2020)	–	103	–	9	–	112
Mr. Zhang Qingjun	–	–	–	–	–	–
Mr. Liu Zhonglin	–	–	–	–	–	–
Mr. Zhang Guoping	–	–	–	–	–	–
Total	311	1,392	2,282	187	528	4,700

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

9 DIRECTORS' AND SUPERVISORS' EMOLUMENTS (CONTINUED)

	Year ended 31 December 2019				
	Directors' and supervisors' 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. Meng Yanbin	–	294	603	83	980
Mr. Wu Jian	–	294	603	83	980
Mr. Du Jin	–	267	548	79	894
Non-executive directors					
Mr. Wang Guoguang (resigned on 28 March 2019)	–	–	–	–	–
Mr. Zhou Liulai	–	–	–	–	–
Mr. Luo Qi (resigned on 28 March 2019)	–	–	–	–	–
Mr. Chen Shoulei (appointed on 28 June 2019)	–	–	–	–	–
Mr. Chen Zongyu (appointed on 28 June 2019)	–	–	–	–	–
Ms. Chang Jinyu (appointed on 30 December 2019)	–	–	–	–	–
Independent non-executive directors					
Mr. Meng Yan	150	–	–	–	150
Mr. Guo Qingliang	–	–	–	–	–
Mr. Hui Wan Fai	159	–	–	–	159
Mr. Tian Jiahe (appointed on 30 December 2019)	–	–	–	–	–
Supervisors					
Mr. Li Guoxiang	–	315	265	77	657
Mr. Zhang Yiming	–	261	239	74	574
Mr. Zhang Qingjun	–	–	–	–	–
Mr. Liu Zhonglin	–	–	–	–	–
Mr. Zhang Guoping (appointed on 28 June 2019)	–	–	–	–	–
Total	309	1,431	2,258	396	4,394

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

10 INDIVIDUALS WITH HIGHEST EMOLUMENTS

Of the five individuals with the highest emoluments, 2020: two (2019: two) are directors whose emoluments are disclosed in Note 9. The aggregate of the emoluments in respect of the other 2020: three (2019: three) individuals are as follows:

	2020 RMB'000	2019 RMB'000
Salaries and other emoluments	**1,087**	1,120
Retirement scheme contributions	**161**	182
Discretionary bonuses	**1,669**	1,407
Cash settled share-based payment expenses	**492**	–
Total	**3,409**	2,709

The emoluments of the individuals with the highest emoluments are within the following band:

	2020 Number of individuals	2019 Number of individuals
Nil to HKD1,000,000	**–**	3
HKD1,000,000 – HKD1,500,000	**3**	–

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

11 PROPERTY, PLANT AND EQUIPMENT

	Buildings and plants RMB'000	Right-of-use assets RMB'000	Machinery and equipment RMB'000	Office equipment RMB'000	Motor vehicles and others RMB'000	Leasehold Improvement RMB'000	Construction in progress RMB'000	Total RMB'000
Cost:								
At 1 January 2019	266,510	162,694	563,582	63,034	112,642	72,704	867,794	2,108,960
Effect on acquisition of subsidiaries	1,871	475	1,168	392	345	–	–	4,251
Additions	80,650	82,182	83,246	6,945	9,317	13,427	371,247	647,014
Disposals	(538)	–	(8,406)	(6,906)	(1,567)	(30,122)	(14,337)	(61,876)
Transfer out to investment property	–	–	–	–	–	–	(9,415)	(9,415)
Transfer in from/(to) construction in progress	424,541	–	48,639	14,314	1,429	13,261	(502,184)	–
At 31 December 2019	773,034	245,351	688,229	77,779	122,166	69,270	713,105	2,688,934
At 1 January 2020	**773,034**	**245,351**	**688,229**	**77,779**	**122,166**	**69,270**	**713,105**	**2,688,934**
Additions	**1,993**	**40,852**	**71,896**	**9,763**	**14,573**	**6,274**	**246,574**	**391,925**
Disposals	**(45)**	**(16,605)**	**(27,534)**	**(2,608)**	**(3,947)**	**–**	**–**	**(50,739)**
Transfer out to investment property	**459**	**–**	**–**	**–**	**–**	**–**	**–**	**459**
Transfer in from/(to) construction in progress	**94,203**	**–**	**137,851**	**1,518**	**691**	**8,205**	**(242,468)**	**–**
At 31 December 2020	**869,644**	**269,598**	**870,442**	**86,452**	**133,483**	**83,749**	**717,211**	**3,030,579**

11 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

	Buildings and plants RMB'000	Right-of-use assets RMB'000	Machinery and equipment RMB'000	Office equipment RMB'000	Motor vehicles and others RMB'000	Leasehold Improvement RMB'000	Construction in progress RMB'000	Total RMB'000
Accumulated depreciation and impairment losses:								
At 1 January 2019	(74,894)	(10,901)	(379,105)	(38,025)	(54,011)	(60,433)	–	(617,369)
Charge for the year	(35,006)	(27,650)	(45,067)	(3,394)	(4,378)	(6,260)	–	(121,755)
Impairment loss	–	–	(3,698)	(150)	–	–	–	(3,848)
Written back on disposals	475	–	6,432	2,600	1,446	30,122	–	41,075
At 31 December 2019	(109,425)	(38,551)	(421,438)	(38,969)	(56,943)	(36,571)	–	(701,897)
At 1 January 2020	**(109,425)**	**(38,551)**	**(421,438)**	**(38,969)**	**(56,943)**	**(36,571)**	**–**	**(701,897)**
Charge for the year	**(30,395)**	**(30,080)**	**(55,409)**	**(9,576)**	**(17,274)**	**(9,074)**	**–**	**(151,808)**
Impairment loss	**(4,148)**	**–**	**–**	**–**	**(4)**	**–**	**–**	**(4,152)**
Written back on disposals	**27**	**8,067**	**23,949**	**2,492**	**2,893**	**–**	**–**	**37,428**
At 31 December 2020	**(143,941)**	**(60,564)**	**(452,898)**	**(46,053)**	**(71,328)**	**(45,645)**	**–**	**(820,429)**
Net book value:								
At 31 December 2020	**725,703**	**209,034**	**417,544**	**40,399**	**62,155**	**38,104**	**717,211**	**2,210,150**
At 31 December 2019	663,609	206,800	266,791	38,810	65,223	32,699	713,105	1,987,037

The Group's property, plant and buildings are all allocated in the PRC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

11 PROPERTY, PLANT AND EQUIPMENT (CONTINUED)

Notes:

(i) The analysis of the net book value of right-of-use assets by class of underlying asset is as follows:

	At 31 December 2020 RMB'000	At 31 December 2019 RMB'000
Property leased for own use, carried at depreciation cost:		
– ownership interests in leasehold land held for own use, with remaining lease terms between 10 and 50 years	**124,116**	121,211
– buildings and plants	**44,855**	62,349
– equipment and others	**40,063**	23,240
	209,034	206,800

During the year, additions to right-of-use assets were RMB40,852,000 (2019: RMB82,182,000). This amount included the purchase of leasehold equipment of RMB22,036,000 (2019: RMB25,780,000), and the remainder primarily related to buildings and plants.

(ii) The analysis of expense items in relation to leases recognised in profit or loss are as follows:

	2020 RMB'000	2019 RMB'000
Depreciation charge of right of use assets by class of underlying assets:		
– ownership interests in leasehold land held for own use	**3,304**	3,251
– buildings and plants	**24,039**	19,751
– equipment and others	**2,737**	4,648
	30,080	27,650
Interest on lease liabilities (Note 6(a))	**4,297**	3,490
Expenses relating to short-term leases	**3,213**	1,400

Details of total cash outflow for leases, the maturity analysis of lease liabilities and the future cash outflows arising from lease that are not yet commenced are set out in Note 21(c), Note 32(b) and Note 26, respectively.

(iii) Impairment loss

As at 31 December 2020, management identified indications that a few of the irradiation facilities may be impaired and determined recoverable amount of those assets on the basis of the fair value less costs of disposal. Accordingly, impairment loss of RMB4,152,000 on the Group's property, plant and equipment were recognised in "administrative expense". The fair value on which the recoverable amount is based on replacement cost approach and categorised into level 3.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

12 INTANGIBLE ASSETS

	Patents and know-how RMB'000	Royalty RMB'000	Software and others RMB'000	Customer relationship RMB'000	Total RMB'000
Cost:					
At 1 January 2019	36,073	9,480	18,909	–	64,462
Effect on acquisition of subsidiaries	4,987	–	3,550	23,300	31,837
Additions	31,367	–	4,662	–	36,029
At 31 December 2019	72,427	9,480	27,121	23,300	132,328
At 1 January 2020	**72,427**	**9,480**	**27,121**	**23,300**	**132,328**
Additions	**51,132**	**–**	**7,625**	**–**	**58,757**
At 31 December 2020	**123,559**	**9,480**	**34,746**	**23,300**	**191,085**
Accumulated amortisation:					
At 1 January 2019	(6,177)	(3,694)	(5,663)	–	(15,534)
Charge for the year	(1,106)	(798)	(3,734)	(2,774)	(8,412)
At 31 December 2019	(7,283)	(4,492)	(9,397)	(2,774)	(23,946)
At 1 January 2020	**(7,283)**	**(4,492)**	**(9,397)**	**(2,774)**	**(23,946)**
Charge for the year	**(10,064)**	**(798)**	**(4,863)**	**(3,051)**	**(18,776)**
At 31 December 2020	**(17,347)**	**(5,290)**	**(14,260)**	**(5,825)**	**(42,722)**
Net book value:					
At 31 December 2020	**106,212**	**4,190**	**20,486**	**17,475**	**148,363**
At 31 December 2019	65,144	4,988	17,724	20,526	108,382

The amortisation charges are included in "cost of sales" in the consolidated statement of profit or loss.

13 INVESTMENTS IN SUBSIDIARIES

	2020 RMB'000	2019 RMB'000
Unlisted shares, at cost	**1,150,550**	1,106,320
Listed shares, at cost	**606,085**	146,085
	1,756,635	1,252,405
Less: impairment loss	**3,700**	3,700
	1,752,935	1,248,705

The following list contains only the particulars of subsidiaries as at 31 December 2020 which principally affected the results, assets or liabilities of the Group.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Name of the company	Place of establishment	Issued and fully paid-up capital RMB	Proportion of ownership interest			Principal activities
			The Group's effective interest	Held by the Company	Held by subsidiaries	
Beijing North Institute of Biological Technology Co., Ltd. 北京北方生物技術研究所有限公司	The PRC	69,305,800	100%	100%	–	Production and sale of bio-pharmaceuticals
Beijing Clae-riar Rediosotope Technique Co., Ltd. (Note (ii)) 北京雙原同位素技術有限公司	The PRC	11,000,000	34.75%	–	50%	Production and sale of radioactive sources
Shanghai Yuanzi Kexing 上海原子科興藥業有限公司	The PRC	84,320,000	48.64%	–	70%	Sale of radioactive medicine
Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd. 深圳市中核海得威生物科技有限公司	The PRC	200,000,000	48.00%	34.10%	20%	Production and sale of bio-pharmaceuticals
HTA (Guangzhou) Isotope Pharmaceutical Co., Ltd. 廣州市原子高科同位素醫藥有限公司	The PRC	16,800,000	55.59%	–	80%	Production and sale of radioactive medicine
HTA Co., Ltd. (Note (iii)) 原子高科股份有限公司	The PRC	161,784,136	69.49%	69.49%	–	Application of nuclear technology
Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd. 安徽養和醫療器械設備有限公司	The PRC	7,750,000	48.00%	–	100%	Medical diagnostic equipment manufacturing
Chengdu Gaotong Isotope Co., Ltd. (Note (iii)) 成都中核高通同位素股份有限公司	The PRC	70,583,407	93.15%	93.15%	–	Application of nuclear technology
CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd. 中核同興(北京)核技術有限公司	The PRC	30,000,000	51%	51%	–	Application of nuclear technology
Beijing CIC Clinical Laboratory 北京中同藍博臨床檢驗所有限公司	The PRC	95,000,000	100%	100%	–	Independent clinical laboratory services
Ningbo Junan Pharmaceuticals Technology Co., Ltd. 寧波君安藥業科技有限公司	The PRC	80,000,000	100%	100%	–	Production and sale of radioactive medicine
CNNC Accuray (Tianjin) Medical Technology Co.,Ltd. 中核安科銳(天津)醫療科技有限責任公司	The PRC	193,700,990	51%	–	51%	Production and sale of radiation therapy equipments

Notes:

(i) The official names of all these entities are in Chinese. The English translation of these entities are for identification only.

(ii) The Group is exposed, or has rights, to variable returns from its involvement with these companies and has the ability to affect those returns through its power over these companies since their establishments.

(iii) These subsidiaries represent companies limited by shares established in the PRC. Other subsidiaries are companies with limited liability established in the PRC.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

The following table lists out the information relating to subsidiaries of the Group which have material non-controlling interests ("NCI"). The summarised financial information presented below represents the amounts before any intercompany elimination.

HTA Co., Ltd.	**2020 RMB'000**	2019 RMB'000
NCI percentage	**30.51%**	31.72%
Current assets	**1,050,565**	612,735
Non-current assets	**1,189,934**	908,407
Current liabilities	**(517,114)**	(519,167)
Non-current liabilities	**(134,542)**	(126,280)
Net assets	**1,588,843**	875,695
Carrying amount of NCI	**484,756**	277,770

	2020 RMB'000	2019 RMB'000
Revenue	**799,838**	761,297
Profit for the year	**179,972**	223,153
Other comprehensive income for the year	**(364)**	(99)
Total comprehensive income for the year	**179,608**	223,054
Total comprehensive income for the year allocated to NCI	**55,748**	70,753
Dividend paid to NCI	**22,607**	21,445
Cash flows from operating activities	**143,240**	61,264
Cash flows from investing activities	**(193,067)**	(147,614)
Cash flows from financing activities	**483,107**	37,802

Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd.	**2020 RMB'000**	2019 RMB'000
NCI percentage	**52.00%**	52.24%
Current assets	**1,891,662**	1,891,600
Non-current assets	**419,814**	553,174
Current liabilities	**(1,269,278)**	(1,503,393)
Non-current liabilities	**(8,222)**	(85,096)
Net assets	**1,033,976**	856,285
Carrying amount of NCI	**537,668**	447,323

	2020 RMB'000	2019 RMB'000
Revenue	**1,398,433**	1,668,601
Profit and total comprehensive income for the year	**290,505**	329,224
Profit and total comprehensive income for the year allocated to NCI	**151,063**	171,986
Dividend paid to NCI	**58,662**	52,246
Cash flows from operating activities	**14,291**	323,193
Cash flows from investing activities	**25,243**	(50,424)
Cash flows from financing activities	**(224,900)**	31,282

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

13 INVESTMENTS IN SUBSIDIARIES (CONTINUED)

Anhui Young-Hearty Medical Appliance & Equipment Co., Ltd.	**2020** **RMB'000**	2019 RMB'000
NCI percentage	**52.00%**	52.24%
Current assets	**285,871**	315,596
Non-current assets	**39,552**	43,235
Current liabilities	**(106,916)**	(170,804)
Net assets	**218,507**	188,027
Carrying amount of NCI	**113,624**	98,225

	2020 **RMB'000**	2019 RMB'000
Revenue	**186,855**	253,461
Profit and total comprehensive income for the year	**80,481**	103,948
Profit and total comprehensive income for the year allocated to NCI	**41,850**	54,302
Dividend paid to NCI	**26,000**	26,119
Cash flows from operating activities	**63,984**	100,706
Cash flows from investing activities	**(2,708)**	(11,349)
Cash flows from financing activities	**(50,000)**	(50,000)

14 INTERESTS IN ASSOCIATES

The following list contains only the particulars of a material associate of the Group, which is an unlisted entity whose quoted market price is not available:

Name of the company	**Place of establishment**	**Issued and fully paid-up capital**	**Group's effective interest**	**Principal activities**
Shenzhen CICAM Isotope Co., Ltd. 深圳西卡姆同位素有限公司*	The PRC	USD 1,000,000	49%	Production and sale of fire detector

* The English translation of the name is for identification only. The official name of the entity is in Chinese.

The Group's associates are accounted for using the equity method in the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

14 INTERESTS IN ASSOCIATES (CONTINUED)

Summarised financial information of the material associates, adjusted for any differences in accounting policies, and reconciled to the carrying amounts in the consolidated financial statements, are disclosed below:

Shenzhen CICAM Isotope Co., Ltd. (CICAM)	2020 RMB'000	2019 RMB'000
Gross amounts		
Current assets	48,133	99,577
Non-current assets	–	7,260
Current liabilities	(16,981)	(43,817)
Net assets	31,152	63,020

	As at 31 December 2020 RMB'000	As at 31 December 2019 RMB'000
Gross amounts		
Revenue	41,188	33,533
Loss for the year	(28,187)	(1,429)
Other comprehensive income	(3,684)	2,329
Total comprehensive income	(31,871)	900
Dividend received from the associate	–	37,297
Reconciled to the Group's interests		
Gross amounts of net assets of the associate	31,152	63,020
Group's effective interest	49%	49%
Group's share of net assets	15,264	30,880
Carrying amount in the consolidated financial statements	15,264	30,880

Note:

On 14 December 2020, the directors of the associate decided to liquidate CICAM and its financial statements are prepared on non-going concern basis. Management of the associate considers enough provision have been accrued or provided based on best estimation when preparing its financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

14 INTERESTS IN ASSOCIATES (CONTINUED)

Aggregate information of associates of the Group that are not individually material:

	2020 **RMB'000**	2019 RMB'000
Aggregate carrying amount of individually immaterial associates in the consolidated financial statements	**49,999**	30,663

	2020 **RMB'000**	2019 RMB'000
Aggregate amounts of the Group's share of those associates' profit and total comprehensive income	**1,783**	2,841

15 INTERESTS IN JOINT VENTURES

Details of the Group's interest in the joint ventures, which is accounted for using the equity method in the consolidated financial statements, are as follows:

Name of the company	**Place of establishment**	**Issued and fully paid-up capital**	**Group's effective interest**	**Principal activities**
Shanghai GMS Pharmaceutical Co., Ltd. 上海欣科醫藥有限公司*	The PRC	USD 1,530,000	49%	Production and sales of bio-pharmaceuticals
Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership) 北京同輻創新產業投資基金合夥企業（有限合夥）*	The PRC	RMB2,500,000,000	40%	The application areas of nuclear technology investments

* The English translation of the name is for identification only. The official name of the entity is in Chinese.

The Group's joint ventures are accounted for using the equity method in the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

15 INTERESTS IN JOINT VENTURES (CONTINUED)

accounting policies, and reconciled to the carrying amounts in the consolidated financial statements, are disclosed below:

Shanghai GMS Pharmaceutical Co., Ltd.	**2020 RMB'000**	2019 RMB'000
Current assets	**231,362**	199,858
Non-current assets	**21,552**	22,400
Current liabilities	**(103,297)**	(120,473)
Non-current liabilities	**(834)**	(976)
Net assets	**148,783**	100,809

	2020 RMB'000	2019 RMB'000
Gross amounts		
Revenue	**235,488**	284,480
Profit and total comprehensive income	**47,975**	60,878
Dividend received	**–**	23,351
Reconciled to the Group's interest		
Gross amounts of net assets	**148,783**	100,809
The Group's effective interest	**49%**	49%
The Group's share of net assets	**72,904**	49,396
Carrying amount in the consolidated financial statements	**72,904**	49,396

Beijing Tongfu Innovation Industrial Investment Fund Partnership (Limited Partnership)	**2020 RMB'000**	2019 RMB'000
Current assets	**976,458**	1,000,000
Non-current assets	**231,022**	–
Current liabilities	**(7,871)**	–
Net assets	**1,199,609**	1,000,000

	2020 RMB'000	2019 RMB'000
Gross amounts		
Revenue	**34,705**	–
Profit and total comprehensive income	**10,177**	–
Dividend received	**5,041**	–
Reconciled to the Group's interests		
Gross amounts of net assets of the associate	**1,199,609**	1,000,000
Group's effective interest	**40%**	48%
Group's share of net assets	**479,844**	480,000
Carrying amount in the consolidated financial statements	**479,844**	480,000

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

16 GOODWILL

	RMB'000
Cost:	
At 31 December 2019	43,875
Acquisition of subsidiaries under non-common control	–
At 31 December 2020	**43,875**
Accumulated impairment losses:	
At 31 December 2019 and 31 December 2020	–
Carrying amount:	
At 31 December 2019	43,875
At 31 December 2020	**43,875**

Goodwill is allocated to the Group's cash-generating units identified according to operation and operating segment as follows:

	2020	2019
	RMB'000	RMB'000
Pharmaceuticals	**42,791**	42,791
Irradiation	**1,084**	1,084
	43,875	43,875

The recoverable amounts of the cash-generating units were determined based on value-in-use calculations. These calculations use cash flow projections based on financial budgets approved by management covering a five-year period. These cash flow projections adopted annual sales growth rates, which are based on the Group's historical experience with these operations and adjusted for other factors that are specific to each cash-generating unit. Cash flows beyond the five-year period are extrapolated using an estimated growth rate. The discount rates used are pre-taxed and reflect specific risks relating to the respective cash generating units.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

16 GOODWILL (CONTINUED)

The key assumptions used in the value-in-use calculations for the above two cash-generating units are as follows:

	2020	2019
Pharmaceuticals		
Annual sales growth rate for the first five-year period	8%~15%	8%~14%, 20%
Annual sales growth rate beyond five-year period	0%	0%
Discount rate	7.9%, 14.25%	7.9%, 13.55%
Irradiation		
Annual sales growth rate for the first five-year period	13%	13%
Annual sales growth rate beyond five-year period	0%	0%
Discount rate	7.9%	7.9%

17 UNQUOTED EQUITY INVESTMENTS

	31 December 2020 RMB'000	31 December 2019 RMB'000
Equity securities designated at FVOCI (non-recycling)		
– unquoted equity investments	137,014	151,492

Note:

The unquoted equity investments are shares in CNNC Financial Leasing Co., Ltd. ("CNNC Financial Leasing Company"), CNNC Finance Co., Ltd. ("CNNC Finance Company") and Tongchuang Investment Partnership (Limited Partnership) ("Tongchuang Investment Partnership"), three related parties under CNNC.

The Group designated its unquoted equity investments at FVOCI (non-recycling), as the investments are held for strategic purposes. The Group received dividends of RMB11,427,000 (2019: RMB8,658,000), RMB1,699,000 (2019: RMB1,504,000) and RMB37,000 (2019: Nil) from CNNC Financial Leasing Company, CNNC Finance Company and Tongchuang Investment Partnership during the year, respectively.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

18 INVENTORIES

(a) Inventories comprise:

	2020 RMB'000	2019 RMB'000
Raw materials	222,494	157,685
Work in progress	73,187	60,647
Finished goods	273,193	174,054
Others	24,367	55,579
	593,241	447,965
Less: write-down of inventories	3,216	3,601
	590,025	444,364

(b) The analyses of the amounts of inventories recognised as expenses and included in the consolidated statement of profit or loss are as follows:

	2020 RMB'000	2019 RMB'000
Carrying amount of inventories sold	1,473,963	995,321
Write-down of inventories	3,601	733
	1,477,564	996,054

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

19 TRADE AND BILL RECEIVABLES

	31 December 2020 RMB'000	31 December 2019 RMB'000
Bill receivables	**53,197**	34,898
Trade receivables due from		
– related parties under CNNC	**17,516**	16,062
– associates and joint ventures	**57,038**	77,133
– third parties	**2,382,279**	2,187,676
	2,506,127	2,315,769
Less: loss allowance	**141,528**	128,023
	2,368,502	2,187,746

All of the trade and bill receivables, net of allowance for doubtful debts, are expected to be recovered within one year.

Aging analysis

The aging analyses of trade and bill receivables, based on the invoice dates and net of loss allowance, are as follows:

	2020 RMB'000	2019 RMB'000
Within 1 year	**2,073,272**	2,032,336
1 to 2 years	**256,320**	116,179
2 to 3 years	**26,997**	32,634
Over 3 years	**11,913**	6,597
	2,368,502	2,187,746

Trade and bill receivables are required to be settled in accordance with contract terms and are generally due immediately without credit period.

Further details on the Group's credit policy and credit risk arising from trade debtors are set out in Note 32(a).

As at 31 December 2020, bill receivables amounting to RMB3,996,000 (2019: RMB2,581,000) was measured at FVOCI. The fair value of bill receivables was at a level 2 fair value measurement which has been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities.

During the year, there was no transfer between level 1 and level 2 fair value hierarchy or transfer into or out of level 3 (2019: Nil).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

20 PREPAYMENTS, DEPOSITS AND OTHER RECEIVABLES

	2020 RMB'000	2019 RMB'000
Receivables from sale of property, plant and equipment		
– CNNC	8,814	8,814
– related parties under CNNC	4,258	4,258
Advance to		
– CNNC	8	8
– related parties under CNNC	1,353	2,157
– associates and joint ventures	55	2,019
Deposits (Note (ii))		
– related parties under CNNC	2,310	5,144
– third parties	35,217	36,536
Staff advance	3,570	4,766
Others	30,260	42,672
Dividends receivables		
– associates and joint ventures and unquoted equity investments	2,579	25,036
Interest receivables	5,997	1,346
	94,421	132,757
Less: loss allowance	12,918	10,897
Financial assets measured at amortised cost	81,503	121,860
Deductible input VAT	60,682	43,890
Prepayments for purchase of inventories from		
– related parties under CNNC	8,988	8,304
– associates and a joint venture	601	361
– third parties	104,321	88,985
	256,095	263,400

Notes:

(i) All of the prepayments, deposits and other receivables are expected to be recovered or recognised as expenses within one year.

(ii) Deposits mainly represent rental deposit, deposits made to obtain land use rights and deposits for bidding.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

21 CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION

(a) Cash at bank and on hand comprised:

	2020 RMB'000	2019 RMB'000
Cash on hand	21	44
Cash at bank	1,108,980	1,833,565
Cash at CNNC Finance Company	1,447,492	911,274
	2,556,493	2,744,883
Representing:		
Cash and cash equivalents	2,351,602	2,640,314
Time deposits with original maturity over three months	190,920	93,346
Restricted deposits (Note)	13,971	11,223
	2,556,493	2,744,883

Note:

Restricted deposits mainly represent deposits for guarantee of letters of credit.

(b) Reconciliation of liabilities arising from financing activities

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

	Bank loans RMB'000	Corporate bond RMB'000	Interest payable RMB'000	Lease liabilities RMB'000	Total RMB'000
At 31 December 2019 and 1 January 2020	288,450	499,682	781	85,468	874,381
Changes from financing cash flows:					
Proceeds from new bank loans	149,210	–	–	–	149,210
Repayment of bank loans	(274,678)	–	–	–	(274,678)
Interest paid on corporate bond	–	(19,000)	–	–	(19,000)
Borrowing costs paid	–	–	(21,310)	–	(21,310)
Capital element of lease rentals paid	–	–	–	(26,583)	(26,583)
Interest element of lease rentals paid	–	–	–	(4,297)	(4,297)
Total changes from financing cash flows	(125,468)	(19,000)	(21,310)	(30,880)	(196,658)
Other changes:					
Increase in lease liabilities from entering into new leases during the year	–	–	–	27,993	27,993
Interest expenses (Note 6(a))	–	19,102	21,374	4,297	44,773
Total other changes	–	19,102	21,374	32,290	72,766
At 31 December 2020	162,982	499,784	845	86,878	750,489

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

21 CASH AT BANK AND ON HAND AND OTHER CASH FLOW INFORMATION (CONTINUED)

(b) Reconciliation of liabilities arising from financing activities (continued)

	Bank loans RMB'000	Corporate bond RMB'000	Interest payable RMB'000	Lease liabilities RMB'000	Total RMB'000
At 31 December 2018	150,000	–	–	–	150,000
Impact on initial application of IFRS 16	–	–	–	35,868	35,868
At 1 January 2019	150,000	–	–	35,868	185,868
Changes from financing cash flows:					
Proceeds from new bank loans	216,950	–	–	–	216,950
Repayment of bank loans	(83,500)	–	–	–	(83,500)
Borrowing costs paid	–	–	(13,560)	–	(13,560)
Proceeds from issuing of corporate bond	–	499,682	–	–	499,682
Capital element of lease rentals paid	–	–	–	(23,969)	(23,969)
Interest element of lease rentals paid	–	–	–	(3,356)	(3,356)
Total changes from financing cash flows	133,450	499,682	(13,560)	(27,325)	592,247
Other changes:					
Increase in lease liabilities from entering into new leases during the year	–	–	–	73,435	73,435
Interest expenses (Note 6(a))	–	–	14,341	3,490	17,831
Acquisition of subsidiaries (Business combination)	5,000	–	–	–	5,000
Total other changes	5,000	–	14,341	76,925	96,266
At 31 December 2019	288,450	499,682	781	85,468	874,381

(c) Total cash outflow for leases

Amounts included in the cash flow statement for leases comprise the following:

	2020 RMB'000	2019 RMB'000
Within operating cash flows	**3,213**	1,400
Within financing cash flows	**30,880**	27,325
	34,093	28,725

These amounts relate to the following:

	2020 RMB'000	2019 RMB'000
Lease rentals paid	**34,093**	28,725
	34,093	28,725

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

22 BANK LOANS

(a) The long-term bank loans comprised:

	2020 RMB'000	2019 RMB'000
Bank loan (Note)		
– secured	**23,302**	142,775
– unsecured	**50,000**	–
	73,302	142,775
Less: current portion of long-term bank loans	**(540)**	(45,540)
	72,762	97,235

Note:

As of 31 December 2020, the unsecured long-term bank loans mainly included a loan of RMB50,000,000 borrowed by a subsidiary of the Group in 2020 at an interest rate of 4.15%.

As of 31 December 2020, the secured long-term bank loans mainly includes:

(i) A three-year loan of RMB5,850,000 borrowed by a subsidiary of the Group in 2020 at base rate plus 15 base points per annum, for which was jointly guaranteed by the shareholders of the subsidiary.

(ii) A fifteen-year loan of RMB8,000,000 borrowed by a subsidiary of the Group in 2019 at base rate plus 78.5 base points per annum, with an amount of RMB7,460,000 remaining as at 31 December 2020, for which certain of the Group's properties with total carrying amount of RMB9,050,000 and right of use assets with total carrying amount of RMB956,000 were pledged.

(iii) A five-year loan of RMB30,000,000 borrowed by a subsidiary of the Group in 2019 at base rate plus 20.25 base points per annum, with an amount of RMB9,992,000 remaining as at 31 December 2020, for which certain of the Group's properties with total carrying amount of RMB57,936,000 and right of use assets with total carrying amount of RMB7,016,000 were pledged.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

22 BANK LOANS (CONTINUED)

(b) The short-term bank loans comprised:

	2020 RMB'000	2019 RMB'000
Bank loan (Note)		
– secured	6,200	6,000
– unsecured	83,480	139,675
	89,680	145,675
Add: current portion of long-term bank loans	540	45,540
	90,220	191,215

Note:

A loan of RMB6,400,000 borrowed by a subsidiary of the Group in 2020 at base rate plus 4.5 base points per annum, with an amount of RMB6,200,000 remaining as at 31 December 2020, for which certain of the subsidiary's trade receivables with total carrying amount of RMB6,214,000 were pledged.

A loan of RMB83,480,000 borrowed by a subsidiary of the Group in 2020 at an interest rate of 3.10%, with an amount of RMB83,480,000 remaining as at 31 December 2020.

(c) The long-term bank loans are repayable as follows:

	2020 RMB'000	2019 RMB'000
After 1 year but within 2 years	9,270	46,080
After 2 years but within 5 years	40,192	45,855
Over 5 years	23,300	5,300
	72,762	97,235

23 CORPORATE BOND

	2020 RMB'000	2019 RMB'000
Public issuance of corporate bond	499,784	499,682

Note:

In December 2019, the Group issued a 3-year corporate bond of RMB500,000,000 with an interest rate of 3.80% per annum.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

24 TRADE PAYABLES

	2020 RMB'000	2019 RMB'000
Trade payables due to		
– related parties under CNNC	21,602	24,858
– associates and joint ventures	3,994	5,035
– third parties	173,907	143,663
	199,503	173,556

(a) Aging analysis

As of the end of the reporting period, the aging analyses of trade payables, based on the invoice dates, are as follows:

	2020 RMB'000	2019 RMB'000
Within 1 year	164,610	158,474
1 to 2 years	29,250	9,830
2 to 3 years	5,643	5,252
	199,503	173,556

All of the trade payables are expected to be settled within one year or are repayable on demand.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

25 ACCRUALS AND OTHER PAYABLES

	2020 RMB'000	2019 RMB'000
Deposits from distributors (Note (i))	549,788	605,687
Payables to distributors (Note (ii))	1,292,385	1,242,519
Payables for staff related costs	125,114	170,323
Dividends payables	7,895	7,315
Other accruals and payables:		
– CNNC	8,628	801
– related parties under CNNC	8,223	7,974
– an associate	1	18
– third parties	142,055	162,874
Total financial liabilities measured at amortised cost	2,134,089	2,197,511
Other taxes payables	59,742	48,786
Contract liabilities (Note (iii))		
– related parties under CNNC	22,323	17,099
– third parties	111,253	105,379
	2,327,407	2,368,775

Notes:

(i) The balances represent deposits from distributors for ordering goods which will be repaid to distributors after the trade receivables have been paid by customers. These deposits are unsecured, interest-free and have no fixed repayment terms.

(ii) The balances represent service fee and commission payables to distributors.

(iii) Movements in contract liabilities:

	2020 RMB'000	2019 RMB'000
At 1 January	122,478	88,798
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 year	(137,926)	(101,456)
Increase in contract liabilities as a result of receipt in advance of transferring goods	149,024	135,136
At 31 December	133,576	122,478

(iv) All of the accruals and other payables are expected to be settled or recognised as revenue within one year or are repayable on demand.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

26 LEASE LIABILITIES

At 31 December 2020, the lease liabilities were repayable as follows:

	2020 RMB'000	2019 RMB'000
Within 1 year	29,907	27,809
After 1 year but within 2 years	40,192	22,245
After 2 years but within 5 years	16,779	35,414
	56,971	57,659
	86,878	85,468

27 EMPLOYEE RETIREMENT BENEFITS

(a) Defined benefit retirement plans

In addition to the government-mandated basic pension and medical program, the Group provides defined retirement benefits to civil retirees, current retirees and certain eligible active employees (the "Plan"), which covers 34% of the Group's employees as at 31 December 2020 (2019: 33%). The Plan is administered by the Group and funded by the working capital of the Group.

Under the Plan, the qualified retirees and/or employees are entitled to fixed supplemental post-retirement pension benefits, fixed death benefits and supplemental post-retirement medical benefits.

The independent actuarial valuations of the defined benefit retirement obligation at 31 December 2020 were prepared by qualified staff of Towers Watson Management Consulting (Shenzhen) Co., Ltd., Beijing Branch, who are members of the American Academy of Actuaries, using the projected unit credit method.

The Plan exposes the Group to actuarial risks, such as interest rate risk and longevity risk.

Information about the Plan disclosed below:

(i) The amounts recognised in the consolidated statement of financial position are as follows:

	2020 RMB'000	2019 RMB'000
Present value of obligations	53,503	52,094

A portion of the above liability is expected to be settled after more than one year. However, it is not practicable to segregate this amount from the amounts payable in the next twelve months. The Group expects the amount of RMB2,952,000 of the defined benefit retirement obligation to be paid in the next twelve months.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

27 EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

(a) Defined benefit retirement plans (continued)

(ii) Movements in the present value of the defined benefit retirement obligation were as follows:

	2020 RMB'000	2019 RMB'000
At 1 January	52,094	44,596
Remeasurements:		
– actuarial losses arising from changes in financial assumptions	513	2,622
Benefits paid by the plans	(2,836)	(2,880)
Current service cost	1,049	937
Effect of new participants and increase in payment rates	907	5,298
Interest expenses	1,776	1,521
At 31 December	53,503	52,094

The effect of new participants and increase in payment rates is the change in the present value of the defined benefit obligation resulting from expanding the employee groups covered by the Plan and increasing the benefits that are payable after retirement.

(iii) Amounts recognised in the consolidated statement of profit or loss and the consolidated statement of profit or loss and other comprehensive income are as follows:

	2020 RMB'000	2019 RMB'000
Service cost	1,049	937
Net interest on net defined benefit liability	1,776	1,521
Total amounts recognised in profit or loss	2,825	2,458
Total amounts recognised in other comprehensive income – actuarial losses	513	2,622
Total defined benefit costs	3,338	5,080

The service cost and the net interest on net defined benefit liability are recognised in the following line items in the consolidated statement of profit or loss:

	2020 RMB'000	2019 RMB'000
Finance costs	1,776	1,521
Administrative expenses	1,049	937
	2,825	2,458

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

27 EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

(a) Defined benefit retirement plans (continued)

(iv) Significant actuarial assumptions (expressed as weighted averages) are as follows:

	2020 **RMB'000**	2019 RMB'000
Discount rates	**3.5%**	3.5%
Future salary increases	**6.0%**	6.0%
Annual turnover rates of active employees	**5.0%**	5.0%

The below analyses show how the defined benefit obligation would have increased (decreased) as a result of 1% change in the significant actuarial assumptions:

	Increase by 1%	
	2020 **RMB'000**	2019 RMB'000
Discount rates	**(7,099)**	(6,755)
Future salary increases	**4,167**	3,776
Annual turnover rates of active employees	**(1,890)**	(1,762)

	Decrease by 1%	
	2020 **RMB'000**	2019 RMB'000
Discount rates	**9,286**	8,804
Future salary increases	**(3,062)**	(2,750)
Annual turnover rates of active employees	**2,183**	2,036

The above sensitivity analyses is based on the assumption that changes in actuarial assumptions are not correlated and therefore it does not take into account the correlations between the actuarial assumptions.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

27 EMPLOYEE RETIREMENT BENEFITS (CONTINUED)

(b) Defined contribution retirement plan

Pursuant to the relevant laws and regulations of the PRC, the Company and its subsidiaries participate in defined contribution retirement benefit schemes managed by government organisations. The Group makes contributions to basic pension insurance plans based on the applicable benchmarks and rates stipulated by the government authorities, whereby these entities are required to contribute to the schemes at a rate of 19% of the employees' basic salaries. Employees of these entities are entitled to retirement benefits, calculated based on a percentage of the average salaries level in the PRC, from the above mentioned retirement schemes at their normal retirement. During the year ended 31 December 2020, the entities established in the PRC have been granted certain exception on the contributions to defined contribution retirement plans by the local government authority as a result of the COVID-19 impact for the period from February 2020 to December 2020.

28 CASH SETTLED SHARE-BASED TRANSACTION

The Group has a share option scheme which was adopted on 30 June 2020, whereby the directors of the Group are authorised, at their discretion, to invite senior management talents and high-level technicians of the Group. Pursuant to the share option scheme, each share option is related to a share, and share option will be settled in cash, and thus there will be no influence on the total number of issued shares or dilution effect on shares.

The total number of share option is 8,607,700. The share options will be vested upon the achievement of performance conditions of the Group, service conditions and personal performance conditions agreed by the scheme.

One third of the total number of share option will vest after two years from the date of grant, another one third of the total number of share option will vest after three years from the date of grant, and the remaining one third of the total number of share option will vest after four years from the date of grant.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

28 CASH SETTLED SHARE-BASED TRANSACTION (CONTINUED)

(a) The terms and conditions of the options granted are as follows:

Share options granted to directors

	Number of instruments	Vesting conditions	Contractual life of share options
– on 30 June 2020	119,900	Two years from the date of grant	6 years
– on 30 June 2020	119,900	Three years from the date of grant	6 years
– on 30 June 2020	119,900	Four years from the date of grant	6 years

Share options granted to employees

	Number of instruments	Vesting conditions	Contractual life of share options
– on 30 June 2020	2,749,333	Two years from the date of grant	6 years
– on 30 June 2020	2,749,333	Three years from the date of grant	6 years
– on 30 June 2020	2,749,333	Four years from the date of grant	6 years

(b) Measurement of fair value

The fair value of the cash settled share (see Note 2(s)(iii)) has been measured using the Black-Scholes formula. Service and non-market performance conditions attached to the arrangements were not taken into account in measuring fair value.

The inputs used in the measurement of the fair values at grant date and measurement date of the cash-settled shares were as follow:

	Grant date 30 June 2020	Measurement date 31 December 2020		
		Two years from the date of grant	Three years from the date of grant	Four years from the date of grant
Fair value (HKD)	7.4	9.4	9.7	10.1
Share price (HKD)	21.5	26.9	26.9	26.9
Exercise price (HKD)	21.5	22.2	22.2	22.2
Expected volatility (weighted-average)	38.76%	37.87%	36.72%	36.37%
Expected life (weighted-average)	4.5	3.5	4.0	4.5
Expected dividends	0%	0%	0%	0%
Risk-free interest rate (based on government bonds)	1.63%	0.18%	0.24%	0.29%

Expected volatility has been based on an evaluation of the historical volatility of the Company's share price, particularly over the historical period commensurate with the expected term. The expected term of the instruments has been based on historical experience and general option holder behavior.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

28 CASH SETTLED SHARE-BASED TRANSACTION (CONTINUED)

(c) Reconciliation of outstanding share options

	2020		2019	
	Weighted average exercise price HKD	**Number of share options**	Weighted average exercise price HKD	Number of share options
Outstanding at the beginning of the year	–	–	–	–
Granted during the year	22.2	8,607,700	–	–
Exercised during the year	–	–	–	–
Forfeited during the year	–	–	–	–
Expired during the year	–	–	–	–
Outstanding at the end of the year	22.2	8,607,700	–	–
Exercisable at the end of the year	–	–	–	–

The share options outstanding at 31 December 2020 had a weighted average exercise price of HK$22.2 (2019: not applicable) and a weighted average remaining contractual life of 5.5 years (2019: not applicable).

(d) Expense recognised in profit or less

For details of the related employee benefit expenses, see Note 6(b).

29 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION

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

	2020 RMB'000	2019 RMB'000
At 1 January	98,220	79,652
Provision for the year	56,728	164,390
Acquisition of subsidiaries	–	1,504
Income tax paid	(103,722)	(147,326)
At 31 December	51,226	98,220

29 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(b) Deferred tax assets and liabilities recognised

The components of deferred tax assets/(liabilities) recognised in the consolidated statement of financial position and movements are as follows:

	Accruals RMB'000	Provision for impairment of assets RMB'000	Provision for reclamation obligations RMB'000	Tax losses RMB'000	Fair value adjustments on inventories, property, plant and equipment, intangible assets and related depreciation and amortisation RMB'000	Fair value change in unquoted equity investments RMB'000	Depreciation and amortisation RMB'000	Fair value adjustments on inventories, property, plant and equipment, intangible assets and related depreciation and amortisation RMB'000	Total RMB'000
At 1 January 2019	167,076	28,512	10,675	–	–	(7,800)	(547)	–	197,916
Charged/(credited) to profit or loss (Note 7(a))	37,063	(1,951)	19,068	1,215	(14)	–	(379)	506	55,508
Credited to reserves	–	–	–	–	–	(5,600)	–	–	(5,600)
Acquisition of subsidiaries	–	–	–	–	3,401	–	–	(4,563)	(1,162)
At 31 December 2019	204,139	26,561	29,743	1,215	3,387	(13,400)	(926)	(4,057)	246,662
At 1 January 2020	**204,139**	**26,561**	**29,743**	**1,215**	**3,387**	**(13,400)**	**(926)**	**(4,057)**	**246,662**
Charged/(credited) to profit or loss (Note 7(a))	**(57,902)**	**(63)**	**(5,091)**	**(1,202)**	**(231)**	**-**	**24**	**553**	**(63,912)**
Charged to reserves	**-**	**-**	**-**	**-**	**-**	**3,620**	**-**	**-**	**3,620**
At 31 December 2020	**146,237**	**26,498**	**24,652**	**13**	**3,156**	**(9,780)**	**(902)**	**(3,504)**	**186,370**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

29 INCOME TAX IN THE CONSOLIDATED STATEMENT OF FINANCIAL POSITION (CONTINUED)

(c) Deferred tax assets not recognised

In accordance with the accounting policy set out in Note 2(t), the Group has not recognised deferred tax assets in respect of tax losses of RMB181,535,000 (2019: RMB118,427,000), as it is not probable that future taxable profits against which the losses can be utilised will be available in the relevant tax jurisdiction and entity. The tax losses can be carried forward for five years from the year incurred.

As at 31 December 2020, tax losses of RMB6,466,000, RMB7,680,000, RMB14,594,000, RMB76,009,000 and RMB99,712,000 will expire, if unused by the end of 31 December 2021, 2022, 2023, 2024 and 2025, respectively.

30 PROVISIONS

(a) The balance of provisions comprised:

	2020 RMB'000	2019 RMB'000
Reclamation obligations (Note (b))	195,217	185,271
Others	4,550	4,141
	199,767	189,412
Less: current provision	73,906	69,598
	125,861	119,814

(b) The movements of the provision for reclamation obligations are as follows:

	2020 RMB'000	2019 RMB'000
At 1 January	185,271	177,550
Increase in estimated cost	4,347	2,391
Interest expenses	5,599	5,330
At 31 December	195,217	185,271

The obligations for reclamation consist of estimated expenditures for retirement of its radioactive production facilities in accordance with the relevant rules and regulations in the PRC. The provision is therefore determined based on management's best estimates. The estimate of the associated costs may be subject to change in the near term when the reclamation on the disposal of the radioactive production facilities becomes apparent in future periods. At the end of the reporting period, the Group reassessed the estimated costs and adjusted the accrued reclamation obligations, where necessary.

(c) Long-term receivables

Long-term receivable represents present value of a part of reclamation obligations which is due from CIAE according to the commitment agreement between a subsidiary of the Group and CIAE.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

31 SHARE CAPITAL, RESERVES AND DIVIDENDS

(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:

	Share capital RMB'000 (Note 31(c))	Capital reserve RMB'000 (Note 31(d)(i))	PRC statutory reserve RMB'000 (Note 31(d)(ii))	Fair value reserve (non-recycling) RMB'000 (Note 31(d)(iii))	Other reserve RMB'000 (Note 31(d)(iv))	Retained profits RMB'000	Total equity RMB'000
Balance at 1 January 2019	319,875	2,238,993	112,901	23,400	4,176	77,000	2,776,345
Changes in equity for 2019:							
Total comprehensive income for the year	–	–	–	16,801	–	108,744	125,545
Appropriation to reserves	–	–	12,775	–	–	(12,775)	–
Dividends (Note 31(b))	–	–	–	–	–	(39,217)	(39,217)
Balance at 31 December 2019 and 1 January 2020	319,875	2,238,993	125,676	40,201	4,176	133,752	2,862,673
Changes in equity for 2020:							
Total comprehensive income for the year	**-**	**-**	**-**	**(10,858)**	**-**	**129,209**	**118,351**
Appropriation to reserves	**-**	**-**	**12,918**	**-**	**-**	**(12,918)**	**-**
Dividends (Note 31(b))	**-**	**-**	**-**	**-**	**-**	**(44,431)**	**(44,431)**
Balance at 31 December 2020	**319,875**	**2,238,993**	**138,594**	**29,343**	**4,176**	**205,612**	**2,936,593**

(b) Dividends

(i) Dividends payable to equity shareholders of the Company attributable to the year

	2020 RMB'000	2019 RMB'000
Final dividend proposed after the end of the reporting period of RMB18.03 cents per ordinary share (2019: RMB13.89 cents per ordinary share)	**57,673**	44,431
	57,673	44,431

The final dividend proposed after the end of the reporting period has not been recognised as a liability at the end of the reporting period.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

31 SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(b) Dividends (continued)

(ii) Dividends payable to equity shareholders of the Company attributable to the previous financial year, approved and paid during the year

	2020 **RMB'000**	2019 RMB'000
Final dividend in respect of the previous financial year, approved and paid during the year, of RMB13.89 cents per share (2019: RMB12.26 cents per share)	**44,431**	39,217

(c) Share capital

	2020 **No. of shares '000**	**2020** **RMB'000**	2019 No. of shares '000	2019 RMB'000
Ordinary shares issued				
At 1 January	**319,875**	**319,875**	319,875	319,875
Shares issued	**–**	**–**	–	–
At 31 December	**319,875**	**319,875**	319,875	319,875

All shareholders are entitled to receive dividends as declared from time to time and are entitled to one vote per share at shareholders' meetings of the Company. All shares rank equally with regard to the Company's residual assets.

On 6 July 2018, the Company issued 79,968,700 H shares with par value of RMB1.00 per share at a price of HKD21.6 per share by way of initial public offering to Hong Kong and overseas investors. On 3 August 2018, the over-allotment option granted by the Company was partially exercised. The Company issued and allotted an aggregate of 100 H shares at HKD21.6 each. After the issuance and allotment of these shares, the registered and issued ordinary shares of the Company increased to 319,874,900 shares with 79,968,800 H shares being listed on The Stock Exchange.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

31 SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(d) Nature and purpose of reserves

(i) Capital reserve

Capital reserve represents (i) the proceeds in excess of the par value upon shares issuance received by the Company as disclosed in Note 31(c); and (ii) the amount of carrying amount of the net assets of certain subsidiaries acquired in excess of the consideration paid by the Group, as a result of business combination under common control.

(ii) PRC statutory reserve

In accordance with the relevant PRC laws and regulations and the Company's articles of association, the Company is required to transfer 10% of its net profit as determined in accordance with accounting rules and regulations of the PRC to the statutory PRC reserve until the reserve reaches 50% of the registered capital. The transfer to this reserve must be made before distributions to equity shareholders. This reserve can be utilised in setting off accumulated losses or increase capital and is non-distributable other than in liquidation.

(iii) Fair value reserve (non-recycling)

The fair value reserve (non-recycling) comprises the cumulative net change in the fair value of equity investments designated at FVOCI under IFRS 9 that are held at the end of the reporting period (see Note 2(g)).

(iv) Other reserve

Other reserve represents specific reserve for production and maintenance funds. Pursuant to the relevant PRC regulations, the Group is required to transfer production and maintenance funds at fixed rates of relevant production outputs or revenue. The maintenance and production funds could be utilised when expenses or capital expenditures on production maintenance and safety measures are incurred. The amount of production and maintenance funds utilised would be transferred from the specific reserve back to retained profits.

(v) Exchange reserve

The exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of an associate. The reserve is dealt with in accordance with the accounting policies as set out in Note 2(x).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

31 SHARE CAPITAL, RESERVES AND DIVIDENDS (CONTINUED)

(e) 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 for the capital structure in light of changes in economic conditions.

The Group monitors its capital structure on the basis of an adjusted net debt-to-capital ratio. For this purpose, adjusted net debt is defined as total debt (which includes interest-bearing borrowings) plus unaccrued proposed dividends. Adjusted capital comprises all components of equity less unaccrued proposed dividends.

During 2020, the Group's strategy, which was unchanged from 2019, was to maintain the adjusted net debt-to-capital ratio at the lower level. In order to maintain or adjust the ratio, the Group may adjust the amount of dividends paid to shareholders, issue new shares, return capital to shareholders, raise new debt financing or sell assets to reduce debt.

The adjusted debt-to-capital ratio at 31 December 2020 and 2019 is as follows:

	Note	**At 31 December 2020 RMB'000**	At 31 December 2019 RMB'000
Current liabilities:			
Interest-bearing borrowings	22(b)	**90,220**	191,215
Lease liabilities	26	**29,907**	27,809
		120,127	219,024
Non-current liabilities:			
Interest-bearing borrowings	22(a)&23	**572,546**	596,917
Lease liabilities	26	**56,971**	57,659
		629,517	654,576
Total debt		**749,644**	873,600
Add: proposed dividends	31(b)	**57,673**	44,431
Adjusted net debt		**807,317**	918,031
Total equity		**5,505,610**	5,003,433
Less: proposed dividends	31(b)	**57,673**	44,431
Adjusted capital		**5,447,937**	4,959,002
Adjusted debt-to-capital ratio		**15%**	19%

Neither the Company nor any of its subsidiaries are subject to externally imposed capital requirements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 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 trade receivables. The Group's exposure to credit risk arising from cash and cash equivalents and bill receivables is limited because the counterparties are banks and financial institutions with sound credit standing, for which the Group considers to have low credit risk.

Trade receivables

The Group has established a credit management policy under which individual credit evaluations are performed on all customers requiring credit over a certain amount. These evaluations focus on the customer's past history of making payments when due and current ability to pay and take into account information specific to the customer as well as pertaining to the economic environment in which the customer operates. Trade receivables are due from the invoice date (or date of revenue recognition, if earlier). Normally, the Group does not obtain collateral from customers.

The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer rather than the industry or country in which the customers operate 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, 2% (2019: 3%) and 6% (2019: 7%) of the total trade receivables was due from the Group's largest customer and the five largest customers, respectively.

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 does not indicate significantly different loss patterns for different customer segments, the loss allowance based on past due status is not further distinguished between the Group's different customer bases.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(a) Credit risk (continued)

Trade receivables (continued)

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

		2020	
	Expected loss rate	**Gross carrying amount**	**Loss allowance**
	%	**RMB'000**	**RMB'000**
With 1 year	**0.6%**	**2,081,690**	**(12,414)**
1 – 2 years	**5%**	**269,522**	**(13,202)**
2 – 3 years	**30%**	**38,621**	**(11,624)**
More than 3 years	**90%**	**116,201**	**(104,288)**
		2,506,634	**(141,528)**

		2019	
	Expected loss rate	Gross carrying amount	Loss allowance
	%	RMB'000	RMB'000
With 1 year	0.5%	2,040,584	(10,829)
1 – 2 years	8%	126,711	(10,532)
2 – 3 years	19%	40,465	(7,831)
More than 3 years	94%	105,428	(98,831)
		2,313,188	(128,023)

Expected loss rates are based on actual loss experience over the past 6 years. These rates are adjusted to reflect differences between economic conditions during the year over which the historic data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(a) Credit risk (continued)

Trade receivables (continued)

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

	2020	2019
	RMB'000	RMB'000
At 1 January	**128,023**	147,741
Amounts written off during the year	**(6,060)**	–
Impairment loss/(gain) during the year	**19,565**	(19,718)
At 31 December	**141,528**	128,023

(b) Liquidity risk

Individual operating entities within the Group are responsible for their own cash management, including the short-term investment of cash surpluses and the raising of loans to cover expected cash demands, subject to approval by the parent company's board when the borrowings exceed certain predetermined levels of authority. The Group's policy is to regularly monitor current and expected liquidity requirements to ensure that it maintains sufficient reserves of cash and adequate committed lines of funding from major financial institutions to meet its liquidity requirements in the short and longer term.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(b) Liquidity risk (continued)

The following table details the remaining contractual maturities at the end of each reporting period of the Group's 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 each reporting period) and the earliest dates the Group can be required to pay:

	31 December 2020					
	Contractual undiscounted cash flow					
	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 year but less than 5 years RMB'000	More than 5 years	Total RMB'000	Carrying amount RMB'000
Corporate bond (Note 23)	19,000	519,000	–	–	538,000	499,784
Lease liabilities (Note 26)	32,767	42,448	18,394	–	93,609	86,878
Bank loans (Note 22)	96,078	9,746	42,463	24,747	173,034	162,982
Trade payables (Note 24)	199,503	–	–	–	199,503	199,503
Accruals and other payables (Note 25)	2,134,089	–	–	–	2,134,089	2,134,089
Other long-term payables	–	–	17,000	–	17,000	12,562
Total	2,481,437	571,194	77,857	24,747	3,155,235	3,095,798

	31 December 2019					
	Contractual undiscounted cash flow					
	Within 1 year or on demand RMB'000	More than 1 year but less than 2 years RMB'000	More than 2 year but less than 5 years RMB'000	More than 5 years	Total RMB'000	Carrying amount RMB'000
Corporate bond (Note 23)	19,000	19,000	519,000	–	557,000	499,682
Lease liabilities (Note 26)	29,946	25,002	41,960	–	96,908	85,468
Bank loans (Note 22)	202,969	49,310	50,700	6,664	309,643	288,450
Trade payables (Note 24)	173,556	–	–	–	173,556	173,556
Accruals and other payables (Note 25)	2,197,511	–	–	–	2,197,511	2,197,511
Other long-term payables	–	–	17,000	–	17,000	10,815
Total	2,622,982	93,312	628,660	6,664	3,351,618	3,255,482

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(c) Currency risk

The Group is exposed to currency risk primarily through bank deposits denominated in foreign currency. i.e. a currency other than the functional currency of the operations to which the transactions relate. The currencies giving rise to this risk are primarily Hong Kong dollars. The Group manages this risk as follows:

(i) Exposure to currency risk

The following table details the Group's exposure at the end of the reporting period to currency risk arising from recognised assets 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 Hong Kong dollars, translated using the spot rates at the year end date. Differences resulting from the translation of the financial statements of foreign operations into the Group's presentation currency are excluded.

	Exposure to foreign currencies	
	2020	2019
	RMB'000	RMB'000
Cash and cash equivalents	**8,170**	144,167

(ii) Sensitivity analysis

The following table indicates the instantaneous change in the Group's profit after tax and retained profits that would arise if foreign exchange rates to which the Group has significant exposure at the end of the reporting period had changed at that date, assuming all other risk variables remained constant.

	2020		2019	
	Increase/ (decrease) in foreign exchange rates	**Increase/ (decrease) in profit after tax and retained profits**	Increase/ (decrease) in foreign exchange rates	Increase/ (decrease) in profit after tax and retained profits
		RMB'000		RMB'000
HK Dollars	**10%**	**613**	10%	10,813
	(10%)	**(613)**	(10%)	(10,813)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(c) Currency risk (continued)

(ii) Sensitivity analysis (continued)

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 retained profits measured in the respective functional currencies, translated into Hong Kong dollars at the exchange rates 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 receivables within the Group which are denominated in a currency other than the functional currencies of 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 2019.

(d) Fair values measurement

(i) Financial assets 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 each reporting period on a recurring basis, categorised into the three-level fair value hierarchy as defined in IFRS 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.

The Group has a finance manager performing valuations for the trading securities and unquoted equity investments. The manager reports directly to the chief accountant and the audit committee. A valuation report with analysis of changes in fair value measurement is prepared by the manager 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 audit committee is held twice a year, to coincide with the reporting dates.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Fair values measurement (continued)

(i) Financial assets measured at fair value (continued)

	Fair value at 31 December 2020 RMB'000	Fair value measurements as at 31 December 2020 categorised into Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000
Recurring fair value measurement				
Bill receivables	**3,996**	**–**	**3,996**	**–**
Unquoted equity investments	**137,014**	**–**	**–**	**137,014**
	141,010	**–**	**3,996**	**137,014**

	Fair value at 31 December 2019 RMB'000	Fair value measurements as at 31 December 2019 categorised into Level 1 RMB'000	Level 2 RMB'000	Level 3 RMB'000
Recurring fair value measurement				
Bill receivables	2,581	–	2,581	–
Unquoted equity investments	151,492	–	–	151,492
	154,073	–	2,581	151,492

Note: As at 31 December 2017, the unquoted equity investments were classified as available-for-sale investments and measured at cost less impairment losses as these investments in unlisted companies do not have a quoted market price in an active market for an identified instruments and whose fair value cannot otherwise be reliably measured. Available-for-sale financial assets were reclassified to financial assets measured at FVPL and those designated at FVOCI (non-recycling) upon the adoption of IFRS 9 at 1 January 2018.

In 2020, there were no transfers between Level 1 and Level 2, or transfers into or out of Level 3 (2019: nil). The Group's policy is to recognise transfers between levels of fair value hierarchy as at the end of the reporting period in which they occur.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Fair values measurement (continued)

(i) Financial assets measured at fair value (continued)

The fair value of bill receivables was at a level 2 fair value measurement which has been calculated by discounting the expected future cash flows using rates currently available for instruments with similar terms, credit risk and remaining maturities.

Information about Level 3 fair value measurements

	Valuation techniques	**Significant unobservable inputs**	**Range**	**Weighted average**
Unlisted equity instruments	Market comparable companies	Discount for lack of marketability	90%	90%

The fair value of unlisted equity instruments is determined using the price to book ratio of comparable listed companies adjusted for lack of marketability discount. The fair value measurement is negatively correlated to the discount for lack of marketability. As at 31 December 2020, it is estimated that with all other variables held constant, a decrease/increase in discount for lack of market ability by 1% would have increased/decreased the Group's other comprehensive income by RMB131,000.

The movements during the period in the balance of these Level 3 fair value measurements are as follow:

	2020 RMB'000	2019 RMB'000
Unlisted equity securities:		
At 1 January	**151,492**	125,491
Payment for purchases	**–**	3,600
Net unrealised gains or losses recognised in other comprehensive income during the year	**(14,478)**	22,401
At 31 December	**137,014**	151,492

Any gain or loss arising from the remeasurement of the Group's unlisted equity securities held for strategic purposes with amount of RMB10,858,000 (net of tax) are recognised in the fair value reserve (non-recycling) in other comprehensive income. Upon disposal of the equity securities, the amount accumulated in other comprehensive income is transferred directly to retained earnings.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(d) Fair values measurement (continued)

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

The carrying amounts of the Group's financial instruments carried at cost or amortised cost are not materially different from their values as at 31 December 2019 and 31 December 2020 except for the following financial instruments, for which their carrying amounts and fair value are disclosed below:

	2020		2019	
	Carrying amount RMB'000	**Fair value RMB'000**	Carrying amount RMB'000	Fair value RMB'000
Bank loans	**72,762**	**74,652**	97,235	100,619
Corporate bond	**499,784**	**509,921**	499,682	502,044
	572,546	**584,573**	597,607	602,663

Valuation techniques and inputs used in Level 3 fair value measurements.

The fair value of bank loans and corporate bond is estimated as being the present value of future cash flows, discounted at current market interest rates for similar financial instruments.

The interest rates used are as follows:

	2020	2019
Bank loans	**4.59%**	4.94%
Corporate bond	**4.19%**	3.70%

(e) Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group's interest rate risk arises primarily from long-term borrowings. Borrowings issued at variable rates expose the Group to cash flow interest rate risk.

The Group regularly reviews and monitors the mix of fixed and variable rate borrowings in order to manage its interest rate risks. During the year, however, management of the Group did not consider it is necessary to use interest rate swaps to hedge their exposure to interest.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

32 FINANCIAL RISK MANAGEMENT AND FAIR VALUES OF FINANCIAL INSTRUMENTS (CONTINUED)

(e) Interest rate risk (continued)

(i) Interest rate profile

The following table details the interest rate profile of the Group's borrowings at the end of the reporting period.

	2020 **RMB'000**	2019 RMB'000
Net fixed rate borrowings:		
Corporate bond (Note 23)	**499,784**	499,682
Lease liabilities (Note 26)	**86,878**	85,468
Bank loans (Note 22)	**89,680**	145,675
	676,342	730,825
Net floating rate borrowings:		
Bank loans (Note 22)	**73,302**	142,775
Total net borrowings	**749,644**	873,600

(ii) Sensitivity analysis

At 31 December 2020, it is estimated that a general increase/decrease of 100 basis point in interest rates of net floating borrowings, with all other variables held constant, the Group's profit after tax would have increased/decreased by approximately RMB546,000, (2019: RMB1,138,000). Other components of consolidated equity would not be affected by the general increase/decrease in interest rates.

The sensitivity analysis above has been determined assuming that the change in interest rates had occurred at the end of the reporting period and had been applied to the exposure to interest rate risk for non-derivative financial instruments in existence at the end of the reporting period. The impact on the Group's profit after tax (and retained profits) and other components of consolidated equity is estimated as an annualized impact on interest expense or income of such a change in interest rates.

The estimated 100 basis points increase or decrease represents management's assessment of a reasonable change in interest rates over the period until the next annual statement of financial position date. The analysis is performed on the same basis for 2019.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

33 COMMITMENTS

Capital commitments

Capital commitments outstanding at 31 December not provided for in the financial statement were as follows:

	2020 RMB'000	2019 RMB'000
Contracted for	791,672	845,778
Authorised but not contracted for	–	44,302
	791,672	890,080

34 MATERIAL RELATED PARTY TRANSACTIONS

(a) Transaction with related parties

The Group is part of a large group of companies under CNNC and has significant transactions and relationships with CNNC and related parties under CNNC.

The principle transactions which were carried out in the ordinary course of business are as follows:

	2020 RMB'000	2019 RMB'000
Sale of goods to		
Related parties under CNNC	48,668	56,856
Associates and joint ventures	25,630	27,061
Service provided to		
Related parties under CNNC	4,662	2,804
Associates and joint ventures	31,698	76,703
Purchase of goods from		
Related parties under CNNC	17,839	12,276
Associates and joint ventures	14,421	17,772
Purchase of property, plant and equipment from		
Related parties under CNNC	2,782	15,887
Service provided by		
CNNC	1,602	1,489
Related parties under CNNC	117,620	100,635
Associates and joint ventures	360	1,052

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

34 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(a) Transaction with related parties (continued)

	2020 RMB'000	2019 RMB'000
Leases from		
Related parties under CNNC		
– right-of-use assets recognised during the year under IFRS16	698	10,968
– lease payments	1,658	5,250
Interest expenses		
Related parties under CNNC	3,874	956
Net deposits placed with		
Related parties under CNNC	536,218	270,625
Interest income		
Related parties under CNNC	13,993	12,409
Dividend paid to		
CNNC	14,817	13,079
Related parties under CNNC	61,520	58,188
Dividend received from		
Related parties under CNNC	7,792	10,162
Capital investment in		
Related parties under CNNC	–	483,600
Associates and joint ventures	6,224	13,760
Purchase of a subsidiary from		
Related parties under CNNC	–	51,002

(b) Balances with related parties

Details of the outstanding balance with related parties are set out in Notes 19, 20, 21, 24 and 25.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

34 MATERIAL RELATED PARTY TRANSACTIONS (CONTINUED)

(c) Transactions with other government-related entities in the PRC

The Group is a state-owned entity and operates in an economic regime currently dominated by entities directly or indirectly owned or controlled by the PRC government and numerous government authorities and agencies (collectively referred to as "State-owned Entities").

In 2018, the Group had transactions with State-owned Entities including, but not limited to, sales of goods, deposits and borrowings, purchase of materials and receiving construction work services. The directors consider that the transactions with these State- owned Entities are activities in the ordinary course of the Group's business and that the dealings of the Group have not been significantly or unduly affected by the fact that the Group and these State-owned Entities are ultimately controlled or owned by the PRC government. The Group has also established pricing policies for services and products, and such pricing policies do not depend on whether or not the counterparties are State-owned Entities. Having due regard to the substance of the relationship, the directors are of the opinion that none of these transactions are material related party transactions that require separate disclosure.

(d) Key management personnel remuneration

Key management personnel are those persons holding positions with authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including the Company's directors.

Remuneration for key management personnel, including amounts paid to the Company's directors as disclosed in Note 9, and certain of the highest paid employees as disclosed in Note 10, is as follows:

	2020	2019
	RMB'000	RMB'000
Salaries and other emoluments	**2,979**	2,565
Retirement scheme contributions	**367**	634
Discretionary bonuses	**3,951**	3,888
Cash settled share-based payment expenses	**1,020**	–
	8,317	7,087

(e) Applicability of the Listing Rules relating to connected transactions

The related party transactions in respect of the sale of goods, service provided, purchase of goods and service, purchase of property, plant and equipment, leases, interest expense and interest income with related parties under CNNC above constitute connected transactions or continuing connected transactions as defined in Chapter 14A of the Listing Rules. The disclosures required by Chapter 14A of the Listing Rules are provided in section "Connected transactions" of the Directors' Report.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

STATEMENT OF FINANCIAL POSITION OF THE COMPANY

AT 31 DECEMBER 2020

(Expressed in RMB)

	2020 RMB'000	2019 RMB'000
Non-current assets		
Property, plant and equipment	12,988	14,189
Investment property	71	243
Intangible assets	5,409	4,707
Investments in subsidiaries	1,752,935	1,248,705
Interests in associates	24,336	18,353
Interests in joint ventures	551,713	528,361
Unquoted equity investments	136,903	151,380
Deferred tax assets	22,844	24,350
	2,507,199	1,990,288
Current assets		
Inventories	75,691	47,223
Trade and bill receivables	139,760	119,655
Prepayments, deposits and other receivables	315,798	370,325
Cash at bank and on hand	610,578	1,040,172
	1,141,827	1,577,375

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

STATEMENT OF FINANCIAL POSITION OF THE COMPANY AT 31 DECEMBER 2020 (CONTINUED)

(Expressed in RMB)

	2020 RMB'000	2019 RMB'000
Current liabilities		
Trade payables	24,154	24,360
Accruals and other payables	138,746	137,376
Lease liabilities	–	754
Income tax payable	6,735	–
	169,635	162,490
Net current assets	972,192	1,414,885
Total assets less current liabilities	3,479,391	3,405,173
Non-current liabilities		
Corporate bond	499,784	499,682
Defined benefit retirement obligation	28,172	29,231
Deferred tax liabilities	9,781	13,400
Other long-term payables	5,061	–
Lease liabilities	–	187
	542,798	542,500
Net assets	2,936,593	2,862,673
Capital and reserves		
Share capital	319,875	319,875
Reserves	2,616,718	2,542,798
Total equity	2,936,593	2,862,673

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)

(Expressed in RMB unless otherwise indicated)

35 IMMEDIATE AND ULTIMATE HOLDING COMPANY

As at 31 December 2020, the directors of the Company consider the immediate and ultimate holding company of the Group to be CNNC, which is a state-owned enterprise established in the PRC. CNNC does not produce financial statements available for public use.

36 POSSIBLE IMPACT OF AMENDMENTS, NEW STANDARDS AND INTERPRETATIONS ISSUED BUT NOT YET EFFECTIVE FOR THE YEAR ENDED 31 DECEMBER 2020

Up to date of issue of these financial statements, the IASB has issued a number of amendments and new standards which are not yet effective for the accounting year ended 31 December 2020 and which have not been adopted in these financial statements.

These include the following which may be relevant to the Group.

	Effective for accounting periods beginning on or after
Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4, and IFRS 16, *Interest Rate Benchmark Reform Phase 2*	1 January 2021
Amendments to IFRS 3, *Reference to the Conceptual Framework*	1 January 2022
Amendments to IAS 16, *Property, Plant and Equipment: Proceeds before Intended Use*	1 January 2022
Amendments to IAS37, *Onerous Contracts – Cost of Fulfilling a Contract*	1 January 2022
Annual Improvements to IFRSs 2018-2020 Cycle	1 January 2022
Amendments to IAS 1, *Classification of Liabilities as Current or Non-current*	1 January 2023
IFRS 17, *Insurance Contracts*	1 January 2023
Amendments to IFRS 10 and IAS 28, *Sale or contribution of assets between an investor and its associate or joint venture*	To be determined

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.

37 IMPACT OF COVID-19 PANDEMIC

The COVID-19 pandemic since early 2020 has brought about additional uncertainties in the Group's operating environment and has impacted the Group's operations and financial position.

The Group has been closely monitoring the impact from the COVID-19 pandemic on the Group's business and has put in place various contingency measures. The easing of the COVID-19 pandemic situation in the mainland China have led to the recovery of the demand of the Group's products and the revenue has been recovered in the second half year of 2020.

The directors of the Company is optimistic that the COVID-19 pandemic will eventually be under full control, and the Group will continue to closely monitor the situation and implement contingency measures, where necessary in a view to reduce the impacts from the COVID-19 pandemic.

FIVE YEAR SUMMARY

(Expressed in RMB)

	Note	2020 RMB'000	2019 RMB'000	2018 RMB'000 (restated)	2017 RMB'000 (restated)	2016 RMB'000 (restated)
Results						
Revenue	2	**4,274,183**	3,988,904	3,249,708	2,672,045	2,363,122
Profit from operations	2	**626,454**	720,594	676,100	530,053	498,361
Finance costs	1	**(46,656)**	(18,758)	(7,714)	(7,095)	(14,391)
Share of profits less losses of associates		**(12,028)**	2,141	(718)	14,764	11,519
Share of profits of joint ventures		**28,393**	29,830	24,952	20,242	17,260
Profit before taxation		**596,163**	733,807	692,620	557,964	512,749
Income tax	2,3	**(120,640)**	(108,882)	(105,490)	(82,326)	(78,247)
Profit for the year		**475,523**	624,925	587,130	475,638	434,502
Attributable to:						
Equity shareholders of the Company		**213,582**	329,030	321,903	271,454	262,108
Non-controlling interests		**261,941**	295,895	265,227	204,184	172,394
Profit for the year		**475,523**	624,925	587,130	475,638	434,502
Assets and liabilities						
Property, plant and equipment	1	**2,210,150**	1,987,037	1,339,798	765,845	607,760
Investment property		**20,768**	22,425	14,526	15,592	16,858
Lease prepayments	1	**–**	–	115,925	63,928	57,657
Intangible assets		**148,363**	108,382	48,928	32,176	12,865
Goodwill		**43,875**	43,875	5,670	5,670	5,670
Interests in associates		**65,263**	61,543	85,510	81,425	73,847
Interests in joint ventures		**552,748**	529,396	42,917	38,774	36,006
Long-term receivables		**35,440**	33,784	32,206	30,702	29,267
Unquoted equity investments	3	**137,014**	151,492	125,491	47,251	47,251
Deferred tax assets		**200,556**	265,045	206,263	155,489	121,050
Net current assets	2	**2,998,946**	2,711,220	2,692,296	1,543,703	622,275
Total assets less current liabilities		**6,413,123**	5,914,199	4,709,530	2,780,555	1,630,506
Deferred tax liabilities		**(14,186)**	(18,383)	(8,347)	(9)	(21)
Other non-current liabilities		**(893,327)**	(892,383)	(362,790)	(334,212)	(157,027)
NET ASSETS		**5,505,610**	5,003,433	4,338,393	2,446,334	1,473,458

FIVE YEAR SUMMARY (CONTINUED)

(Expressed in RMB)

	Note	**2020** **RMB'000**	2019 RMB'000	2018 RMB'000 (restated)	2017 RMB'000 (restated)	2016 RMB'000 (restated)
Capital and reserves						
Share capital		**319,875**	319,875	319,875	239,906	200,000
Reserves	1,2,3	**3,571,323**	3,439,471	3,182,178	1,629,038	727,522
Total equity attributable to equity shareholders of the Company		**3,891,198**	3,759,346	3,502,053	1,868,944	927,522
Non-controlling interests		**1,614,412**	1,244,087	836,340	577,390	545,936
TOTAL EQUITY		**5,505,610**	5,003,433	4,338,393	2,446,334	1,473,458
Earnings per share	8					
Basic and diluted (RMB)		**0.67**	1.03	1.15	1.17	1.31

Notes to the five year summary

1 As a result of the adoption of IFRS 16, Leases, with effect from 1 January 2019, the Group has changed its accounting policies in respect of the lessee accounting model. In accordance with the transitional provisions of the standard, the changes in accounting policies were adopted by way of opening balance adjustments to recognise right-of-use assets and lease liabilities as at 1 January 2019. After initial recognition of these assets and liabilities, the Group as a lessee is required to recognise interest expense accrued on the outstanding balance of the lease liabilities, and the depreciation of the 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 terms. Figures in years earlier than 2019 are stated in accordance with the policies applicable in those years.

2 As a result of the adoption of IFRS 15, Revenue from contracts with customers, with effect from 1 January 2018, the Group has changed its accounting policies in respect of revenue recognition. In accordance with the transitional provisions of the standard, the changes in accounting policies were adopted by way of opening balance adjustments to equity as at 1 January 2018. Figures in years earlier than 2018 are stated in accordance with the policies applicable in those years.

3 The Group adopted IFRS 9, Financial instruments, including the amendments to IFRS 9, Prepayment features with negative compensation, from 1 January 2018. As a result, the Group has changed its accounting policies in relation to financial instruments. As allowed by IFRS 9, the Group has not restated information relating to prior years. Differences in the carrying amounts of the financial assets resulting from the adoption of IFRS 9 were recognised in retained earnings and reserves at 1 January 2018. There was no difference in the carrying amounts of the financial liabilities. Prior to 1 January 2018, figures were stated in accordance with the policies applicable in those years.

4 As a result of the business combination under common control in 2019, figures for the years from 2016 to 2019 have been restated for comparison purposes.

DEFINITIONS

"404 Company"	CNNC 404 Company Limited
"AGM"	the annual general meeting of the Company
"Articles of Association"	the Articles of Association of China Isotope & Radiation Corporation
"Baoyuan Investment"	China Baoyuan Investment Co., Ltd.
"Board" or "Board of Directors"	the Board of Directors of the Company
"Board of Supervisors"	the Board of Supervisors of the Company
"China" or "PRC"	the People's Republic of China, for the purpose of this annual report, excluding Hong Kong, Macau and Taiwan
"CIAE"	China Institute of Atomic Energy
"CIRC", "Company", "our Company", "we" or "us"	China Isotope & Radiation Corporation, a joint stock company incorporated in the PRC with limited liability
"CNGT"	Chengdu Gaotong Isotope Co., Ltd. (CNNC)
"CNNC"	China National Nuclear Corporation
"CNNC Fund"	Beijing CNNC Industry Investment Fund (LLP)
"CNNC Tongxing"	CNNC Tongxing (Beijing) Nuclear Technology Co., Ltd.
"Company Law"	the Company Law of the People's Republic of China
"EPC"	engineering, procurement and construction
"Group" or "our Group"	the Company and its subsidiaries from time to time
"Listing Date"	6 July 2018, being the date on which the H Shares are listed on the Stock Exchange
"Headway"	Shenzhen Zhonghe Headway Bio-Sci & Tech Co., Ltd.
"HTA"	HTA Co., Ltd.
"H Share(s)"	overseas listed foreign shares in the ordinary share capital of the Company with a nominal value of RMB1.00 each, which are to be subscribed for and traded in HK dollars and have been approved for the granting of listing, and permission to deal, on the Stock Exchange

DEFINITIONS (CONTINUED)

"HK$" or "HK dollars"	Hong Kong dollars and cents, respectively, the lawful currency of Hong Kong
"Hong Kong" or "HK"	Hong Kong Special Administrative Region of the PRC
"Listing Rules"	the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited
"Model Code"	the Model Code for Securities Transactions by Directors of Listed Issuers
"NPIC"	Nuclear Power Institute of China
"PBOC"	People's Bank of China
"Prospectus"	the prospectus of the Company dated 22 June 2018
"Reporting Period"	the financial year ended 31 December 2019
"RMB"	Renminbi, the lawful currency of the PRC
"Rounding"	In this report, where information is presented in hundreds, thousands, ten thousands, millions or hundred millions, certain amounts of less than one hundred, one thousand, ten thousand, one million or hundred million, as the case may be, have been rounded to the nearest hundred, thousand, ten thousand, million or hundred million, respectively. Amounts presented as percentages have, in certain cases, been rounded to the nearest tenth or hundredth of a percent. Any discrepancies in any table or chart between totals and sums of amounts listed therein are due to rounding
"SFO"	the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong), as amended, supplemented or otherwise modified from time to time
"Shareholder(s)"	holder(s) of the Share(s) of the Company
"Shenzhen CICAM"	Shenzhen CICAM Manufacturing Co., Ltd.
"Stock Exchange"	The Stock Exchange of Hong Kong Limited
"Supervisor(s)"	supervisor(s) of our Company
"Yunke Pharm"	Chengdu Yunke Pharmaceutical Co., Ltd.
"%"	per cent

中國同輻股份有限公司
China Isotope & Radiation Corporation