網龍網絡控股有限公司
NETDRAGON WEBSOFT HOLDINGS LIMITED

(incorporated in the Cayman Islands with limited liability)
Stock Code: 777

ANNUAL REPORT

2022

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2022

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NETDRAGON WEBSOFT HOLDINGS LIMITED

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CORPORATE INFORMATION

BOARD OF DIRECTORS

Executive Directors

Mr. Liu Dejian *(Chairman)*
Dr. Leung Lim Kin, Simon *(Vice Chairman)*
Mr. Liu Luyuan *(Chief Executive Officer)*
Mr. Zheng Hui
Mr. Chen Hongzhan

Non-executive Director

Mr. Lin Dongliang

Independent non-executive Directors

Mr. Sing Chung Matthias Li
Mr. Lee Kwan Hung, Eddie
Mr. Liu Sai Keung, Thomas

COMPLIANCE OFFICER

Mr. Liu Luyuan

COMPANY SECRETARY

Mr. Lau Hak Kin

QUALIFIED ACCOUNTANT

Mr. Yam Kwok Hei Benjamin, *HKICPA, CA, CFA*
Mr. Lau Hak Kin, *HKICPA, FCCA, CFA*

AUDIT COMMITTEE

Mr. Sing Chung Matthias Li *(Chairman of the Committee)*
Mr. Lee Kwan Hung, Eddie
Mr. Liu Sai Keung, Thomas

REMUNERATION COMMITTEE

Mr. Lee Kwan Hung, Eddie *(Chairman of the Committee)*
Mr. Sing Chung Matthias Li
Mr. Liu Sai Keung, Thomas

NOMINATION COMMITTEE

Mr. Liu Sai Keung, Thomas *(Chairman of the Committee)*
Mr. Sing Chung Matthias Li
Mr. Lee Kwan Hung, Eddie

SHARE AWARD SCHEME COMMITTEE

Mr. Lee Kwan Hung, Eddie *(Chairman of the Committee)*
Mr. Liu Sai Keung, Thomas
Mr. Yam Kwok Hei Benjamin
Mr. Lau Hak Kin

AUTHORISED REPRESENTATIVES

Mr. Liu Luyuan
Mr. Lau Hak Kin

HONG KONG LEGAL ADVISER

Jingtian & Gongcheng LLP

PRC LEGAL ADVISER

Jingtian & Gongcheng

AUDITOR

Deloitte Touche Tohmatsu
Certified Public Accountants
Registered Public Interest Entity Auditors

CORPORATE INFORMATION

PRINCIPAL BANKERS

Bank of America
China Minsheng Banking Corp Ltd.
The Hongkong and Shanghai Banking Corporation Limited

HONG KONG BRANCH SHARE REGISTRAR AND TRANSFER OFFICE

Tricor Investor Services Limited
17/F, Far East Finance Centre
16 Harcourt Road
Hong Kong

STOCK INFORMATION

Listing Place

Main Board of The Stock Exchange of Hong Kong Limited

Stock Code

777

Listing Date

24 June 2008

Stock Name

NETDRAGON

REGISTERED OFFICE

Cricket Square
Hutchins Drive
P.O. Box 2681
Grand Cayman KY1-1111
Cayman Islands

HEAD OFFICE IN PRC

851 Building,
58 Wenquan Branch Road,
Fuzhou

HEAD OFFICE AND PRINCIPAL PLACE OF BUSINESS IN HONG KONG

Units 2001-05 & 11, 20/F.
Harbour Centre, 25 Harbour Road
Wan Chai, Hong Kong

COMPANY WEBSITE

www.nd.com.cn

GROUP FINANCIAL SUMMARY

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

	For the year ended 31 December				
	2018	2019	2020	2021	**2022**
	RMB million	RMB million	RMB million	RMB million	**RMB million**
Revenue	5,037	5,793	6,137	7,036	**7,866**
Cost of revenue	(1,990)	(1,938)	(1,966)	(2,513)	**(3,551)**
Gross profit	3,047	3,855	4,171	4,523	**4,315**
Other income and gains	118	140	231	224	**223**
Impairment loss under expected credit loss model, net of reversal	(12)	(26)	2	(8)	**(14)**
Selling and marketing expenses	(698)	(916)	(893)	(956)	**(945)**
Administrative expenses	(853)	(883)	(903)	(956)	**(975)**
Research and development costs	(923)	(1,076)	(1,176)	(1,160)	**(1,224)**
Other expenses and losses	(150)	(308)	(327)	(266)	**(213)**
Share of results of associates and joint ventures	(3)	(8)	(17)	(16)	**(17)**
Operating profit	526	778	1,088	1,385	**1,150**
Interest income on pledged bank deposits	4	3	3	1	**—**
Exchange (loss) gain on financial assets at fair value through profit or loss, bank borrowings, convertible preferred shares, convertible and exchangeable bonds and derivative financial instruments	(10)	(1)	45	19	**(73)**
Fair value change on convertible preferred shares	60	111	—	—	**—**
Fair value change on financial assets at fair value through profit or loss	—	—	52	20	**(33)**
Fair value change on derivative financial instruments	—	—	43	(3)	**15**
Finance costs	(12)	(25)	(158)	(186)	**(219)**
Profit before taxation	568	866	1,073	1,236	**840**
Taxation	(91)	(163)	(217)	(253)	**(76)**
Profit for the year	477	703	856	983	**764**

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME (Cont'd)

	For the year ended 31 December				
	2018	2019	2020	2021	**2022**
	RMB million	RMB million	RMB million	RMB million	**RMB million**
Attributable to:					
— Owners of the Company	546	807	954	1,062	**834**
— Non-controlling interests	(69)	(104)	(98)	(79)	**(70)**
Profit for the year	477	703	856	983	**764**
Earnings per share					
— Basic (RMB cents)	102.42	152.68	171.19	191.67	**154.15**
— Diluted (RMB cents)	102.27	152.17	170.96	191.58	**154.14**

CONDENSED CONSOLIDATED STATEMENT OF FINANCIAL POSITION

	As at 31 December				
	2018	2019	2020	2021	**2022**
	RMB million	RMB million	RMB million	RMB million	**RMB million**
Non-current assets	3,391	3,668	3,870	3,944	**4,344**
Current assets	3,355	4,089	6,123	6,941	**6,687**
Non-current liabilities	(465)	(493)	(1,380)	(1,256)	**(1,468)**
Current liabilities	(1,482)	(1,903)	(1,961)	(2,554)	**(2,964)**
Non-controlling interests	134	235	155	240	**300**
Equity attributable to owners of the Company	4,933	5,596	6,807	7,315	**6,899**

CHAIRMAN'S STATEMENT

Dear Shareholders,

2022 was an exceptional year for us, and I am proud of our accomplishments. We managed to successfully deliver a resilient overall performance with 11.8% revenue growth, reaching RMB7.9 billion in total group revenue. We also pursued several growth drivers for both our education and gaming businesses to increase our core competencies and market share. This included launching new products, strengthening strategic partnerships, enhancing our go-to-market strategy, and bolstering our R&D capabilities. I believe our efforts in 2022 have put us in a great position to grow sustainably in the long run.

GAMING

The gaming industry in China was heavily affected by the Covid-19 pandemic that led to a slowdown of the domestic economy during the year. Although our gaming revenue decreased by 5.8% YoY to RMB3.4 billion due to the macro impact, our mobile gaming revenue remained stable with a slight YoY decrease of 0.2%, outperforming the domestic mobile gaming market, which saw a market decline of 14.4% during the year. Our flagship mobile game Eudemons Pocket Version continued to deliver strong performance with total revenue up 6.2% YoY, largely due to our successful ROI-driven user acquisition strategy and the implementation of effective content and gameplay updates throughout the year. Meanwhile, PC gaming revenue reached RMB2.8 billion, representing a 6.9% YoY decrease, mainly due to the short-term impact of the Covid-related economic slowdown in the domestic market. Nevertheless, despite the short-term macro challenges, we stepped up our efforts to enhance the in-game consumption mechanics of our flagship PC game, Eudemons Online, which resulted in 28.4% YoY increase in Average Paying Users (APA), which will undoubtedly provide us with a stronger and larger paying user base to drive future growth.

The strong growth of our overseas gaming business was another highlight of our gaming business in 2022. We achieved revenue of RMB540 million in the overseas markets, up 6.5% YoY in a year of global economic challenges. Total overseas revenue as a percentage of total gaming revenue also increased for the fifth consecutive year to 15.7%. Our Conquer IP was the main driver of growth in 2022, with overseas revenue up 48.5% YoY to RMB188 million as we continued to replicate our successful business model in Egypt in new geographical markets. We also continued to make remarkable progress in expanding our Heroes Evolved and Under Oath IP to the overseas markets. In addition, we are continuing to pursue growth in the metaverse and expect the initial metaverse offering (IMO) of our Neopets Metaverse game to launch in 2023.

Looking forward, our growth strategy is to remain very focused on significantly expand our pipeline of new games while driving revenue growth from our existing games. To achieve this goal, we increased our gaming R&D headcount by over 300 throughout the year, as we believe a stronger and larger team will enable us to increase the quality and quantity of our new games.

EDUCATION

Our education business continued to deliver a stellar performance in 2022. Revenue achieved a record high of RMB4.3 billion in 2022, representing a YoY increase of 34.2% as we continued to lead the market in delivering best-in-class products to our customers. Our market share continued to increase even as more players are entering the market, and we believe this is testament to our strong execution and our ability to capitalize on our competitive strengths relating to our people, our technology, and our channel reach.

We continued to accelerate our pace of innovation by continuing to bring new products to the market. 2022 saw the introduction to market of the all new ActivPanel 9, a product which offers the most robust, seamless, and secure user experience yet for both teachers and students, enabling us to sell at a higher ASP compared to our existing model. We also stepped up our efforts in pursuing strategic partnerships and M&A opportunities to capitalize on software monetization opportunities, an example of which is our recent acquisition of Explain Everything, the leading digital whiteboard platform, which addresses one of the most common use cases by facilitating interaction and engagement during lessons. We also entered into a strategic partnership with Merlyn Mind, the leading education AI technology player in classroom applications, and are currently building on this partnership to develop an artificial intelligence (AI) enabled interactive panel for classrooms. During the year, we started to execute on the roadmap to build this next-generation panel, which we expect to launch in our next panel release. We believe we are well ahead of the market in terms of integrating AI into classrooms. Our goal is to become the category dominant leader in a new product category that transforms classroom learning with AI.

We are also actively expanding our market presence in the emerging markets with our unique country roll-out model. In China, as part of our partnership with the National Center for Education Technology ("NCET"), we were mandated to build and provide technical support for the National K-12 Smart Education Platform, which since its launch through March of this year has amassed 77 million registered users and 23 billion page views. As user traction continues to grow with this platform, we are excited to continue to build on our partnership with NCET to explore future monetization opportunities at scale. In addition, we are currently in the second phase of a paid pilot program with the Education Department of Thailand where we are targeting an addressable market of 30,000 schools across the country through our blended learning offerings.

Looking forward, we will continue to scale our Promethean installed base with our goal to turn the Promethean platform to be "appstore for the classroom", which will put us in a position to scale our software and SAAS monetization. To that end, our direction to pursue the transformation of education with AI will allow us to offer AI-enabled applications on our platform that leads to recurring monetization opportunities. We are currently moving in full speed to achieve this goal.

CAPITAL RETURN MEASURES

Given our confidence in our growth prospects and our ability to generate sustained free cash flow, I would like to reiterate our commitment to put shareholders' capital return at the forefront of our priorities. We expect to continue with the execution of capital return measures including share buyback opportunities and dividends. In addition to the special interim dividend of HKD0.50 per ordinary share that we declared in August, we are pleased to announce that the Board has approved our final dividend proposal of HKD0.40 per ordinary share. Total dividends for the year has resulted in approximately 73.0% of our total profit being attributable to shareholders for the year.

To conclude, I look forward to embarking on another exciting year in 2023 and would like to express my sincere gratitude for your unwavering support and trust. Together, we remain committed to achieving our shared goals, and I am confident that with our steadfast determination, resilience, and adaptability, we will overcome any challenges and emerge stronger than ever before.

Liu Dejian
Chairman

MANAGEMENT DISCUSSION AND ANALYSIS

(1) FINANCIAL HIGHLIGHTS AND REVIEW

Fiscal Year 2022 Financial Highlights

- Revenue was RMB7.9 billion, representing an 11.8% increase YoY.
- Revenue from the games business was RMB3.4 billion, representing 43.6% of the Group's total revenue and a 5.8% decrease YoY.
- Revenue from the education business was RMB4.3 billion, representing 55.1% of the Group's total revenue and a 34.2% increase YoY.
- Gross profit was RMB4.3 billion, representing a 4.6% decrease YoY.
- Core segmental profit[1] from the games business was RMB1.8 billion, representing a 14.1% decrease YoY.
- Core segmental loss[1] from the education business was RMB299 million, representing a 27.4% improvement YoY.
- EBITDA was RMB1.5 billion, representing a 20.7% decrease YoY.
- Operating profit was RMB1.2 billion, representing a 17.0% decrease YoY.
- Non-GAAP operating profit[2] was RMB1.3 billion, representing a 12.7% decrease YoY.
- Profit attributable to owners of the Company was RMB834 million, representing a 21.5% decrease YoY.
- Non-GAAP profit attributable to owners of the Company[2] was RMB1.3 billion, representing a 2.2% decrease YoY.
- Operating cash flow was RMB1.1 billion, representing a 4.2% increase YoY.
- The Company declared a final dividend of HKD0.40 per ordinary share (2021: HKD0.40 per ordinary share), subject to approval at the coming annual general meeting.

(1) FINANCIAL HIGHLIGHTS AND REVIEW (Cont'd)

Segmental Financial Highlights

	FY2022		FY2021		Variance	
(RMB million)	Gaming	Education	Gaming	Education	Gaming	Education
Revenue	3,430	4,336	3,642	3,231	-5.8%	34.2%
Gross profit	3,280	1,007	3,474	995	-5.6%	1.2%
Gross margin	95.6%	23.2%	95.4%	30.8%	0.2%	-7.6%
Core segmental profit (loss)[1]	1,821	(299)	2,120	(412)	-14.1%	-27.4%
Segmental operating expenses[3]						
— Research and development	(768)	(446)	(658)	(501)	16.7%	-11.0%
— Selling and marketing	(398)	(532)	(419)	(530)	-5.0%	0.4%
— Administrative	(292)	(387)	(318)	(351)	-8.2%	10.3%

Note 1: Core segmental profit (loss) figures are derived from the Group's reported segmental profit (loss) figures (presented in accordance with Hong Kong Financial Reporting Standard ("HKFRS") 8) but exclude non-core/operating, non-recurring or unallocated items including government grants, intercompany finance costs, impairment loss (net of reversal), impairment loss of intangible assets, goodwill and interest in an associate, write-down of inventories, fair value change and exchange difference on financial assets at fair value through profit or loss ("FVTPL"), fair value change and exchange difference on derivative financial instruments, interest expense and exchange difference on convertible and exchangeable bonds, write off of intangible assets and redundancy payment.

Note 2: To supplement the consolidated results of the Group prepared in accordance with HKFRSs, the use of non-GAAP measures is provided solely to enhance the overall understanding of the Group's current financial performance. The non-GAAP measures are not expressly permitted measures under HKFRSs and may not be comparable to similarly titled measures for other companies. The non-GAAP measures of the Group exclude share-based payments expense, amortisation of intangible assets arising on acquisitions of subsidiaries, impairment loss of intangible assets, goodwill and interest in an associate, write-down of inventories, fair value change on financial assets at FVTPL, fair value change on derivative financial instruments, finance costs, interest income on pledged bank deposits and exchange difference on financial assets at FVTPL, bank borrowings, convertible and exchangeable bonds and derivative financial instruments.

Note 3: Segmental operating expenses exclude unallocated expenses/income such as depreciation, amortisation and exchange difference that have been grouped into SG&A categories on the Company's reported consolidated financial statements, but cannot be allocated to specific business segments for purpose of calculating the segmental profit (loss) figures in accordance with HKFRS 8.

(2) BUSINESS REVIEW AND OUTLOOK

NetDragon Websoft Holdings Limited (the "**Company**") and its subsidiaries (collectively referred to as the "**Group**") delivered a resilient performance with 11.8% revenue growth in a year of both opportunities and challenges. Our education business achieved record-high revenue of RMB4.3 billion with 34.2% YoY growth, as we continued to build on our global market leadership position with our commitment to providing educators the ability to transform learning and collaboration. In June 2022, we introduced our all-new ActivPanel 9 that deliver the most robust, seamless and secured user experience yet for teachers and students. During the year, we also took steps to expand our strategic partnerships and M&A initiatives to tap into concrete software monetization opportunities that will unleash the value of our global channel reach, as well as our largest installed base in the overseas market.

We are also excited to have announced that in June 2022, we entered into a strategic partnership with Merlyn Mind, a leader in education AI technology. We are currently building on this partnership to develop an artificial intelligence enabled interactive panel for classrooms, which we plan on launching in our next panel release. We believe this will be a one-of-a-kind product that will elevate our competitive position to a new level.

The gaming industry in China went through unprecedented challenges throughout 2022 as a result of a slowdown of the domestic economy due to the Covid-19 impact. However, a clearly defined go-to-market strategy and our unique gaming IP portfolio helped us to weather the storm. Although revenue of the gaming segment decreased by 5.8% YoY, such revenue performance outperformed the market as we remained laser focus on execution with operational excellence. Our overseas games continued to deliver exceptional performance with a YoY overseas revenue growth of 6.5%. We also substantially strengthened our R&D capability by adding over 300 R&D headcounts during the year, hence putting ourselves in a much stronger position to expand our pipeline of new games.

Last but not least, we continued to put shareholders' capital return as a high priority. We are pleased to announce that the Board has approved our final dividend proposal of HKD0.40 per ordinary share. Total dividends for the year (including special interim dividend declared in August 2022) amounted to HKD1.30 per ordinary share, representing approximately 73.0% of the total profit attributable to the owners for the year.

Education Business

Revenue from education business reached a record high of RMB4.3 billion, representing a YoY increase of 34.2%, and accounting for approximately 55.1% of total revenue. Our flagship edtech subsidiary Promethean continued to outperform the market and maintain its global ex-China #1 market leadership position in terms of shipment volume. Total shipments of interactive flat panels reached a record-high of over 253,000 units, a YoY increase of 37.5%, as we delivered strong performance across all major markets, ranking #1 in market share in nine of our top ten markets, including the U.S., the U.K., Italy, and Australia. In addition to expanding penetration of its hardware installed base, Promethean continues to leverage its unique position of being the classroom edtech hub by stepping up efforts in pursuing strategic partnership and M&A opportunities with an aim to tap into concrete software monetization opportunities. The Company announced the acquisition of Explain Everything, a leading digital whiteboard platform in December 2022 for creating engaging lessons, activities, and interactive presentations. Through this strategic acquisition, Promethean is expected to add to its product portfolio a revenue-generating application tool that addresses one of the most common use cases of its customers. This acquisition will also support the development of new and better solutions that would address teaching, learning, and collaboration needs.

Our gross margin was impacted by various geopolitical and macro challenges during the year, more specifically with respect to tariffs and a lower GBP and Euro relative to USD. On an ex-tariff and forex-neutral basis, Promethean achieved an adjusted gross margin of 30.3%, which is a 2.4 ppt reduction from 32.7% in 2021 that is largely caused by the sell down of our existing ActivPanel 7 inventory since the launch of ActivPanel 9 in June, and a slightly higher unit material cost for ActivPanel 9 relative to the older model. It should also be noted that the new ActivPanel 9 had an Average Selling Price (ASP) that was 17.0% higher than the ASP of the existing ActivPanel 7 during the year, thanks to its positioning as a next-generation product that includes new features with enhanced simplicity, connectivity, security, adaptability and longevity.

We are also actively expanding our country model with a pipeline of countries in emerging markets. In Egypt, the Company secured an order of 94,000 Promethean panels from the Ministry of Education in the first quarter of 2022. In Thailand, the Company's paid pilot program entered its second phase with an expectation to enter commercial rollout later this year. In China, the Company continued to build on its partnership with the National Center for Education Technology, a unit directly under the Ministry of Education, in building and providing technical support for the National K-12 Smart Education Platform for primary and secondary schools. Such platform was launched in March 2022 with a huge success, amassing over 77 million registered users and 23 billion page views as of 23 March 2023. The monthly active users surpassed 10 million for every month after the launch.

We continued to enhance the cost structure of the education business during the year. Overall core segmental loss of the business for the year narrowed by 27.4% YoY to RMB299 million. Operating expenses as a percentage of revenue decreased by 11.3 ppts YoY, driven by effective cost control initiatives that will also lead to higher operating leverage going forward. Furthermore, despite 11.0% YoY reduction in full year R&D expense, the Company managed to step up its R&D effort in the second half of the year with an aim to expand its offerings into multiple new products due for launch in 2023, designed to broaden its penetration of the market and to bring user experience to a new level.

In 2022, market penetration of interactive flat panels reached a new high of 21% of global K12 classrooms, which in our view represents a critical scale that will enable future scaling of value-added subscription/SaaS-based applications. Looking forward, we believe that we are well-positioned to capture this future revenue stream, thanks to our market leadership in interactive flat panels and our installed base of 1.9 million classrooms. To that end, we announced in June 2022 that Promethean has entered in a strategic partnership with Merlyn Mind, the leader in education AI technology with classroom applications. We are currently building on this partnership to develop an artificial intelligence enabled interactive panel for classrooms, which we plan on launching in our next panel release. We believe the product will be one-of-a-kind product that will not only strengthen our competitive position in classroom technology, but also put us in a position to become a category dominant leader in a new product category.

Gaming Business

A slowdown of the domestic economy in China due to the Covid-19 impact has resulted in a revenue YoY decrease of 5.8% to RMB3.4 billion in 2022 for our gaming business. Mobile gaming revenue remained steady at RMB577 million, representing a modest decrease of 0.2% YoY, outperforming a domestic mobile game market decline of 14.4% YoY in 2022. *Eudemons Pocket Version* continued to deliver strong performance and achieved record-high gross billings, representing a YoY growth of 6.2%, largely a result of the change to a ROI-driven user acquisition strategy, as well as effective content and gameplay updates throughout the year. Our mobile gaming portfolio under the *Eudemons* IP on a combined basis achieved a steady revenue growth of 3.6% YoY. Meanwhile, PC gaming revenue was RMB2.8 billion, representing a 6.9% YoY decrease as we saw short-term impact from Covid-related economic slowdown on spending of our core players during the year in the domestic market. Despite the challenges, we stepped up our effort in making enhancements to the in-game spending mechanisms for our flagship game *Eudemons Online* to optimize our payers' base, resulting in a 28.4% YoY increase in APA for this game. Enhanced playability on the mobile platform also significantly drove user engagement and stickiness, leading to increase of DAU and ACU of *Eudemons Online* cross-platform version by 26.1% and 36.4% YoY, respectively.

Our overseas gaming business continued to deliver strong performance with revenue of RMB540 million, a YoY increase of 6.5%, a growth rate that outperformed the market. Overseas gaming revenue as a percentage of total gaming revenue also increased consecutively for 5 years to 15.7% in 2022. Our *Conquer* IP was the main driver for the growth in 2022 with 48.5% overseas revenue increase YoY to RMB188 million, with the growth mainly driven by solid execution along with easing pandemic controls and market recovery in the Middle East. Meanwhile, we continued to replicate our successful business model in Egypt to new markets including Saudi Arabia, Kuwait, Morocco, the Philippines, the U.S and Canada. New language versions were launched in Filipino, Turkish and Russian during the year. We also continued to make progress in expanding the overseas market presence of our *Heroes Evolved* IP. In July, the Company launched the Vietnamese pocket version under the *Heroes Evolved* IP, labelled *Loan Chien Mobile*, hailed by local gaming media as the new giant of Vietnamese e-sports. In August 2022, the Company signed an exclusive licensing agreement with a renowned global publisher for AAA games to co-launch *Under Oath* in major international markets starting in Japan in 2023. *Neopets: Faerie's Hope*, the Company's first match-three game, was launched in the U.S., Canada, the U.K., Germany and France in December 2022, which saw its next-day retention rate and three-day retention rate in the top 5-10% of titles in the same genre. Our flagship metaverse Web 3.0 game *Neopets Metaverse* also hit another major milestone in January 2023 by completing a USD4 million financing round with participation from industry leaders including Polygon Ventures, Blizzard Avalanche Ecosystem Fund, Hashkey Capital and IDG Capital. *Neopets Metaverse* is expected to launch its initial metaverse offering (IMO) in later this year.

Our plan in 2023 will be to significantly expand our pipeline of new games, in conjunction with driving revenue growth for our existing games. During 2022, we stepped up our investment in R&D to put ourselves in a stronger position to capitalize on the market rebound anticipated for 2023, as we saw our gaming R&D expense increased by 16.7% YoY to RMB768 million, accounting for 22.4% of gaming revenue. Our R&D headcounts increased by over 300 in 2022, hence significantly strengthening our development competencies and resulting in an increase of both the quality and quantity of our pipeline of new games. We are expecting a total of 5 new games under the *Eudemons* IP to be launched in 2023 and 2024, the first of which is Eudemons Mobile II, which was successfully launched in March 2023. We also have new games in the pipeline under our *Under Oath* and *Heroes Evolved* IP, as well as new IPs to be announced. Last but not least, we expect to actively explore acquisition opportunities in order to further expand our market reach and core competencies.

(3) LIQUIDITY AND CAPITAL RESOURCES

As at 31 December 2022, the Group had restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and cash and cash equivalents of approximately RMB3,909 million (31 December 2021: RMB4,356 million).

As at 31 December 2022, the Group had net current assets of approximately RMB3,723 million as compared with approximately RMB4,387 million as at 31 December 2021.

(4) GEARING RATIO

The gearing ratio (consolidated bank borrowings/consolidated total equity) was 0.11 (31 December 2021: 0.06). As at 31 December 2022, total bank borrowings of the Group amounted to approximately RMB739 million (31 December 2021: RMB403 million) which included variable-rate loan of RMB376 million (31 December 2021: RMB192 million) and fixed-rate loan of RMB363 million (31 December 2021: RMB211 million). The bank borrowings of RMB736 million (31 December 2021: RMB369 million) were secured by pledge of certain properties and right-of-use assets of the Group, personal guarantee provided by a director of the Company and corporate guarantee provided by the Company and its subsidiaries and the remaining bank borrowings of RMB3 million (31 December 2021: RMB34 million) were unsecured.

(5) CAPITAL STRUCTURE

As at 31 December 2022, the Group's total equity amounted to approximately RMB6,599 million (2021: RMB7,075 million).

(6) CONTINGENT LIABILITIES

As at 31 December 2022 and 2021, the Group did not have any material contingent liabilities.

(7) SIGNIFICANT INVESTMENTS AND ACQUISITIONS AND DISPOSALS AND FUTURE PLANS FOR MATERIAL INVESTMENTS AND CAPITAL ASSETS

Save as disclosed in this annual report, the Group did not have any material acquisitions and disposal of subsidiaries, associates and joint ventures as at 31 December 2022.

During the year, the Group did not have other plans for significant investments and capital assets.

(8) FOREIGN CURRENCY RISKS

The Group operates mainly in the People's Republic of China (the "PRC"), the United States of America and the United Kingdom. Most of its monetary assets, liabilities and transactions are principally denominated in the functional currency of respective group entities, which is Renminbi, US dollar and Great Britain Pound. However, the Group also has operations in Hong Kong, Canada, Australia, Europe and Poland and the business transactions conducted in these areas during the year were mainly denominated and settled in Hong Kong dollar, Canadian dollar, Australian dollar, European dollar and Polish Zloty respectively. The Group currently does not have hedging policy in respect of the foreign currency risk. However, the management closely monitors foreign exchange exposure to ensure appropriate measures are implemented on a timely and effective manner.

(9) CREDIT RISKS

As at 31 December 2022, the Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position.

In order to minimise the credit risk of trade receivables, contract assets, other receivables, refundable rental deposits and loan receivables, the management of the Group has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In this regard, the directors of the Company consider that the Group's credit risk is significantly reduced. In addition, the Group always recognises lifetime expected credit loss ("ECL") for trade receivables and contract assets. The ECL on these assets are assessed individually for credit-impaired debtors and collectively for others using a provision matrix with appropriate groupings.

The credit risk on restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances are limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies or are state-owned banks located in the PRC. In this regard, the directors of the Company consider that the ECL on these balances is insignificant.

(9) CREDIT RISKS (Cont'd)

The Group regularly monitors the business performance of the joint ventures. The Group's credit risks in these balances are mitigated through the value of the assets held by these entities and the power to participate or jointly control the relevant activities of these entities. The directors of the Company believe that there are no significant increase in credit risk of these amounts since initial recognition and the Group provided impairment based on 12-month ECL. For the years ended 31 December 2022 and 2021, the Group assessed the ECL for these balances were insignificant and thus loss allowance was negligible.

The credit risk on liquid funds is limited because the counterparties are banks with good credit ratings and there is no significant concentration of credit risk.

The Group has no significant concentration of credit risk on trade receivables, other receivables and contract assets with exposure spreading over a number of counterparties and customers.

(10) LIQUIDITY RISK

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The Group's policy is to regularly monitor current and expected liquidity requirements and its compliance with lending covenants, 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. Based on the assessment of the management, liquidity risk encountered by the Group is minimal.

CORPORATE CULTURE AND SOCIAL RESPONSIBILITIES

CORPORATE CULTURE

"Passion, Learning, Innovation, Endeavor, Pursuit of Excellence, Fairness, and Customer-orientation" is the DNA of the corporate culture of NetDragon as well as the cultural gene of every individual of NetDragon.

Passion

Passion is the attitude that every staff treats his work and colleagues. We are optimistic, dedicate ourselves to work and never give up; we always maintain a positive attitude and try to influence others

Learning

Learning has been our habit. We take the initiative to learn new things with the unity of knowledge and action. We also focus on self-examination and are ready to share what we know.

Innovation

Innovation is the motive power behind our success. We welcome changes and actively explore new fields. We dare to make attempts and sustain innovations.

Endeavor

Endeavor is our characteristic. We actively hand up and show ourselves so that we can grasp opportunities and win the future.

Pursuit of Excellence

Pursuit of Excellence is our working standard. We always have high aspirations and keep improving. We only compete with ourselves so as to surpass your expectation.

Fairness

Fairness is the working environment we strongly advocate. We respect each other, keep a frank and open mind, stay objective and impartial, and believe in the value of clear rewards and punishments.

Customer-orientation

Customer-orientation is the design and service concept of our products. We lead demands, emphasize experience, pursue a win-win situation and create values.

STAFF RELATIONSHIP AND WELFARE

HUMAN RESOURCES

1. As of 31 December 2022, total number of employees of the Group is 5,135.

2. In 2022, we promoted the vocational training programme organised by the Fujian Provincial Department of Industry and Information Technology and the Department of College Students Affairs of the Ministry of Education in which we reached strategic cooperation with several renowned colleges to create an innovative metaverse industry academia cooperation benchmark, realising the integration of innovative chain and industry chain in the metaverse. Based on the business-centred management concept and flexible employment model, the Company has continuously fostered the exploration of new employment relationship modes, vigorously promoted proactive external information development and metaverse work model, which attracted large number of outstanding talents globally to join the NetDragon metaverse organisation to contribute to global education. In 2022, the Company was awarded employer brand awards such as "Internship Base for College Students in Fujian Province (福建省大學生實習基地)", "2022NFuture The Most Socially Responsible Campus Recruitment Employer (2022NFuture最具社會責任校招僱主獎)", "Favourite Employer of 2022 (2022年度最愛僱主獎)", "Human Resource Management Outstanding Employer of 2023 (2023人力資源管理傑出僱主獎)" and "2023 Best Talent Employer Award (2023最佳人才僱主獎)".

3. We are accelerating the pace of building a "co-creation everyone partakes in and value everyone shares" metaverse organisation to continuously encourage the exploration and transformation of a "business-centered" metaverse organisational management, which elevates the organisation and culture to explore continuously with a more "open", "brave" and "passionate" attitude, moving with the times. We continue to procure the openness and transparency of company information through electronic tools and platforms. We encourage innovative and value contribution through timely reward mechanism to award talents who add value and make contribution by implementing company strategy, progressing product/project research, possessing innovative and creative mindset, reducing expenditure or bringing honorary award with a non-work innovation.

4. In terms of talent cultivation, we combined managerial position requirements and new culture to optimise the senior management 360° evaluation feedback mechanism through various forms of training and activities, such as training camps, to improve employees' abilities in all aspects, and to cultivate various talents that meet the Company's requirements.

5. In terms of staff benefits and services, we actively innovates, reduces cost and increase efficiency, and promote the harmonious relationship between employees and the Company through diversified welfare activities. At the same time, the Company should actively carry out various prevention and control measures to protect the health of employees under epidemic situation.

6. In terms of upgrading the protection and experience of staff rights, we formulated a metaverse new work model which benefited the work-family relationship balance of employees to procure harmonious employment relationship and corporate healthy development by listening to employees' voices and resolving employees' demands through various forms and channels, such as satisfaction surveys and "BUG collection cabins".

WORKING ENVIRONMENT

The Group provides a friendly and happy working environment for our staff, with spacious and well-equipped workplace, including staff canteen, cafes, activity rooms, indoor and outdoor swimming pool, football court, basketball court, badminton court, tennis court, squash courts and fitness center. A relaxed and pleasant working environment does not only enhance a sense of belonging among staffs, but also enhance their work efficiency and creativity. The Group also organises various staff activities such as carnival, quarter marathon and new year gala.

DIRECTORS AND SENIOR MANAGEMENT

EXECUTIVE DIRECTORS

Liu Dejian, aged 51, Chairman of the Board and Executive Director

Mr. Liu is the founder of NetDragon and the chief designer of NetDragon's development strategy and business planning. Over the years, Mr. Liu plays a pivotal role in elevating our Company into one of the leading online game and mobile Internet operations developers in PRC. Mr. Liu is mainly responsible for the group's forward-looking business strategies, and the formation of research and development teams. Mr. Liu leads the design of the online game products and formulates the development policy, which has significantly contributed to the growth of the Company as a competitive online game operator and developer. Currently, Mr. Liu is committed to leading the Company's transformation to an international design-oriented enterprise, while actively promoting Internet education to establish our Group as a leading force in the online education industry globally.

Mr. Liu graduated with a Bachelor's degree of Science in Chemistry from University of Kansas in the USA in 1995. He also completed his doctorate degree in education from Beijing Normal University in 2021. During his academic years in the United States, Mr. Liu developed a strong belief that internet technology was about to revolutionize the world. After graduation, Mr. Liu returned to China and founded Fujian NetDragon Websoft Co., Ltd. (福建網龍計算機網絡信息技術有限公司) ("NetDragon (Fujian)"). Besides, Mr. Liu also served as the vice-president of Beso Biological Research Centre, Inc ("Beso") from 1995 to 2005. He also held the position of vice-president of Fuzhou Yangzhenhua 851 Bio-Engineering Research Inc. ("Fuzhou 851") from 1995 to 2000, and subsequently assumed the role of president since 2001. Mr. Liu is a brother of Liu Luyuan and a cousin of Zheng Hui.

He was awarded the Special Allowance Expert in State Council* (國務院特殊津貼專家) in January 2015. In May 2017, Mr. Liu was recognized as a Senior Engineer Enjoying Professor and Researcher Status* (享受教授、研究員待遇高級工程師) with his exceptional technical accomplishments. In addition, Mr. Liu received the 2013 Progress Prize Second Award in Fujian Province Science and Technology* (二零一三年度福建省科學技術進步二等獎) and 2021 Progress Prize Third Award in Fujian Province Science and Technology* (二零二一年度福建省科學技術進步三等獎).

* *For identification purpose only*

DIRECTORS AND SENIOR MANAGEMENT

Leung Lim Kin, Simon, aged 68, Vice Chairman of the Board, Executive Director, Chairman and Chief Executive Officer of Fujian Province Huayu Education Technology Co. Ltd. ("Fujian Huayu") (福建省華漁教育科技有限公司)

Dr. Leung joined the Company in March 2015. He is responsible for the planning, consolidation and operation of the education business of the Company in the People's Republic of China and the development of the online education business overseas.

Dr. Leung had over 30 years of experience in both information technology and telecommunications industries. In 2005, he was appointed as the president of Motorola Asia-Pacific, a company principally engaged in the production of data communication and telecommunication equipment, where he was primarily responsible for the overall strategic planning and implementation in the Asia-Pacific region. Since 2008, Dr. Leung was the chief executive officer of Microsoft Greater China region, a company principally engaged in developing, manufacturing, licensing and sales of software products, where he was primarily responsible for overseeing overall business operations and for developing and implementing a regional strategy.

Prior to joining the Company, Dr. Leung also held management roles at various educational institutions or corporations engaging in education business. From 2009 to 2010, he was the governor of the Upper Canada College, an educational institution, where he was primarily responsible for establishing and directing policy for the college and overseeing its financial affairs. In 2012, Dr. Leung was the chief executive officer of Harrow International Management Services Limited, a company principally engaged in the management of Harrow International Schools, where he was responsible for the development of new Harrow International Schools and education services in Asia.

Dr. Leung received his bachelor of arts degree and a doctorate in laws from the University of Western Ontario, Canada in 1978 and 2005 respectively and a doctorate in business administration from Hong Kong Polytechnic University in 2007.

* *For identification purpose only*

Dr. Leung currently serves as a member of the Ivey Asia Advisory Board of the Richard Ivey School of Business of the University of Western Ontario, an educational institution, where he is primarily responsible for advising the school on its mission strategy in Asia. He is also a governor of Tung Wah College, an educational institution, where he is primarily responsible for determining key governance issues. From 2010 to 2015, Dr. Leung was a member of the International Advisory Committee of the Hong Kong Polytechnic University. From 2015 to 2017, he was appointed as a member of the Steering Committee on Innovation and Technology of HKSAR. Dr. Leung is currently an independent non-executive director of PuraPharm Corporation Limited (Stock Code: 1498), a company listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "Stock Exchange"). He is also a non-executive director of Modern Times Group (Stock Code: 'MTG A' and 'MTG B'), a company listed on Nasdaq Stockholm.

Liu Luyuan, aged 49, Executive Director, Chief Executive Officer, Compliance Officer and one of the authorised representatives of the Company

Mr. Liu is the executive Director, Chief Executive Officer, Compliance Officer and one of the authorised representatives of the Company, and also serves as CEO of Fujian TQ Digital Inc. ("TQ Digital") (福建天晴數碼有限公司) and director of NetDragon Websoft Inc. ("NetDragon (BVI)"). Mr. Liu currently shoulders a number of social services, such as acting as the director general of the West Taiwan Strait Youth Entrepreneurs Foundation, vice chairman of Fujian Youth Development Foundation, vice chairman of the Fujian Youth Federation, executive vice chairman of Fujian Enterprises and Entrepreneurs Confederation, as well as the chairman of Fujian Youth Entrepreneurs Association.

As an outstanding representative of the new social community taking part in the construction of the Fujian West-strait Economic Zone, Mr. Liu has engaged in the operation and management of software enterprises and technology development since his graduation from Chengdu Electronic Technology University in 1997. He has decades of experience in the management and administration of technical institutions. Mr. Liu is in charge of overall management. He has set up the project management department, and introduced the game project management system to ensure a level of standards for game products. As the Company's spokesman, he is also responsible for coordination with governmental departments, media, and other external parties, under which he has built up the Company's public reputation. By taking part in various activities on behalf of the Company, he shared new ideas and new technologies in animation and game industry. Furthermore, he set up the West Taiwan Strait Youth Entrepreneurs Foundation to cultivate talent. Mr. Liu was awarded the "May 4th Youth Medal" and the titles of "Fujian Brilliant Entrepreneur", "Fujian Top Ten Economic People" and "Fujian Business Building Haixi Outstanding Contribution Award".

Mr. Liu graduated from Chengdu Electronic Technology University in 1997, with a degree in electro-mechanical engineering, and later received an adjunct professor certificate from Fujian Normal University. Mr. Liu is a brother of Liu Dejian, and cousin of Zheng Hui.

Chen Hongzhan, aged 50, Executive Director, Senior Vice President and Chief Technology Officer

Mr. Chen is the Senior Vice President, Chief Technology Officer and Executive Director of the Company. He is an experienced online game developer with over 20 years of experience in the management of game development. He is mainly responsible for game development of the Company. The technical team led by Mr. Chen is responsible for the Programme development and the technical support to the production of games of the Company. His technical support and experience have raised the efficiency and quality of the Company's game development department.

Mr. Chen graduated with a Bachelor's degree of Engineering in Mechanical Design and Manufacture (機械設計及製造) from Beihang University (北京航空航天大學) in July 1995. Before joining the Company in 2001, Mr. Chen was a game developer. Mr. Chen established his own online game studio from 1996 to 1999. Mr. Chen worked as the project manager in Chongqing Dazhong Software Company from 1998 to 2000 and the manager of the technical department in Beijing Beijibing Technology Development Company Limited from 2000 to 2001.

Zheng Hui, aged 54, Executive Director, Chairman of NetDragon (Fujian) and NetDragon Communist Party Committee Secretary

Mr. Zheng is an executive Director of the Company and is responsible for the overall management of the Group. Mr. Zheng has accumulated over 20 years of management and administration experience, providing support to the Group's operation, and coordinating, supervising and managing the duties of various departments. Mr. Zheng is one of the founding shareholders of the Company, and he is currently the legal representative and director of NetDragon (Fujian), TQ Digital, Fujian Huayu and Fujian Tianquan Education Technology Limited* ("Fujian Tianquan") (福建天泉教育科技有限公司). At the same time, he is also appointed in several positions, which includes the Deputy to the Fujian Fourteenth Provincial People's Congress* (福建省第十四屆人大代表), the Deputy to the Fuzhou Sixteenth Provincial People's Congress* (福州市第十六屆人大代表), Vice Chairman of Fujian Provincial Federation of Industry and Commerce* (福建省工商聯副主席), Vice Chairman of Fuzhou Federation of Industry and Commerce* (福州市工商聯副主席), Vice Chairman of Fujian Provincial Private Business Chamber of Commerce* (福建省民營企業商會常務副會長), Executive Vice Chairman of Fuzhou Private Enterprise Association* (福州市民營企業家協會常務副會長), member of China Culture and Entertainment Industry Association* (中國文化娛樂行業協會理事), Chairman of Fujian Cultural Enterprises Association* (福建省文化企業協會會長), Chairman of Trade Development Association of Fuzhou City* (福州市服務貿易發展促進協會會長), Executive Vice Chairman of the Fuzhou Chamber of E-Commerce* (福州市電子商務商會常務副會長), Vice Chairman of the Fujian Confidentiality Association* (福建省保密協會副會長), Vice Chairman of the Fujian Technology Market Association* (福建省技術市場協會副會長), Vice Chairman of Fuzhou Talent Development Association* (福州市人才發展促進會副會長), Vice Chairman of Fuzhou Software Industry Association* (福州市軟件行業協會副會長).

* *For identification purpose only*

Mr. Zheng was awarded as the Brilliant Entrepreneur of Game Industry in China* (中國遊戲行業優秀企業家) from 2016 to 2022 and was recognised as the First Batch of Cultural Master in Fuzhou* (福州市首批文化名家) in September 2018. He was also awarded the title of "Model Worker" in the thirty-sixth session of evaluation by Fuzhou Municipality People's Government* (福州市第三十六屆勞動模範). He has been appointed as the Secretary of NetDragon Party* (網龍黨委書記) since 2016, has received Non-Government Party Award* (非公黨建金雁獎) in 2018, be honoured as Outstanding Party Performer* (市優秀黨務工作者) in 2019, and was nominated as "Party Building Leaders of Digital Economy" in 2020.

Before founding NetDragon (Fujian) in 1999, Mr. Zheng worked in Beso and Fuzhou 851 from 1992 to 1999. He obtained a graduation certificate from the Continuing Education Institute of Beijing Normal University in 2000. Zheng Hui is the cousin of Liu Dejian and Liu Luyuan.

NON-EXECUTIVE DIRECTOR

Lin Dongliang, aged 60, Non-executive Director

Mr. Lin was appointed as a non-executive Director on 15 October 2007. Mr. Lin graduated with a Master's degree in Engineering Management in 1986 from Tsinghua University.

Mr. Lin is currently a general partner of IDG Capital. He has presided over a variety of investment projects in the IT industry since 1995 with remarkable success. Prior to joining IDG Capital, Dongliang worked at the Development Research Center of the State Department of China. Mr. Lin is currently a director of Sichuan Hexie Shuangma Co., Ltd (四川和諧雙馬股份有限公司) (stock code: 935), a company listed on the Shenzhen Stock Exchange. He was a non-executive director of Productive Technologies Company Limited (formerly known as "IDG Energy Investment Limited") (Stock Code: 650), a company listed on the Main Board of the Stock Exchange.

INDEPENDENT NON-EXECUTIVE DIRECTORS

Lee Kwan Hung, Eddie, aged 57, Independent non-executive Director

Mr. Lee was appointed as an independent non-executive Director on 15 October 2007. Mr. Lee is also the chairman of our remuneration committee, a member of our audit committee and nomination committee.

He is a practicing solicitor and received his LL.B (Honours) degree and Postgraduate Certificate in Laws from the University of Hong Kong in 1988 and 1989 respectively. He was then admitted as solicitor in Hong Kong in 1991 and in England and Wales in 1997. He joined Howse Williams (formerly known as "Howse Williams Bowers"), a law firm in Hong Kong, as a consultant lawyer in 2014.

Mr. Lee is currently the independent non-executive director of Embry Holdings Limited (Stock Code: 1388), Newton Resources Ltd (Stock Code: 1231), Tenfu (Cayman) Holdings Company Limited (Stock Code: 6868), Red Star Macalline Group Corporation Ltd (Stock Code: 1528), FSE Lifestyle Services Limited (Stock Code: 331) and Ten Pao Group Holdings Limited (Stock Code: 1979), all companies listed on the Main Board of the Stock Exchange. Mr. Lee was also an independent non-executive director of each of Landsea Green Management Limited (formerly known as "Landsea Green Properties Co., Ltd") (Stock Code: 106) between July 2013 to June 2020, China BlueChemical Ltd. (Stock Code: 3983) between June 2012 and May 2021 and Glory Sun Financial Group Limited (Stock Code: 1282) between November 2015 and July 2022, all companies listed on Main Board of the Stock Exchange.

Liu Sai Keung, Thomas, aged 50, Independent non-executive Director

Mr. Liu was appointed as an independent non-executive Director on 15 October 2007. Mr. Liu is also the chairman of our nomination committee, a member of our audit committee and remuneration committee. He graduated with a MBA degree from the Anderson School at the University of California, Los Angeles and a Bachelor's degree in Business Administration and a Master's degree in Finance from the Chinese University of Hong Kong in 1995 and 1999 respectively. Mr. Liu is currently the executive director and Chief Operation Officer of VCREDIT Holdings Limited (Stock Code: 2003), a company listed on the Main Board of the Stock Exchange. Prior to joining VCREDIT Group in 2009, he served as the managing director of strategic investments of GroupM China from 2007 to 2009 and the vice president of Star Group Limited from 2006 to 2007. He was also served as a business development director of TOM Online Limited and an investment banking associate of the New York office of Lehman Brothers Inc.

Sing Chung Matthias Li, aged 68, Independent non-executive Director

Mr. Li was appointed as an independent non-executive Director on 30 December 2022. Mr. Li is also the chairman of the audit committee, a member of the remuneration committee and nomination committee.

Mr. Li is a seasoned business executive with extensive strategic planning, corporate and financial management experience. Mr. Li currently serves as vice chairman of the Hong Kong Business Accountants Association and the Hong Kong Public Sector Accountants Association, council member and secretary of UNICEF Hong Kong, and Hong Kong Accounting Consultant appointed by the Ministry of Finance of the People's Republic of China. From 2016 to 2020, Mr. Li was the chief executive officer of Ocean Park Corporation in Hong Kong where he also previously served as chief financial officer and corporate secretary. Mr. Li started his career as an auditor at Arthur Andersen & Co and was a director overseeing Asia Pacific institutional banking at Bank of Montreal before joining Ocean Park in 1994. Mr. Li graduated from the University of Toronto with a Bachelor of Commerce and Master of Business Administration degrees, and is currently a fellow of the Hong Kong Institute of Certified Public Accountants and a fellow of the Chartered Professional Accountants, Canada.

SENIOR MANAGEMENT

Wang Song, aged 41, Chief Product Officer and Senior Vice President

Mr. Wang joined the Group in 2002 and is responsible for the game projects, such as Eudemons Online《魔域》, Conquer Online《征服》and Heroes Evolved《英魂之刃》. He has also participated in the planning of a number of major projects, including Monster & Me《幻靈游俠》, Zero Online《機戰》, OL Tou Ming Zhuang Online《投名狀OL》and OL Heroes of Might & Magic Online《英雄無敵OL》. Since 2004, Mr. Wang has been planning the Eudemons Online《魔域》project, and in the past ten years, he has led the Eudemons Online《魔域》related projects to win numerous awards in China, successfully enter the overseas market, and achieve tens of billions of income for the Company. Mr. Wang has also been responsible for the planning and research and development of educational products of the Group since 2013. Since 2017, with the change of the Group's overall education business structure, Mr. Wang has been fully responsible for the product business of the Group (including games and education). He is currently the Chief Products Officer and Senior Vice President of the Company, mainly responsible for the Company's core product design, major strategic recommendations and major decision making.

Yam Kwok Hei, Benjamin, aged 47, Chief Financial Officer and Senior Vice President

Mr. Yam joined the Group as our Chief Financial Officer in October 2013 and is responsible for financial management, investor relations and strategic business development. Mr. Yam has over 20 years of professional experience in financial services spanning private equity, corporate finance and auditing. Prior to joining the Group, he was a Partner at Entropy Ventures, a cleantech venture capital firm, and before that, he worked for over 7 years at SAIF Partners, a pre-eminent Asian private equity firm managing over USD4 billion, where he last served as Senior Vice President and was actively involved in leading the closing and exit of numerous investment transactions in Greater China, as well as serving as an active board member of several portfolio companies. Mr. Yam started his professional career as an auditor at Arthur Andersen.

Mr. Yam holds a Master of Science degree from Columbia University and a Bachelor of Commerce degree from University of British Columbia. He is a Chartered Accountant, an associate member of the Hong Kong Institute of Certified Public Accountants and a Chartered Financial Analyst charterholder.

Chen Hong, aged 47, Chief Technology Officer ("CTO") of Fujian Huayu and Senior Vice President

Mr. Chen joined the Group as CTO of Fujian Huayu in April 2018, fully responsible for technical development strategy planning, research and development, difficult challenges and innovation, capacity improvement and other technical management issues in the education business field. Prior to joining the Group, Mr. Chen served as General Manager of VMware Beijing R&D Center, R&D Director of CPD China and Japan, and CTO of SVM (Joint Venture of Sugon and VMware). Mr. Chen has rich management experiences in large-scale teams of Chinese and global companies, Sino-foreign joint ventures and startups. He also has excellent management skills in Internet education, education artificial intelligence, cloud computing, operating system, network, storage, system management automation and large enterprise software development, testing, product management, customer technical support, and R&D center management. Mr. Chen obtained a master's degree in engineering from Beijing Institute of Technology in 1999 and a master's degree in business administration from Tsinghua University in 2008.

Vin Riera, aged 52, Chief Executive Officer of Promethean

Vin Riera was appointed as Chief Executive Officer at Promethean in January 2017. Vin is responsible for Promethean's "mission to develop the transformative technologies, educational content and dynamic experiences that motivate students to learn". He is committed to furthering the legacy of success and continuing to place Promethean customers at the center of everything it does. Prior to working for Promethean, Vin has served as the Chief Executive Officer at Collegis Education, Chief Executive Officer at Edmentum and held executive leadership roles at Gateway and Orange Business Services. Vin holds a Bachelor of Business Administration from Western New England University and has over 25 years of successful experience across the hardware, software and business services fields.

Yu Biao, aged 53, Senior Vice President, Chairman of Fujian Huayu (PRC), Chairman of Fuzhou Software Technology Vocational College (福州軟件職業技術學院)

Mr. Yu joined the Group in September 2009, Currently, he serves as Senior Vice President of the Company, Chairman of Fujian Huayu (PRC) and Chairman of Fuzhou Software Technology Vocational College (福州軟件職業技術學院), and is mainly responsible for the planning, consolidation and operation development of the education business of the Company in the PRC and the development of its overseas online education business, with a focus on comprehensive business that covers early childhood education, basic education, higher education, vocational education, corporate training, and non-formal and lifelong education to provide educational authorities, colleges, kindergartens, parents and teachers with professional and convenient education services and teaching or training services through collaborations with educational authorities, colleges and enterprises by building official services platforms and services portals, so as to promote wider application of information technology in education and intelligent education that assisted us in cultivating and providing a large number of talents with practical skills. Mr. Yu also concurrently serves as the vice president of China Unicom 5G Applications Innovation Alliance (中國聯通 5G 應用創新聯盟), member of Digital Art Professional Committee of China Society of Image and Graphics (中國圖像圖形學學會數碼藝術專委會), vice president of the Association of Promoting Reading in the Public of Fujian Province (福建省全民閱讀促進會), manager of VR/AR Vocational Education Steering Committee of Fujian Province (福建省 VR/AR 行業職業教育指導委員會) and director of Fuzhou 5G Association (福州市 5G 協會).

Before joining the Company, Mr. Yu graduated from the Department of Light Industries of Fuzhou University in 1992, majoring in food engineering. Mr. Yu was a director of Xiamen Digital Engine Network Co., Ltd. (廈門數字引擎網絡有限公司) in 2000. He was the assistant to the dean of Napier College of Fuzhou University (福州大學中英Napier學院) from 2000 to 2007. Mr. Yu was the managing director of Fuzhou Bojie Education Consultation Co., Ltd. (福州博傑教育諮詢有限公司) in February 2004, deputy director of the Chinese and Australian Class Project of Fuzhou No.8 Secondary School and the Chief Representative of the Australian school in China in June 2006 and Managing Director of Fuzhou Bojie Child Education Technology Co., Ltd. (福州博傑兒童教育科技有限公司) from 2008 to 2009. He has over 20 years of experience in education management.

Lin, Chiachuan, Peter, aged 52, Chief Designer and Vice President

After joining the Group in April 2013, Mr. Lin has participated in its businesses, such as the development and design of interface and hardware of the Company's products, research and development of educational equipment, and design of gaming experience. He is currently responsible for the management of User Experience Design Center (UEDC) and Industrial Design Centre (IDC) and certain overseas design teams. Mr. Lin served as the senior manager of the design centre of BenQ Corporation (BenQ) from 2004 to 2006, and the chief designer of BenQ from 2006 to 2010, responsible for the design of brand-name products. He joined Samsung Design China under Samsung Electronics as the creative director/deputy chief in 2012. Mr. Lin graduated from Rochester Institute of Technology in New York, the U.S. and obtained a master's degree of fine arts (MFA). He has over 20 years of experience in design and development and management of brand-name products.

Lin Wei, aged 44, Senior Vice President and President of Fujian Huayu (PRC)

Mr. Lin joined the Group in 2008 and is currently the senior vice president of the Group and the president of Fujian Huayu (PRC), mainly responsible for organisation and management of sales team, construction and expansion of sales channel and research and development of hardware products for the educational business of the Group in the PRC. Before joining the Group, Mr. Lin worked for DELL (China) and has over 15 years of experience in IT, mobile Internet and education industries.

Mr. Lin also serves as the instructor of Yanwu Maker at the Software College of Xiamen University and has dedicated to the integration of advanced technology (such as AI/VR/AR/big data) with education, so as to move the industry forward. In view of this, Mr. Lin actively encourages the implementation of virtual reality technology in higher vocational education. Since the inception of the virtual reality competition in the National Vocational Student Skills Competition (全國高等職業技能大賽虛擬現實賽項) in 2017, Netdragon has been the organiser of this event for two consecutive years. Mr. Lin has facilitated the cooperation of Netdragon with National Center for Schooling Development Programme to set up Guoyu Huayu VR World Laboratory project, thereby providing VR technology laboratory and talent cultivation programme for research undergraduate education, application-type undergraduate education and vocational college. He has formed a

VR educational alliance with China Association for Educational Technology and The Open University of China to provide VR curriculum design and laboratory construction programme for the Open University. Furthermore, Mr. Lin also serves on the editorial board of the "Artificial Intelligence" (人工智能) series and "Product Design Method" (產品設計方法), applying for the Virtual Reality Competition of National Vocational College Skills Competition Higher Vocational Group for three consecutive years and teaching materials for basic education published by the Shanghai Educational Publishing House. He received the 2020 Echoing China Tencent Education Annual Ceremony Award (二零二零回響中國騰訊教育年度盛典獎) and was recognised as the 2020 Education Industry Leader (二零二零年度教育行業領軍人物).

Lin Chen, aged 41, Senior Vice President

Mr. Lin joined the Group in 2009, currently serves as the senior vice president of the Group. He is responsible for the management of the design planning center and QA department. Mr. Lin is an experienced expert in the area of software quality management. After joining the Group, Mr. Lin has led the QA technology team to continuously improve software quality management system and ensure product safety and reliability of the Company, and has in turn achieved remarkable result in ensuring software safety. Since 2013, Mr. Li has concurrently served as the head of the design center and design planning center and was responsible for management of the game design, software design, UED and industry design teams. He proactively promotes improvement of design ability, cultivation of design talents, consideration and promotion of design method and helping the Group to transform into an international design enterprise. Since 2018, Mr. Lin has served as the senior vice president of the Group, responsible for the management of the design center, the planning center and the QA department. Concurrently, he has been deeply involved in strategic work of the Group, such as decision-making in research and development of the game and education business.

Before joining the Group, Mr. Lin worked in the Global Information Technology Services department, responsible for testing and delivery of overseas IT projects. He is experienced in software quality management and overseas business management.

QUALIFIED ACCOUNTANT AND COMPANY SECRETARY

Lau Hak Kin, Wood, aged 45, Financial Controller, Qualified Accountant, Head of Compliance and Corporate Affairs and Company Secretary

Mr. Lau joined the Group as Financial Controller and Head of Compliance and Corporate Affairs in February 2014 and was appointed as the Company Secretary of the Group in September 2014. Mr. Lau holds a bachelor's degree in business administration, majoring in accountancy, from the Chinese University of Hong Kong. He is an associate member of the Hong Kong Institute of Certified Public Accountants, a fellow member of the Association of Chartered Certified Accountants and a CFA charterholder. He has over 20 years of experience in financial management, risk management, accounting, taxation and auditing and previously worked for PricewaterhouseCoopers and acting chief financial officer of Asian Citrus Holdings Limited before joining the Group.

REPORT OF THE DIRECTORS

The Directors are pleased to present the annual report and the audited consolidated financial statements of the Group for the year ended 31 December 2022.

PRINCIPAL ACTIVITIES

The Company was incorporated in the Cayman Islands as an exempted company with limited liability on 29 July 2004 and is an investment holding company. The shares of the Company have been listed on the Main Board of the Stock Exchange since 24 June 2008.

The Group is principally engaged in online and mobile games development, including games design, programming and graphics and online and mobile games operation, education business, mobile solution, products and marketing business and property project business.

Details of the principal activities of the Company's principal subsidiaries are set out in note 47 of Notes to the Consolidated Financial Statements.

BUSINESS REVIEW

The fair review of the Group's business for the year ended 31 December 2022 is set out in "Management Discussion and Analysis" section on pages 11 to 14.

Details of analysis of the financial key performance are set out in "Management Discussion and Analysis" section on pages 9 to 10.

PRINCIPAL RISKS & UNCERTAINTIES

Competition in the online and mobile game industry in the global market, including the PRC, is becoming increasingly intense. There are already several online and mobile game companies with strong financial resources, such as Electronic Arts, IGG Inc, NetEase.com and Tencent Holdings Limited, which have successfully listed their shares on NASDAQ or the Hong Kong Stock Exchange. Meanwhile, there are many private companies focusing on online game development which have further intensified the competition, particularly in the global market. Many of the competitors have been aggressively recruiting talent to bolster their game development capabilities and increasing their spending on game marketing for a long time. Increased competition in the online and mobile game market may make it difficult for the Group to retain our existing employees, attract new employees, acquire new players and sustain our growth rate.

The Company is affected by the emergence of new technologies and games. New technologies in online game development or operations could render the games that the Group designs or plans to develop obsolete or unattractive to players, thereby limiting our ability to recover the development costs, which could potentially adversely affect our future profitability and growth prospects.

BUSINESS REVIEW (Cont'd)

PRINCIPAL RISKS & UNCERTAINTIES (Cont'd)

The Group relies on the spending of our game players for our revenue, which may in turn depend on the players' level of disposable income, job security, perceived future earnings capabilities and willingness to spend. In the past three years, the global economy has been affected by the COVID-19 pandemic. Many major economies have also adjusted their monetary and fiscal policies, which has led to far-reaching effects such as inflation and liquidity crisis in small and medium-sized banks in Europe and the United States. If our game players reduce their spending on playing games due to such uncertain economic conditions, our business, financial condition and results of operations may be adversely affected.

Details of the risks relating to the contractual arrangements are set out on pages 51 to 55.

KEY RELATIONSHIPS WITH EMPLOYEES, CUSTOMERS AND SUPPLIERS

The future success of the Group is heavily dependent upon the continued service of our key executives and other key employees. In particular, the Group relies on the expertise and experience of Liu Dejian, an executive Director, in our business operations. Mr. Liu is mainly responsible for overall business strategic development and is the chief game designer of our game development team. Mr. Liu leads the game development team on the design of our online game products. He formulates our development policy and contributes to our growth as a competitive online game operator and developer.

The operating environment of the online game industry is changing rapidly. In order to maintain profitability and financial and operational success, the Group must continuously develop new online games that are attractive to players, make improvements to the existing games that appeal to players and enhance the technical and artistic features of all of our games. The success of our games largely depends on our ability to anticipate and respond effectively to the ever changing customer preferences and demand.

The suppliers of the Group's online game business include primarily server and bandwidth leasing companies and game operation service providers and it also relies on third party service providers in various aspects. The distribution and payment channels comprise (i) direct sales supported by online payment service providers and distribution partners, (ii) pre-paid card sales supported by distributors throughout the PRC, and (iii) cooperation channels supported by our cooperation partners.

The performance and the results of operation of the Group as set out in this Annual Report are historical in nature and past performance is not a guarantee of future performance. This Annual Report may contain forward-looking statements and opinions that involve risks and uncertainties. Actual result may also differ materially from expectations discussed in such forward-looking statements and opinions. Neither the Group nor the Directors, employees or agents of the Group assume any obligations or liabilities in the event that any of the forward-looking statements or opinions does not materialise or turns out to be incorrect.

BUSINESS REVIEW (Cont'd)

COMPLIANCE WITH LAWS AND REGULATIONS

In relation to human resources, the Group is committed to complying with the requirements of the Personal Data (Privacy) Ordinance, and ordinances relating to disability, sex, family status and race discrimination, as well as the Employment Ordinance, the Minimum Wage Ordinance and ordinances relating to occupational safety of employees of the Group, so as to safeguard the interests and well-being of its employees.

The Group is also committed to safeguarding the security of personal data. When collecting and processing such data, the Group strictly abides by the relevant laws, regulations, business guidelines and normative standards in respect of network security, data security and personal information protection in the place where its business is operated, with a view to protecting the privacy of its employees and customers.

On the corporate level, the Group complies with the requirements under the Companies Ordinance (Chapter 622 of the Laws of Hong Kong) ("Companies Ordinance"), the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Listing Rules") and the Securities and Futures Ordinance (Chapter 571 of the Laws of Hong Kong) (the "SFO") for, among other things, the disclosure of information and corporate governance, and the Group has adopted the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code").

Workplace Quality

The Group is an equal opportunity employer and eliminates any kind of discrimination. The Group has employee handbooks outlining terms and conditions of employment, expectations for employees' conduct and behavior, employees' rights and benefits. We establish and implement policies that promote a friendly and respectful workplace.

The Group believes that employees are valuable assets of an enterprise and regards human resources as its corporate wealth. We provide on-the-job training and development opportunities to enhance our employees' career progression. Through different training, staff's professional knowledge in corporate operations, occupational and management skills are enhanced.

Health and Safety

The Group prides itself on providing a safe, effective and congenial work environment. Adequate arrangements, training and guidelines are implemented to ensure the working environment is healthy and safe. The Group provides health and safety communications for employees to present the relevant information and raise awareness of occupational health and safety issues.

The Group values the health and well-being of staff. In order to provide employees with health coverage, staff are entitled to medical insurance benefits as well as other health awareness programmes.

REPORT OF THE DIRECTORS

RESULTS AND APPROPRIATIONS

The results of the Group and appropriations of the Company for the year ended 31 December 2022 are set out in the Consolidated Statement of Profit or Loss and Other Comprehensive Income on page 132.

The interim dividend of HKD0.40 and special interim dividend of HKD0.50 for the six months ended 30 June 2022 were paid on 31 October 2022.

The Directors now recommend the payment of a final dividend of HKD0.4 per share. The final dividend is expected to be payable on or before Friday, 7 July 2023 to shareholders whose names appear on the register of members of the Company on Thursday, 8 June 2023, amounting to approximately RMB193 million.

PROPERTY, PLANT AND EQUIPMENT

During the year under review, the Group acquired certain property, plant and equipment for the year ended 31 December 2022.

Details of movements in the property, plant and equipment of the Group for the year ended 31 December 2022 are set out in note 14 of Notes to the Consolidated Financial Statements.

SHARE CAPITAL

Details of movements of the Company's issued shares for the year ended 31 December 2022 are set out in note 37 of Notes to the Consolidated Financial Statements.

RESERVES

Movements in the reserves of the Group for the year ended 31 December 2022 are set out in the Consolidated Statement of Changes in Equity.

DISTRIBUTABLE RESERVES OF THE COMPANY

As at 31 December 2022 and 2021, the Company had reserves available for distribution to shareholders, which comprises the dividend reserve of approximately RMB193 million (2021: approximately RMB811 million), share premium of approximately RMB1,918 million (2021: approximately RMB1,986 million) and retained earnings of approximately RMB45 million (2021: approximately RMB241 million) of the Company.

MAJOR CUSTOMERS AND SUPPLIERS

The aggregate revenue from sales of goods or rendering of services attributable to the Group's five largest customers and the Group's largest customer accounted for approximately 22.7% and approximately 12.0%, respectively, of the Group's total revenue for the year. The aggregate purchases attributable to the Group's five largest suppliers and the Group's largest supplier accounted for approximately 69.8% and approximately 28.9%, respectively, of the Group's total purchase for the year.

So far as is known to the Directors, none of the Directors, their close associates, or shareholders (which to the best knowledge of the Directors) owned more than 5% of the number of issued shares of the Company had any beneficial interest in the Group's five largest suppliers and customers during the year.

DIRECTORS AND DIRECTORS' SERVICE CONTRACTS

The Directors who held office during the year and up to the date of this report were as follows:

Executive Directors

Mr. Liu Dejian (Chairman)
Dr. Leung Lim Kin Simon (Vice Chairman)
Mr. Liu Luyuan (Chief Executive Officer)
Mr. Zheng Hui
Mr. Chen Hongzhan

Non-executive Director

Mr. Lin Dongliang

Independent non-executive Directors

Mr. Sing Chung Matthias Li *(Notes 2, 3 and 5) (Appointed on 30 December 2022)*
Mr. Lee Kwan Hung, Eddie *(Notes 1, 4, 5 and 8)*
Mr. Liu Sai Keung, Thomas *(Notes 1, 3, 6 and 7)*
Mr. Chao Guowei, Charles *(Resigned on 30 December 2022)*

DIRECTORS AND DIRECTORS' SERVICE CONTRACTS (Cont'd)

Notes:

1. Member of Audit Committee
2. Chairman of Audit Committee
3. Member of Remuneration Committee
4. Chairman of Remuneration Committee
5. Member of Nomination Committee
6. Chairman of Nomination Committee
7. Member of Share Award Scheme Committee
8. Chairman of Share Award Scheme Committee

The Directors' profile is set out on pages 21 to 26.

Each of the executive Directors has entered into a service contract with the Company and each of the non-executive Director and independent non-executive Directors has entered into an appointment letter with the Company, all for an initial term of three years since the date of appointment and renewable automatically for successive terms of one year each commencing from the day next after the expiry of the current term unless and until terminated in accordance with its terms or by either party thereto giving to the other not less than three months' prior written notice. Each of the executive Directors will receive a salary which is subject to annual review at the discretion of the Board.

The determination of the salary payment to the Directors will be based on salaries paid by comparable companies, time commitment, the duties and responsibilities of the Directors in the Company, the Company's performance and its remuneration policy.

Each of the executive Directors may also be entitled to a bonus payment in such amount as shall be determined by the Board in its absolute discretion provided that the aggregate sum of such bonus payments in any financial year shall, unless the Board shall determine otherwise, not exceeding 1% of the audited consolidated net profit of the Group after taxation but before extraordinary items in the relevant financial year.

In accordance with article 87(1) of the articles of association of the Company, Mr. Chen Hongzhan, Mr. Lin Dongliang and Mr. Liu Sai Keung, Thomas, will retire by rotation at the forthcoming annual general meeting (the "AGM").

DIRECTORS AND DIRECTORS' SERVICE CONTRACTS (Cont'd)

In accordance with article 86(3) of the articles of association of the Company, any Director appointed from time to time by the Board as an addition to the existing Board shall hold office only until the next following annual general meeting of the Company and shall then be eligible for re-election. Mr. Sing Chung Matthias Li, who was appointed as an independent non-executive Director on 30 December 2022, shall retire and being eligible offer himself for re-election at the 2023 Annual General Meeting of the Company.

Mr. Sing Chung Matthias Li, Mr. Chen Hongzhan, Mr. Lin Dongliang and Mr. Liu Sai Keung, Thomas being eligible, will offer themselves for re-election at the AGM of the Company. None of the Directors proposed for re-election has a service contract with the Company or any of its subsidiaries which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

The Company has received annual confirmations of independence from Mr. Lee Kwan Hung, Eddie, Mr. Liu Sai Keung, Thomas, Mr. Sing Chung Matthias Li and considers them to be independent.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

As at 31 December 2022, the interests and short positions of the Directors and chief executive of the Company in the shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the Securities and Futures Ordinance (Cap 571 of the Laws of Hong Kong) ("SFO")), which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests or short positions which they were taken or deemed to have under provisions of the SFO), or which were required to be entered in the register kept by the Company pursuant to Section 352 of the SFO or which were required, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers (the "Model Code") as set out in Appendix 10 to the Rules Governing the Listing of Securities on the Stock Exchange (the "Listing Rules"), to be notified to the Company and the Stock Exchange, were as follows:

Name of Director	Name of Company	Capacity and nature of interests	Number of shares and underlying shares held or amount of registered capital contributed *(Note 1)*	Approximate percentage of shareholding
Liu Dejian *(Note 2)*	The Company	Beneficial owner, through a controlled corporation and beneficiary of a trust	250,822,457 (L)	46.38%
Leung Lim Kin, Simon *(Note 4)*	The Company	Beneficial owner	5,419,040 (L)	1.00%

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES (Cont'd)

Name of Director	Name of Company	Capacity and nature of interests	Number of shares and underlying shares held or amount of registered capital contributed *(Note 1)*	Approximate percentage of shareholding
Liu Luyuan *(Note 2)*	The Company	Beneficial owner and beneficiary of certain trust	250,822,457 (L)	46.38%
Liu Luyuan *(Note 3)*	NetDragon (Fujian)	Beneficial owner	RMB299,880,000 (L)	99.96%
Zheng Hui *(Note 2)*	The Company	Beneficial owner and through controlled corporations	250,822,457 (L)	46.38%
Zheng Hui *(Note 3)*	NetDragon (Fujian)	Beneficial owner	RMB299,880,000 (L)	99.96%
Chen Hongzhan *(Note 5)*	The Company	Beneficial owner and beneficiary of certain trust	11,197,019 (L)	2.07%
Lee Kwan Hung, Eddie *(Note 6)*	The Company	Beneficial owner	583,019 (L)	0.11%
Liu Sai Keung, Thomas *(Note 7)*	The Company	Beneficial owner	818,019 (L)	0.15%
Sing Chung Matthias Li *(Note 8)*	The Company	Beneficial owner	2,000 (L)	0.00%

Notes:

1. The letter "L" denotes the shareholder's long position in the shares, underlying shares and share capital of the relevant member of the Group.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES (Cont'd)

Notes:(Cont'd)

2. Liu Dejian is interested in 100.00% of the issued voting shares of DJM Holding Ltd., which in turn is interested in 35.34% of the issued voting shares of the Company. Liu Dejian is also interested in 0.38% of the issued voting shares of the Company which is represented by beneficial interest of 1,884,000 shares and a beneficiary of a trust of 197,019 shares.

   Liu Luyuan is interested in 4.30% of the issued voting shares of the Company which is represented by interest held as a beneficiary of certain trust holding in aggregate 21,541,819 shares, and the rest being beneficial interest of 1,684,000 shares.

   Zheng Hui is interested in 100.00% of the issued share capital of Fitter Property Inc., which in turn is interested in 3.52% of the issued voting shares of the Company. Zheng Hui is interested in 100.00% of the issued share capital of Eagle World International Inc., which in turn is interested in 2.57% of the issued voting shares of the Company. Zheng Hui is also interested in 0.28% of the issued shares of the Company which is represented by beneficial interest of 1,497,000 shares.

   Liu Dejian is a brother of Liu Luyuan and a cousin of Zheng Hui who have agreed to act in concert to acquire interests in the shares in the Company. All of Liu Dejian, Liu Luyuan and Zheng Hui are deemed to be interested in 46.38% of the issued voting shares of the Company through their direct and deemed shareholding in all of DJM Holding Ltd., a trust in favour of Liu Luyuan, a trust in favour of Liu Dejian, Fitter Property Inc., Eagle World International Inc. and their respective shares held as beneficial owner in each of their personal capacities.

3. Liu Luyuan and Zheng Hui are interested in 0.07% and 99.89%, of the registered capital of Fujian NetDragon Websoft Co., Ltd. (福建網龍計算機網絡信息技術有限公司) ("NetDragon (Fujian)") respectively. Liu Luyuan and Zheng Hui have agreed to act in concert to acquire interests in the registered capital of NetDragon (Fujian). All of Liu Luyuan and Zheng Hui are deemed to be interested in 99.96% of the registered capital of NetDragon (Fujian).

4. Leung Lim Kin, Simon is interested in 1.00% of the issued voting shares of the Company which is represented by beneficial interest of 1,419,040 shares and the rest being the underlying shares of interest of 4,000,000 share options granted by the Company.

5. Chen Hongzhan is interested in 2.07% of the issued voting shares of the Company which is represented by personal interest of 156,200 shares and interest held as a beneficiary of certain trust holding in aggregate of 11,040,819 shares.

6. Lee Kwan Hung, Eddie is interested in 0.11% of the issued voting shares of the Company which is represented by personal interest of 65,019 shares and the rest being underlying shares of interest of 518,000 share options granted by the Company.

7. Liu Sai Keung, Thomas is interested in 0.15% of the issued voting shares of the Company which is represented by personal interest of 300,019 shares and the rest being underlying shares of interest of 518,000 share options granted by the Company.

8. Sing Chung Matthias Li is interested in 0.00% of the issued voting shares of the Company which is represented by beneficial interest of 2,000 shares.

DIRECTORS' AND CHIEF EXECUTIVES' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES (Cont'd)

Save as disclosed above, to the best knowledge of the Directors, as at 31 December 2022, none of the Directors and chief executive of the Company had any interest and short positions in any shares, underlying shares or debentures of the Company or any of its associated corporations (within the meaning of Part XV of the SFO) which were required to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO (including interests and short positions which they were taken or deemed to have under such provisions of the SFO), or which were required to be entered in the register kept by the Company pursuant to Section 352 of the SFO or which were required, pursuant to the Model Code to be notified to the Company and the Stock Exchange.

DIRECTORS' INTERESTS IN TRANSACTION, ARRANGEMENT OR CONTRACTS OF SIGNIFICANCE

Save as disclosed under the paragraph headed "CONNECTED TRANSACTIONS" stated in this report and note 43 of the Notes to the Consolidated Financial Statements, no transaction, arrangement or contract of significance in relation to the Company's business, to which the Company was a party and in which a Director or an entity connected with a Director had a material interest, whether directly or indirectly, subsisted at the end of the year or at any time during the year under review.

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES

So far as is known to the Directors, as at 31 December 2022, the following persons (other than a Director or chief executive of the Company) had, or were deemed or taken to have interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or, which were required to be entered in the register kept by the Company under Section 336 of the SFO or, who were directly or indirectly interested in 5% or more of the issued voting shares of any other member of the Group:

Name of Shareholder	Name of Company	Capacity and nature of interests	Number of shares and underlying shares held or amount of registered capital contributed *(Note 1)*	Approximate percentage of shareholding
DJM Holding Ltd.	The Company	Beneficial owner	191,078,100 (L)	35.34%
IDG Group *(Note 2)*	The Company	Beneficial owner	53,533,320 (L)	9.90%
Ho Chi Sing *(Note 2)*	The Company	Through controlled corporations	53,533,320 (L)	9.90%
Zhou Quan *(Note 2)*	The Company	Through controlled corporations	50,470,735 (L)	9.33%

SUBSTANTIAL SHAREHOLDERS' INTERESTS AND OTHER PERSONS' INTERESTS AND SHORT POSITIONS IN SHARES, UNDERLYING SHARES AND DEBENTURES (Cont'd)

Notes:

1. The letter "L" denotes the shareholder's long position in the share capital of the relevant member of the Group.

2. The IDG Group is comprised of four limited partnerships, namely IDG Technology Venture Investments, L.P., IDG-Accel China Growth Fund L.P., IDG-Accel China Growth Fund-A L.P. and IDG-Accel China Investors L.P., being interested in approximately 2.01%, 6.08%, 1.24% and 0.57% respectively, in the Company who are deemed to be acting in concert to acquire interests in the Company, and their respective controlling entities. The controlling structure of each of the above partnerships is as follows:

   a) IDG Technology Venture Investments, L.P. is controlled by its sole general partner, IDG Technology Venture Investments, LLC, which in turn is controlled by its managing members, Zhou Quan and Ho Chi Sing.

   b) IDG-Accel China Growth Fund L.P. and IDG-Accel China Growth Fund-A L.P. are controlled by their sole general partner, IDG-Accel China Growth Fund Associates L.P., which in turn is controlled by its sole general partner, IDG-Accel China Growth Fund GP Associates Ltd.. IDG-Accel China Growth Fund GP Associates Ltd. is held as to 35.00% by each of Zhou Quan and Ho Chi Sing.

   c) IDG-Accel China Investors L.P. is controlled by its sole general partner, IDG-Accel China Investors Associates Ltd., which in turn is held as to 100.00% by Ho Chi Sing.

Save as disclosed above, the Directors are not aware of any persons (other than a Director or chief executive of the Company) who had, or were deemed or taken to have interests or short positions in the shares or underlying shares of the Company which would fall to be disclosed to the Company under the provisions of Divisions 2 and 3 of Part XV of the SFO or, which were required to be entered in the register kept by the Company under Section 336 of the SFO or who were directly or indirectly interested in 5% or more of the issued voting shares of any other member of the Group as at 31 December 2022.

RELATED PARTY TRANSACTIONS

Related party transactions entered into by the Group for the year ended 31 December 2022 are disclosed in note 43 to the consolidated financial statements of Group. Save as disclosed in below sections of this report, all other material related party transaction did not constitute non-exempted connected transactions or continuing connected transactions under the Listing Rules.

CONNECTED TRANSACTIONS

ND STRUCTURE CONTRACTS

ND Cooperation Framework Agreement

With a view to offer further protection to the interests of the Company and the shareholders as a whole by means of contractual arrangements, Fujian TQ Digital Inc. (福建天晴數碼有限公司) ("TQ Digital") and Fujian NetDragon Websoft Co., Ltd. (福建網龍計算機網絡信息技術有限公司) ("NetDragon (Fujian)") and its equity holders entered into the structure contracts (together with the contracts entered into between NetDragon (Fujian) and Fujian TQ Online Interactive Inc. ("TQ Online") as set out below, the "ND Structure Contracts"), which superseded the cooperation arrangements between TQ Digital and NetDragon (Fujian) effective from 1 January 2007. The registered owners of NetDragon (Fujian) are: (i) Liu Luyuan, an executive Director (as to approximately 0.07%), (ii) Zheng Hui, an executive Director (as to approximately 99.89%), (iii) Chen Minlin, an employee of Fuzhou Yangzhenhua 851 Bio-Engineering Research Inc. ("Fuzhou 851") (as to approximately 0.02%), and (iv) Lin Yun, an employee of the Group (as to approximately 0.02%).

In view of the Enterprise Income Tax law adopted by the National People's Congress of the PRC on 16 March 2007, a wholly foreign owned enterprise, TQ Online, has been set up to gradually substitute TQ Digital in our operation. TQ Online has entered into the ND Structure Contracts with NetDragon (Fujian) on 16 May 2008. As TQ Digital is and will still be the party operating the existing versions of the Group's online games, all ND Structure Contracts entered into between TQ Digital and NetDragon (Fujian) will be retained.

Under the ND Structure Contracts, NetDragon (Fujian) is responsible to collect the revenue generated from the operation of the games. Through the ND Structure Contracts, we are able to recognise and receive the economic benefits of the business and operations of NetDragon (Fujian). The ND Structure Contracts enable TQ Digital and TQ Online to control over and to acquire the equity interests in and/or assets of NetDragon (Fujian) when permitted by the relevant PRC laws and regulations.

On 15 October 2007, TQ Digital and NetDragon (Fujian) entered into a cooperation framework agreement (the "ND Cooperation Framework Agreement") pursuant to which TQ Digital and NetDragon (Fujian) agreed to cooperate in the provision of services relating to the online game development for and the operation of the online game business of NetDragon (Fujian). The ND Cooperation Framework Agreement and the terms of reference of the management committee (the "ND Management Committee") laid down the principles that the ND Management Committee shall have right to determine the amount of license and service fees payable by NetDragon (Fujian) with reference to the amount of expenditure incurred by NetDragon (Fujian) in the conduct of its business and operations and its working capital requirements, including the guiding principles that (i) NetDragon (Fujian) shall pay the maximum amount of fees to TQ Digital without incurring any loss for each financial year; and (ii) the net asset value of NetDragon (Fujian) shall not exceed its net asset value as at 31 December 2006, being approximately RMB15 million. Further details of ND Management Committee are set out in the section of "Corporate Governance Report" under the paragraphs of "ND Management Committee". This principle will ensure that all of the net profit after tax of NetDragon (Fujian) in each financial year shall be paid to TQ Digital as service or license fees, and will give flexibility to the ND Management Committee to implement the ND Structure Contracts and its underlying principles more effectively in response to constantly changing the PRC laws and regulation.

On 16 May 2008, TQ Online and NetDragon (Fujian) entered into another cooperation framework agreement with the same terms as the ND Cooperation Framework Agreement, save as to the date, duration and the substitution of TQ Digital by TQ Online. The term of such cooperation framework agreement is 10 years commencing from 16 May 2008 and ending on 15 May 2018, and automatically renewable for successive 10 year terms provided that TQ Online does not issue any notice of termination one month before the termination date.

CONNECTED TRANSACTIONS (Cont'd)

ND STRUCTURE CONTRACTS (Cont'd)

ND Cooperation Framework Agreement (Cont'd)

As a result of the ND Structure Contracts, TQ Digital and TQ Online are able to control NetDragon (Fujian), and accordingly, it is regarded as our subsidiary and its results are to be consolidated into our consolidated financial statements. Since NetDragon (Fujian) was under the common control of the same group of persons before and after our formation, the results and financial positions of NetDragon (Fujian) is combined into our consolidated financial statements using merger accounting as if NetDragon (Fujian) was part of us since its respective date of establishment or since the date when it first came under the common control.

In accordance with the terms of the ND Cooperation Framework Agreements, TQ Digital and TQ Online (where relevant) entered into (1) cooperation and license agreements in respect of online games; (2) online games software development service agreements; and (3) technical support service agreements with NetDragon (Fujian), for the purpose of license, development of online games and provision of technical services to NetDragon (Fujian). Details of the agreements are set out below:

Date of agreement signed	Name of agreement	Summary of agreement	Terms of agreement
15-10-2007 and 20-11-2007	Cooperation and license agreements in respect of online games	TQ Digital will license online game softwares to NetDragon (Fujian) for use in the PRC	• 10 years commencing from 01-01-2007 to 31-12-2016* • Consideration for an initial license fee and a per annum license fee determined as a percentage of NetDragon (Fujian)'s annual gross revenues
15-10-2007	Online game software development service agreement	TQ Digital will provide online software development service to NetDragon (Fujian)	• 10 years commencing from 01-01-2007 to 31-12-2016* • Consideration of a service fee
15-10-2007	Technical support service agreement	TQ Digital will provide technical support services to NetDragon (Fujian)	• 10 years commencing from 01-01-2007 to 31-12-2016* • Consideration of a per annum services fee determined as a percentage of NetDragon (Fujian)'s annual gross revenues
16-05-2008	Online game software development service agreement	TQ Online will provide online software development service to NetDragon (Fujian)	• 10 years commencing from 16-05-2008 to 15-05-2018▲ • Consideration of a service fee

* automatically renewable for successive 10 year terms provided that TQ Digital does not issue any notice of termination one month before the termination date

▲ automatically renewable for successive 10 year terms provided that TQ Online does not issue any notice of termination one month before the termination date

CONNECTED TRANSACTIONS (Cont'd)

ND STRUCTURE CONTRACTS (Cont'd)

ND Cooperation Framework Agreement (Cont'd)

Date of agreement signed	Name of agreement	Summary of agreement	Terms of agreement
16-05-2008	Technical support service agreement	TQ Online will provide technical support services to NetDragon (Fujian)	• 10 years commencing from 16-05-2008 to 15-05-2018▲ • Consideration of a per annum services fee determined as a percentage of NetDragon (Fujian)'s annual gross revenues
01-03-2009	Cooperation and license agreements in respect of online games	TQ Online will license online game softwares to NetDragon (Fujian) for use in the PRC	• 10 years commencing from 01-03-2009 to 28-02-2019▲ • Consideration for an initial license fee and a per annum license fee determined as a percentage of NetDragon (Fujian)'s annual gross revenues

ND Equity Interest Pledge Agreement

On 28 September 2007, TQ Digital, NetDragon (Fujian) and all equity holders of NetDragon (Fujian) entered into an equity interest pledge agreement, pursuant to which all such equity holders granted to TQ Digital a continuing first priority security interests over their respective equity interests in the registered capital of NetDragon (Fujian), representing all of the equity interest in its registered capital, for the purpose of securing the performance of the contractual obligations by NetDragon (Fujian)'s equity holders under the ND Structure Contracts.

▲ automatically renewable for successive 10 year terms provided that TQ Online does not issue any notice of termination one month before the termination date

CONNECTED TRANSACTIONS (Cont'd)

ND STRUCTURE CONTRACTS (Cont'd)

ND Agreement for the Exclusive Right to Acquire Equity Interest and Assets

On 15 October 2007, TQ Digital, NetDragon (Fujian) and all of the equity holders of NetDragon (Fujian) entered into an agreement for the exclusive right to acquire equity interest and assets, pursuant to which NetDragon (Fujian) and all its equity holders granted to TQ Digital or its designee (a) a right to acquire part or all of the equity interest in the registered capital of NetDragon (Fujian); and (b) a right to acquire part or all of the assets of NetDragon (Fujian) from the equity holders of NetDragon (Fujian) as and when permitted by the relevant PRC laws and regulations. The amount of consideration payable by TQ Digital to the equity holders of NetDragon (Fujian) shall be a nominal amount or the lowest possible amount permissible under the applicable PRC law. If the minimum amount of consideration stipulated under the relevant PRC laws and regulations is higher than the nominal amount at the time of exercise of the acquisition right, Liu Dejian, Liu Luyuan and Zheng Hui had jointly, severally and irrevocably undertaken to reimburse the Company or its subsidiaries of any amount in excess of the nominal amount.

ND Equity Holders' Voting Rights Proxy Agreement

On 15 October 2007, all equity holders of NetDragon (Fujian) entered into an equity holders' voting rights proxy agreement (the "ND Proxy Agreement") with TQ Digital and NetDragon (Fujian), pursuant to which all equity holders of NetDragon (Fujian) have irrevocably authorised TQ Digital or a nominee designated by TQ Digital (which will likely be a director of TQ Digital) to exercise all their voting rights in NetDragon (Fujian). The term of the ND Proxy Agreement shall continue indefinitely for so long as NetDragon (Fujian) subsists in order to secure our control over NetDragon (Fujian).

ND Other Contracts

The Directors expect that there may be other contracts, such as service agreement and/or cooperation and license agreement, to be entered from time to time (the "ND Other Contract(s)") between the Company and its subsidiaries on the one hand and NetDragon (Fujian) on the other. Save as disclosed in this report, no ND Other Contract subsisted at the end of the year or at any time during the year under review.

CONNECTED TRANSACTIONS (Cont'd)

ND STRUCTURE CONTRACTS (Cont'd)

Change in one of the Registered Owners of NetDragon (Fujian)

On 3 May 2021, the then registered owners of NetDragon (Fujian), NetDragon (Fujian) and TQ Digital have entered into the following agreements in relation to the change in registered owner of equity interests in NetDragon (Fujian) from Liu Dejian to Zheng Hui:

(1) the equity transfer agreement entered into between Liu Dejian and Zheng Hui, pursuant to which Liu Dejian agreed to transfer 3.2337% equity interest in NetDragon (Fujian) to Zheng Hui at a consideration of RMB9,701,050;

(2) the pledge release agreement entered into between TQ Digital and Liu Dejian, pursuant to which TQ Digital and Liu Dejian agreed to release the pledge over Liu Dejian's equity interest in NetDragon (Fujian); and

(3) the supplemental ND structure contracts, which included:

   (i) the supplemental equity interest pledge agreement entered into between TQ Digital and Zheng Hui, pursuant to which Zheng Hui agreed to grant to TQ Digital a continuing first priority security interests over the equity interest as a result of the equity transfer of Liu Dejian to Zheng Hui; and

   (ii) the supplemental agreement entered into between TQ Digital, NetDragon (Fujian) and the then registered owners of NetDragon (Fujian) to amend (a) the Agreement for the Exclusive Right to Acquire Equity Interest and Assets; (b) the Equity Holders' Voting Rights Proxy Agreement; and (c) the Equity Interest Pledge Agreement, pursuant to which, among other things, Liu Dejian shall be released from all rights and obligations under these three agreements, and the rights and obligations imposed on TQ Digital, NetDragon (Fujian) and the remaining registered owners of NetDragon (Fujian) under these three agreements remain unchanged.

CONNECTED TRANSACTIONS (Cont'd)

BEST ASSISTANT CONTROL DOCUMENTS

WAIVER FROM THE STOCK EXCHANGE AND ANNUAL REVIEW

As Liu Luyuan and Zheng Hui, being the executive Directors and the controlling shareholders of the Company, are interested in an aggregate of 99.96% in NetDragon (Fujian), NetDragon (Fujian) is technically an associate of Liu Luyuan and Zheng Hui, and therefore a connected person of the Company. Transactions between the Company, NetDragon Websoft Inc. ("NetDragon (BVI), TQ Digital, TQ Online or NetDragon Websoft (Hong Kong) Limited ("NetDragon (Hong Kong)") or NetDragon Websoft Inc. ("NetDragon (USA)") (all being wholly-owned subsidiaries of the Company) on one hand and NetDragon (Fujian) on the other hand, including the ND Structure Contracts and the ND Other Contracts, would technically constitute connected transactions under the Listing Rules. The Stock Exchange has granted a specific waiver to the Company from strict compliance with the connected transactions requirement of Chapter 14A of the Listing Rules in respect of the ND Structure Contracts and the ND Other Contracts. Details of the waiver, together with its conditions, are set forth in the listing document of the Company dated 27 May 2008 (the "Listing Document").

On 10 February 2015, Fujian Tianquan Education Technology Limited ("Fujian Tianquan"), Fujian Province Huayu Education Technology Limited ("Fujian Huayu") and NetDragon (Fujian) have entered into the Best Assistant Control Documents (as defined below). Pursuant to the Specific Waiver granted by the Stock Exchange to the Company at around the time of Listing, the framework of the ND Structure Contracts may be cloned in relation to any existing or new wholly foreign owned enterprise, operating company or foreign-invested telecommunication enterprise ("FITE") that the Company might wish to establish, without obtaining the approval of the Shareholders on terms that the protections for the Shareholders described in the Specific Waiver will apply.

The Best Assistant Control Documents are cloned from the ND Structure Contracts such that Fujian Tianquan will receive service fees from Fujian Huayu, and the total amount of which shall be determined by the Best Assistant Management Committee (as defined below) with reference to the amount of expenditure incurred by Fujian Huayu in the conduct of its business and operations and its working capital requirements under the guiding principles that (i) Fujian Huayu shall pay the maximum amount of fees to Fujian Tianquan without incurring any loss for each financial year; (ii) the net asset value of NetDragon (Fujian) at the end of the year, on a stand alone basis or when aggregated with all of its subsidiaries including but not limited to Fujian Huayu and its subsidiaries, shall not exceed its net asset value as at 31 December 2006, being approximately RMB15 million; and (iii) the net asset value at the end of the year of Fujian Huayu shall not exceed its registered capital as at 31 December 2014, being approximately RMB200 million.

The Directors confirm that this arrangement ensures that substantially all economic benefits generated from the operation of Fujian Huayu will be enjoyed by Fujian Tianquan and will give flexibility to the Best Assistant Management Committee to implement the Best Assistant Control Documents and its underlying principles more effectively in response to constantly changing PRC laws and regulations.

CONNECTED TRANSACTIONS (Cont'd)

BEST ASSISTANT CONTROL DOCUMENTS (Cont'd)

WAIVER FROM THE STOCK EXCHANGE AND ANNUAL REVIEW (Cont'd)

As the Best Assistant Control Documents are cloned from the ND Structure Contracts, transactions under the Best Assistant Control Documents are exempt from Shareholders' approval.

The amount of revenue and assets subject to the contractual arrangements under the ND Structure Contracts and the Best Assistant Control Documents accounted for approximately 38.4% and 8.5% of the Group's total revenue and assets, respectively, for the year ended 31 December 2022.

The Company's independent non-executive Directors have reviewed the ND Structure Contracts, the ND Other Contracts and the Best Assistant Control Documents and confirmed that the relevant transactions carried out thereunder during the year ended 31 December 2022 have been entered into in accordance with the relevant provisions of the ND Structure Contracts, the ND Other Contracts and the Best Assistant Control Documents, have been operated so as to allow (a) the economic interest generated by NetDragon (Fujian) flows to TQ Digital and TQ Online; and (b) the economic interest generated by Fujian Huayu flows to Fujian Tianquan; and the new structure contracts (including the Best Assistant Control Documents) entered into, renewed and/or cloned during the year ended 31 December 2022 were entered into on terms that are fair and reasonable so far as the Company is concerned and in the interests of the shareholders of the Company as a whole.

Each of NetDragon (Fujian) and Fujian Huayu has provided to the Company an undertaking that they will allow the Company and its auditor to have full access to relevant records of NetDragon (Fujian) and Fujian Huayu, respectively.

On 10 February 2015, Fujian Tianquan, Fujian Huayu and NetDragon (Fujian) entered into the Best Assistant Cooperation Framework Agreement (as defined below), a technical support service agreement, an equity interest pledge agreement, an exclusive acquisition rights agreement and a proxy agreement (collectively, the "Best Assistant Control Documents"). The registered owner of Fujian Huayu is NetDragon (Fujian).

Save for the entering into of the Best Assistant Control Documents, details of which are disclosed below, there were no other new arrangements pursuant to or under the contractual arrangements entered into, renewed or reproduced between the Group and the PRC operational entity during the year ended 31 December 2022, and there was no material change in the contractual arrangements and/or the circumstances during the year ended 31 December 2022.

CONNECTED TRANSACTIONS (Cont'd)

BEST ASSISTANT CONTROL DOCUMENTS (Cont'd)

Best Assistant Cooperation Framework Agreement

On 10 February 2015, Fujian Tianquan and Fujian Huayu have entered into a cooperation framework agreement (the "Best Assistant Cooperation Framework Agreement") pursuant to which Fujian Tianquan and Fujian Huayu agreed to cooperate in the provision of value-added telecommunications services relating to the online educational softwares business development for and the operation of the online educational softwares business of Fujian Huayu. The Best Assistant Cooperation Framework Agreement and the terms of reference of the management committee (the "Best Assistant Management Committee") laid down the principles that the Best Assistant Management Committee shall have right to determine the amount of license and service fees payable by Fujian Huayu with reference to the amount of expenditure incurred by Fujian Huayu in the conduct of its business and operations and its working capital requirements, including the guiding principles that (i) Fujian Huayu shall pay the maximum amount of fees to Fujian Tianquan without incurring any loss for each financial year; (ii) the net asset value of NetDragon (Fujian) at the end of the year, on a stand alone basis or when aggregated with all of its subsidiaries including but not limited to Fujian Huayu and its subsidiaries, shall not exceed its net asset value as at 31 December 2006, being approximately RMB15 million; and (iii) the net asset value at the end of the year of Fujian Huayu shall not exceed its registered capital as at 31 December 2015, being approximately RMB200 million. This principle will ensure that all economic benefits generated from the operation of Fujian Huayu in each financial year will be enjoyed by Fujian Tianquan as service or license fees, and will give flexibility to the Best Assistant Management Committee to implement the Best Assistant Control Documents and its underlying principles more effectively in response to constantly changing the PRC laws and regulation.

As a result of the Best Assistant Control Documents, Fujian Tianquan is able to control Fujian Huayu, accordingly, it is regarded as subsidiary of Best Assistant (Cayman) and its results are to be consolidated into financial statements of Best Assistant (Cayman). Since Fujian Huayu was under the common control of the same group of persons before and after our formation, the results and financial positions of Fujian Huayu is combined into financial statements using merger accounting as if Fujian Huayu was part of us since its date of establishment or since the date when it first came under the common control.

CONNECTED TRANSACTIONS (Cont'd)

BEST ASSISTANT CONTROL DOCUMENTS (Cont'd)

Best Assistant Cooperation Framework Agreement (Cont'd)

In accordance with the terms of the Best Assistant Cooperation Framework Agreement, Fujian Tianquan entered into the technical support service agreement with Fujian Huayu, for the purpose of license, development of educational softwares business and provision of technical services to Fujian Huayu. Details of the agreement are set out below:

Date of agreement signed	Name of agreement	Summary of agreement	Terms of agreement
10-02-2015	Technical support service agreement	Fujian Tianquan will provide technical support services to Fujian Huayu	• For an indefinite term commencing from 10-02-2015, unless Fujian Huayu have transferred all its assets or equity interests to Fujian Tianquan or a party designated by Fujian Tianquan • Consideration of a per annum services fee determined as a percentage of Fujian Huayu annual gross revenues

Best Assistant Equity Interest Pledge Agreement

On 10 February 2015, Fujian Tianquan, Fujian Huayu and NetDragon (Fujian) entered into an equity interest pledge agreement, pursuant to which NetDragon (Fujian) granted to Fujian Tianquan a continuing first priority security interests over its equity interests in the registered capital of Fujian Huayu, representing all of the equity interest in its registered capital, for the purpose of securing the performance of the contractual obligations by Fujian Huayu under the Best Assistant Control Documents.

Best Assistant Exclusive Acquisition Rights Agreement

On 10 February 2015, Fujian Tianquan, Fujian Huayu and NetDragon (Fujian) entered into an exclusive acquisition rights agreement, pursuant to which Fujian Huayu and NetDragon (Fujian) granted to Fujian Tianquan or its designee (a) a right to acquire part or all of the equity interest in the registered capital of Fujian Huayu; and (b) a right to acquire part or all of the assets of Fujian Huayu from NetDragon (Fujian) as and when permitted by the relevant PRC laws and regulations. The amount of consideration payable by Fujian Tianquan to NetDragon (Fujian) shall be a nominal amount or the lowest possible amount permissible under the applicable PRC law.

CONNECTED TRANSACTIONS (Cont'd)

BEST ASSISTANT CONTROL DOCUMENTS (Cont'd)

Best Assistant Proxy Agreement

On 10 February 2015, NetDragon (Fujian) entered into a proxy agreement with Fujian Tianquan and Fujian Huayu, pursuant to which NetDragon (Fujian) have irrevocably authorised Fujian Tianquan or a nominee designated by Fujian Tianquan to exercise all their voting rights in Fujian Huayu. The term of the Best Assistant Proxy Agreement shall continue indefinitely for so long as Fujian Huayu subsists in order to secure our control over Fujian Huayu.

REASONS FOR ENTERING INTO THE CONTRACTUAL ARRANGEMENTS

As NetDragon (BVI) and Best Assistant are companies incorporated in the British Virgin Islands and Cayman Islands respectively, their PRC subsidiaries, TQ Digital, TQ Online and Fujian Tianquan are considered as wholly foreign-invested enterprises. The PRC government restricts foreign investment in value-added telecommunications businesses. The arrangements under the contractual arrangements are designed specifically to confer upon TQ Digital and TQ Online (in the case of the ND Structure Contracts) and Fujian Tianquan (in the case of the Best Assistant Control Documents) the right to enjoy all the economic benefit of NetDragon (Fujian) and Fujian Huayu respectively, and to prevent leakages of assets and values of NetDragon (Fujian) and Fujian Huayu to their ultimate shareholders.

RISK RELATING TO THE CONTRACTUAL ARRANGEMENTS

There is no assurance that the contractual arrangements are in compliance with existing or future PRC laws and regulations.

The Company has not encountered any interference from any governing bodies in operating its business through NetDragon (Fujian) and/or Fujian Huayu under the contractual arrangements.

However, it cannot be assured that the PRC government or judicial authorities would agree that the contractual arrangements comply with PRC licensing, registration, other regulatory requirements or policies that may be adopted in the future. If the PRC government or judicial authorities determines that the contractual arrangements do not comply with applicable laws and regulations, it could have broad discretion in dealing with such incompliance, including:

1. requiring the nullification of the contractual arrangements;

2. levying fines and/or confiscating the proceeds generated from the operations under the contractual arrangements;

CONNECTED TRANSACTIONS (Cont'd)

RISK RELATING TO THE CONTRACTUAL ARRANGEMENTS (Cont'd)

There is no assurance that the contractual arrangements are in compliance with existing or future PRC laws and regulations. (Cont'd)

3. revocation of the business licenses or operating licenses of NetDragon (Fujian), Fujian Huayu, TQ Digital, TQ Online and/or Fujian Tianquan;

4. discontinuing or placing restrictions or onerous conditions on the business operations of NetDragon (Fujian), Fujian Huayu, TQ Digital, TQ Online and/or Fujian Tianquan;

5. imposing conditions or requirements which the Group may not be able to comply with or satisfy;

6. requiring the Group to undergo a costly and disruptive restructuring; and

7. taking other regulatory or enforcement actions that could be harmful to or even shut down online game business and/or online education business of the Group.

The imposition of any of the above-mentioned consequences could result in a material and adverse effect on the Group's ability to conduct its business. In addition, if the imposition of any of these consequences causes TQ Digital, TQ Online and/or Fujian Tianquan to lose the rights to direct the activities of NetDragon (Fujian) and/or Fujian Huayu or their respective rights to receive their economic benefits, the Group would no longer be able to consolidate the financial results of NetDragon (Fujian) and/or Fujian Huayu and thus affect its financial results.

CONNECTED TRANSACTIONS (Cont'd)

RISK RELATING TO THE CONTRACTUAL ARRANGEMENTS (Cont'd)

Each of TQ Digital, TQ Online and Fujian Tianquan relies on the contractual arrangements to control and obtain the economic benefit from NetDragon (Fujian) and Fujian Huayu, the operating entities in the PRC, which may not be as effective in providing operational control as direct ownership.

If NetDragon (Fujian), Fujian Huayu and/or their ultimate shareholders breach their obligations under the contractual arrangements or if TQ Digital, TQ Online and/or Fujian Tianquan loses effective control over NetDragon (Fujian) and/or Fujian Huayu for any reason, TQ Digital, TQ Online and/or Fujian Tianquan would need to bring a claim against them under the terms of the contractual arrangements. The contractual arrangements are governed by the PRC law and provide that any dispute arising from these arrangements will be submitted to the Fuzhou International Economic and Trade Arbitration Commission, for arbitration, the ruling of which will be final and binding. Furthermore, personal liabilities of ultimate shareholders of NetDragon (Fujian) and Fujian Huayu may also subject the equity interest they hold in NetDragon (Fujian) and Fujian Huayu to court preservation actions or enforcement. The legal framework and system in the PRC, particularly those relating to arbitration proceedings, is not as developed as other jurisdictions such as Hong Kong. As a result, significant uncertainties relating to the enforcement of legal rights through arbitration, litigation and other legal proceedings remain in the PRC, which could limit TQ Digital, TQ Online and/or Fujian Tianquan's ability to enforce the contractual arrangements and exert effective control over NetDragon (Fujian) and/or Fujian Huayu. If NetDragon (Fujian), Fujian Huayu and/or their ultimate shareholders fail to perform their respective obligations under the contractual arrangements, and TQ Digital, TQ Online and/or Fujian Tianquan is unable to enforce the contractual arrangements, or suffer significant delay or other obstacles in the process of enforcing the contractual arrangements, the Group's business and operations could be severely disrupted, which could materially and adversely affect its results of operations.

Certain terms of the ND Structure Agreements and the Best Assistant Control Documents may not be enforceable under PRC laws.

Under PRC laws, an arbitral body granting any injunctive relief or provisional or final liquidation order to preserve the assets of or any equity interest in PRC legal entities in case of disputes shall submit the application to courts in the PRC. Therefore, such remedies may not be available to TQ Digital, TQ Online and/or Fujian Tianquan, notwithstanding the relevant contractual provisions contained in the ND Structure Agreements and the Best Assistant Control Documents. PRC laws allow an arbitral body to award the transfer of assets of or an equity interest in NetDragon (Fujian) and Fujian Huayu in favour of an aggrieved party. In the event of non-compliance with such award made by the arbitral body, enforcement measures may be sought from the court.

In the event that NetDragon (Fujian), Fujian Huayu and/or any of their ultimate shareholders breaches any of the ND Structure Contracts and/or the Best Assistant Control Documents, TQ Digital, TQ Online and/or Fujian Tianquan may not be able to obtain sufficient remedies in a timely manner, and its ability to exert effective control over NetDragon (Fujian) and/or Fujian Huayu and conduct its business could be materially and adversely affected and the financial performance of the Group could be materially and adversely affected.

CONNECTED TRANSACTIONS (Cont'd)

RISK RELATING TO THE CONTRACTUAL ARRANGEMENTS (Cont'd)

The contractual arrangements may be subject to scrutiny by the PRC tax authorities and any finding that TQ Digital, TQ Online, Fujian Tianquan, NetDragon (Fujian) and/or Fujian Huayu owes additional taxes could substantially reduce the consolidated net income and the value of the Group.

Under the contractual arrangements, NetDragon (Fujian) will transfer all of its profits to TQ Digital and TQ Online, while Fujian Huayu will transfer all of its profits to Fujian Tianquan. Such profits will be net of any accumulated loss, working capital requirements, expenses and tax and therefore substantially reduce NetDragon (Fujian) and Fujian Huayu's taxable income. These arrangements and transactions are related party transactions which must be conducted on an arm's length basis under applicable PRC tax rules. In addition, under PRC laws and regulations, arrangements and transactions among related parties may generally be subject to audit or scrutiny by the PRC tax authorities within ten years after the taxable year when the arrangements or transactions are conducted. As a result, the determination of service fees and other payments to TQ Digital and TQ Online by NetDragon (Fujian) and to Fujian Tianquan by Fujian Huayu under the contractual arrangements may be challenged and deemed not in compliance with such tax rules. The Group could face material and adverse tax consequences if the PRC tax authorities determine that the contractual arrangements were not entered into on an arm's length basis and therefore adjust the taxable income of NetDragon (Fujian) and/or Fujian Huayu in the form of a transfer pricing adjustment which refers to the prices that one member of a group of affiliated corporation's charges to another member of the group for goods, assets, services, financing or the use of intellectual property. A transfer pricing adjustment could, among other things, result in a reduction, for PRC tax purposes, of expense deductions recorded by NetDragon (Fujian) and/or Fujian Huayu, which could in turn increase NetDragon (Fujian) and/or Fujian Huayu's tax liabilities. Any such adjustment could result in a higher overall tax liability of the Group. In addition, the PRC tax authorities may impose late payment fees and other penalties on NetDragon (Fujian) and/or Fujian Huayu for any unpaid taxes. The consolidated net income of the Group may be materially and adversely affected if NetDragon (Fujian) and/or Fujian Huayu's tax liabilities increase or if it is subject to late payment fees or other penalties. As a result, the value of the Group may be materially and adversely affected.

CONNECTED TRANSACTIONS (Cont'd)

ACTIONS TAKEN BY THE GROUP TO MITIGATE THE RISKS

During the year ended 31 December 2022, the Group has implemented the following measures to ensure the effective operation of the Structured Contracts and the Group's compliance with the Previous Structured Contracts and the Structured Contracts:

- major issues arising from the implementation and compliance with the Structured Contracts or any regulatory enquiries from government authorities will be submitted to the Board, if necessary, for review and discussion on an occurrence basis;
- the Board will review the overall performance of and compliance with the Previous Structured Contracts and the Structured Contracts at least once a year;
- the Company will disclose the overall performance and compliance with the Previous Structured Contracts and the Structured Contracts in its annual/interim report to update the Shareholders and potential investors;
- the Directors will provide periodic updates in the annual/interim reports regarding the qualification requirements as stipulated under the FITE Regulations and the development of the Foreign Investment Law, including the latest relevant regulatory development as well as the plan and progress in acquiring the relevant experience to meet these qualification requirements; and
- the Company will engage external legal advisers or other professional advisers, if necessary, to assist the Board to review the implementation of the Previous Structured Contracts and the Structured Contracts, review the legal compliance and to deal with specific issues or matters arising from the Previous Structured Contracts and the Structured Contracts.

UNWINDING OF THE CONTRACTUAL ARRANGEMENTS

It is the intention of the Group to unwind the contractual arrangements when foreign investment in the development and operation of online game and online education business is no longer restricted in the PRC.

However, as at the date of this report, there is no unwinding of any of the contractual arrangements or failure to unwind when the restrictions that led to the adoption of the contractual arrangements are removed.

CONNECTED TRANSACTIONS (Cont'd)

Tenancy Agreements between TQ Digital, NetDragon (Fujian) and Fuzhou 851

On 20 January 2015, NetDragon (Fujian) entered into the renewal tenancy agreement (the "2015 Renewal Tenancy Agreement") with Fuzhou 851 to renew the 2012 Renewal Tenancy Agreements for a period from 22 January 2015 to 21 January 2018. On 19 January 2018, NetDragon (Fujian) entered into the renewal tenancy agreement (the "2018 Renewal Tenancy Agreement") with Fuzhou 851 to renew the 2015 Renewal Tenancy Agreement. As Fuzhou 851 is 100% wholly owned by DJM Holding Ltd., a substantial shareholder of the Company and therefore, Fuzhou 851 is a connected person of the Company under the Listing Rules. As such, the transactions contemplated under the 2018 Renewal Tenancy Agreement constitute continuing connected transactions of the Company. The aggregate annual cap for the 2018 Renewal Tenancy Agreement based on the total annual rental payable under the 2018 Renewal Tenancy Agreement for each of the financial years ended 31 December 2018, 2019 and 2020 is RMB7.7 million (equivalent to approximately HKD9.4 million).

Further details of the 2018 Renewal Tenancy Agreement are set forth in the announcement of the Company dated 19 January 2018.

On 19 January 2021, NetDragon (Fujian) entered into the renewal tenancy agreement (the "2021 Renewal Tenancy Agreement") with Fuzhou 851 to renew the 2018 Renewal Tenancy Agreement for a term of three years commencing from 22 January 2021 to 21 January 2024. As Fuzhou 851 is 100% wholly owned by DJM Holding Ltd., a substantial shareholder of the Company and therefore, Fuzhou 851 is a connected person of the Company under the Listing Rules According to *HKFRS 16 ''Leases''* which has come into effect on 1 January 2019, the Group is required to recognise the value of the right-of-use assets on its statement of financial position in connection with the 2021 Renewal Tenancy Agreement, this transaction will be regarded as acquisition of assets by the Group pursuant to the Listing Rules. The transaction contemplated under the 2021 Renewal Tenancy Agreement constitutes connected transaction of the Company under Chapter 14A of the Listing Rules.

CONNECTED TRANSACTIONS (Cont'd)

Capital Contribution Agreement

On 29 April 2022, TQ Online, an indirect wholly-owned subsidiary of the Company, together with other investors who have agreed to make monetary capital contributions (the "Investors") and existing shareholders of Wuxi Mesh Tech Co., Ltd ("Wuxi Mesh Tech"), entered into a capital contribution agreement (the "Capital Contribution Agreement"), pursuant to which, amongst other things, TQ Online has conditionally agreed to make a capital contribution (the "Capital Contribution") in the amount of RMB50 million to Wuxi Mesh Tech in two installments. Regarding the first instalment, within 10 days upon execution of the Capital Contribution Agreement, TQ Online shall pay RMB20 million to Wuxi Mesh Tech. Regarding the second instalment, upon (i) the satisfaction of conditions precedent as stated in the Capital Contribution Agreement and (ii) within 10 business days after Wuxi Mesh Tech has completed the registration procedure with the relevant Administration of Industry and Commerce of the PRC in respect of change in registered capital of Wuxi Mesh Tech and obtain a new business licence, TQ Online shall pay RMB30 million to Wuxi Mesh Tech. Upon completion, TQ Online will hold approximately 2.27% of the total equity interest in Wuxi Mesh Tech. The Directors are of the view that the Capital Contribution will help the Group to capitalize on opportunities in terms of strategic synergies through potential application of the technology of Wuxi Mesh Tech in the future to broaden and enhance the Company's product portfolio, as well as capturing the financial return from the grown of the fast-growing touch user interface industry, given the proprietary technologies of Wuxi Mesh Tech and a global addressable market size. For further details regarding the Capital Contribution Agreement, please refer to the announcements of the Company dated 29 April 2022 and 23 May 2022.

Pursuant to the terms of the Capital Contribution Agreement, TQ Online and the Investors agreed to make monetary capital contributions to Wuxi Mesh Tech as follows:

Party	**Total capital contribution to be made** *RMB million*	**Approximate percentage of equity interest in Wuxi Mesh Tech immediately after completion of the Capital Contribution**
TQ Online	50	2.27%
Investors (excluding TQ Online)	150	6.82%
Total	200	9.09%

As Wuxi Mesh Tech is indirectly held as to approximately 61.53% by the family members of Mr. Lin Dongliang, a non-executive director of the Company (including his son and his spouse) and therefore, Wuxi Mesh Tech is a connected person of the Company under the Listing Rules. As such, the entering into of the Capital Contribution Agreement constitutes a connected transaction of the Company under Chapter 14A of the Listing Rules.

CONTINUING CONNECTED TRANSACTIONS

The Group entered into the following transaction which constituted continuing connected transactions under the Listing Rules. The transaction falls within the ambit of Rule 14A.76(2) of the Listing Rules and is subject to reporting and announcement requirements but exempt from the independent shareholders' approval under Chapter 14A of the Listing Rules. Details of the transaction subsisted during the year under review are set out as follows:

Transaction in relation to Recreation Centre Agreement between TQ Digital and Fuzhou 851

On 24 April 2018, NetDragon (Fujian) entered into the renewal recreation centre agreement (the "2018 Renewal Recreation Centre Agreement"), pursuant to which Fuzhou 851 agreed to provide certain services regarding the usage of various recreation facilities at the Recreation Centre to the Group and its staff for a period from 25 April 2018 to 24 April 2021 at an annual fee of RMB9.5 million (equivalent to approximately HKD11.8 million).

Further details of the 2018 Renewal Recreation Centre Agreement are set forth in the announcement of the Company dated 24 April 2018.

On 23 April 2021, NetDragon (Fujian) entered into the renewal recreation centre agreement (the "2021 Renewal Recreation Centre Agreement"), pursuant to which Fuzhou 851 agreed to provide certain services regarding the usage of various recreation facilities at the Recreation Centre to the Group and its staff for a period from 25 April 2021 to 24 April 2024 at an annual fee of RMB11.7 million (equivalent to approximately HKD14 million).

Further details of the 2021 Renewal Recreation Centre Agreement are set forth in the announcement of the Company dated 23 April 2021.

CONFIRMATION OF THE INDEPENDENT NON-EXECUTIVE DIRECTORS

The independent non-executive Directors have reviewed the above transaction conducted during the year ended 31 December 2022 and confirmed that the transaction:

(i) has been entered into in the ordinary and usual course of the business of the Group;

(ii) has been entered into either on normal commercial terms or, if there are no sufficient comparable transactions to judge whether they are on normal commercial terms, on terms no less favourable to the Group than those available to or from independent third parties;

(iii) has been entered into in accordance with the 2018 Renewal Recreation Centre Agreement and the 2021 Renewal Recreation Centre Agreement on terms that are fair and reasonable and in the interests of the shareholders of the Company as a whole; and

(iv) has not exceeded the annual cap for the year ended 31 December 2022 as disclosed in the relevant announcement the Company.

CONTINUING CONNECTED TRANSACTIONS (Cont'd)

COMPLIANCE WITH DISCLOSURE REQUIREMENTS

For further details of the nature and extent of each of the connected person's interest in each of the Transactions, please refer to the section headed "Corporate Governance Report — Directors' Interest In Transaction, Arrangement or Contract" below. The Company has complied with the applicable requirements of Chapter 14A of the Listing Rules in respect of the continuing connected transactions.

AUDITOR'S LETTER ON DISCLOSED CONTINUING CONNECTED TRANSACTIONS

In addition, the Company has engaged its auditor to report on the ND Structure Contracts, the ND Other Contracts, the Best Assistant Control Documents and the Transactions under the 2021 Renewal Recreation Centre Agreement of the Group in accordance with Hong Kong Standard on Assurance Engagements 3000 "Assurance Engagements Other Than Audits or Reviews of Historical Financial Information" and with reference to Practice Note 740 "Auditor's Letter on Continuing Connected Transactions under the Hong Kong Listing Rules" issued by the Hong Kong Institute of Certified Public Accountants. The auditor has issued unqualified opinion containing the conclusion in respect of the ND Structure Contracts, the ND Other Contracts and the Best Assistant Control Documents which are in compliance with the Rule 14A.56 of the Listing Rules.

The auditor has also issued unqualified opinion containing the conclusions in respect of the transaction under the 2021 Renewal Recreation Centre Agreement set out above which are in compliance with the Rule 14A.56 of the Listing Rules.

PRE-EMPTIVE RIGHTS

There is no provision for pre-emptive rights under the Company's articles of association or the laws in the Cayman Islands which would oblige the Company to offer new shares on a pro rata basis to existing shareholders of the Company.

AUDIT COMMITTEE

The Company established the audit committee on 15 October 2007 which comprises three independent non-executive Directors, namely, Sing Chung Matthias Li (chairman), Lee Kwan Hung, Eddie and Liu Sai Keung, Thomas.

The audit committee is primarily responsible for the review and supervision of the Group's financial reporting process, risk management and internal control system. It has met with the external auditors of the Group to review the accounting principles and practices adopted by the Company and the audited annual financial statements of the Group for the year ended 31 December 2022.

MODEL CODE FOR SECURITIES TRANSACTIONS

The Company has adopted Model Code for Securities Transactions by Directors of Listed Issuer (the "Model Code") as set out in Appendix 10 of the Listing Rules and the code of conduct for Directors in their dealings in the Company's securities. Having made specific enquiry to all the Directors of the Company, all the Directors confirmed that they have complied with the required standard of dealings as set out in the Model Code for the year ended 31 December 2022.

CORPORATE GOVERNANCE CODE

The Company has complied with the CG Code throughout the year ended 31 December 2022 as contained in Appendix 14 of the Listing Rules.

A report on the principal corporate governance practices adopted by the Company is set out on pages 70 to 83.

PERMITTED INDEMNITY

The Bye-laws provides that each Director or other officer of the Company shall be entitled to be indemnified out of the assets of the Company against all losses or liabilities which he or she may sustain or incur in or about the execution of the duties of his or her office or otherwise in relation thereto. In addition, the Company has maintained appropriate directors and officers liability insurance in respect of relevant legal actions against the Directors.

COMPETITION AND CONFLICT OF INTERESTS

None of the Director nor any of their respective associates, as defined in the Listing Rules, has interest in any business that competes or may compete, either directly or indirectly, with the businesses of the Group, or has any other conflict of interests with the Group as at 31 December 2022 and as at the date of this report.

PURCHASE, SALE OR REDEMPTION OF SECURITIES

During the year ended 31 December 2022, the Company bought back a total of 3,221,500 shares on the Stock Exchange at an aggregate consideration of HKD59.5 million before expenses. All such shares were subsequently cancelled in February 2022. The repurchases were made for the benefit of the Company and its shareholders as a whole with a view to enhancing the earnings per share of the Company.

PURCHASE, SALE OR REDEMPTION OF SECURITIES (Cont'd)

Details of the share buy-backs are as follows:

Month of purchase	Number of ordinary shares bought back	Price per share Highest	Lowest	Aggregate consideration paid
		HKD	*HKD*	*HKD million*
January 2022	3,221,500	19.96	17.72	59.5

Save as disclosed above, neither the Company nor any of its subsidiaries had purchased, sold or redeemed any of the Company's securities during the year ended 31 December 2022.

PUBLIC FLOAT

Based on the information that is publicly available to the Company and within the knowledge of the Directors as at the latest practicable date prior to the issue of this report, the Company has maintained the prescribed public float under the Listing Rules.

SHARE OPTION SCHEME

Pursuant to the resolution of the shareholders of the Company dated 24 May 2018, the Company adopted a new share option scheme (the "2018 Share Option Scheme") to replace its previous share option scheme.

The 2018 Share Option Scheme was adopted for the purpose of providing incentives or rewards to participants (being employees (whether full-time or part time), executives or officers of the Group (including executive and non-executive directors of Members of the Group) and business consultants, agents and legal and financial advisers of the Group who the Board considers, in its sole discretion, will contribute or have contributed to the Members of the Group) ("Participants") as incentives and/or rewards for the Eligible Participants' contribution to the Group, and any of its associated companies, the Group's holding company and the subsidiaries and the associated companies to the Group's holding company (the "Members of the Group").

The 2018 Share Option Scheme became effective on 24 May 2018 and, unless otherwise cancelled or amended, will remain in force for 10 years from that date.

SHARE OPTION SCHEME (Cont'd)

The maximum number of shares which may be issued upon exercise of all options granted and to be granted under the 2018 Share Option Scheme is 53,341,969 shares, representing 10% of the issued shares of the Company as at the date of adoption of the Share Option Scheme and 9.86% of the issued shares of the Company as at the date of this annual report. As at the date of this report, there are a total of 47,041,969 shares available for issue under the 2018 Share Option Scheme, which represented 8.70% of the issued shares of the Company. The maximum number of shares issuable under share options granted to each eligible participant in the Share Option Scheme (including both exercised and outstanding options) within any 12-month period is limited to 1% of the shares of the Company in issue. Any grant or further grant of share options in excess of this limit is subject to shareholders' approval in a general meeting. A grant of share options under the Share Option Scheme to a director, chief executive or substantial shareholder of the Company, or to any of their associates, is subject to approval in advance by the independent non-executive directors (excluding any independent non-executive director who is the grantee of the Option). In addition, any share options granted to a substantial shareholder or an independent non-executive director of the Company, or to any of their associates, which would result in the shares issued and to be issued, upon exercise of all options already granted and to be granted (including options exercised, cancelled and outstanding), to such person in the 12-month period up to and including the date of the grant in excess of 0.1% of the shares of the Company in issue and with an aggregate value (based on the closing price of the Company's shares at the date of grant) in excess of HKD5 million, are subject to shareholders' approval in advance in a general meeting.

The offer of a grant of share options may be accepted within 28 days from the date of offer upon payment of a nominal consideration of HKD1 in total by the grantee. The exercise period of the share options granted is determined by the directors, save that such a period shall not be more than 10 years from the date of offer of the share options and subject to the provisions for early termination as set out in the Share Option Scheme. There is no requirement of a minimum period for which an option must be held before it can be exercised.

The exercise price of the share options shall be not less than the highest of (i) the Stock Exchange closing price of the Company's shares on the date of offer of the share options, which must be a date on which the Stock Exchange is open for business of dealing in securities; (ii) the average Stock Exchange closing price of the Company's shares for the five trading days immediately preceding the date of offer; and (iii) the nominal value of a share of the Company on the date of offer.

SHARE OPTION SCHEME (Cont'd)

Pursuant to the resolution of the shareholders of the Company dated 24 May 2018, the Company adopted a new share option scheme (the "2018 Share Option Scheme") to replace the existing share option scheme which expired on 12 June 2018 (the "2008 Share Option Scheme"). Details of the share options outstanding and movement during the year ended 31 December 2022 are as follows:

2008 Share Option Scheme

Grantee	Date of grant	Exercise Price *HKD*	As at 1 January 2022	Number of share options Granted	Exercised	Cancelled	Lapsed	As at 31 December 2022
Independent non-executive Directors								
Lee Kwan Hung, Eddie	04.12.2013	15.72	318,000	–	–	–	–	318,000
	31.03.2017	23.65	100,000	–	–	–	–	100,000
Liu Sai Keung, Thomas	04.12.2013	15.72	318,000	–	–	–	–	318,000
	31.03.2017	23.65	100,000	–	–	–	–	100,000
Others								
Employees	23.04.2012	5.74	85,667	–	19,825	–	65,842	–
	12.09.2012	7.20	50,250	–	–	–	50,250	–
	16.01.2013	11.164	48,500	–	–	–	–	48,500
	04.12.2013	15.72	238,500	–	–	–	–	238,500
	31.03.2017	23.65	100,000	–	–	–	–	100,000
Total			1,358,917	–	19,825	–	116,092	1,223,000

SHARE OPTION SCHEME (Cont'd)

2018 Share Option Scheme

Grantee	Date of grant	Exercise Price	As at 1 January 2022	Granted	Number of share options Exercised	Cancelled	Lapsed	As at 31 December 2022
		HKD						
Executive Directors								
Leung Lim Kin, Simon	24.01.2020	21.07	4,000,000	–	–	–	–	4,000,000
Independent non-executive Directors								
Lee Kwan Hung, Eddie	24.01.2020	21.07	100,000	–	–	–	–	100,000
Liu Sai Keung, Thomas	24.01.2020	21.07	100,000	–	–	–	–	100,000
Others								
Employees	24.01.2020	21.07	1,100,000	–	–	–	–	1,100,000
Total			5,300,000	–	–	–	–	5,300,000

Notes:

1. For vesting period and exercise period of the options granted under the 2008 Share Option Scheme and the 2018 Share Option Scheme, please refer to note 38 of the Notes to the Consolidated Financial Statements.

2. The weighted average closing price of the shares immediately before various dates during 2022 on which the options were exercised was HKD16.19.

DIRECTORS' RIGHTS TO ACQUIRE SHARES OR DEBENTURES

Apart from the Share Option Scheme disclosed above and set out in note 38 of Notes to the Consolidated Financial Statements, at no time during the year was the Company, its holding company or any of its subsidiaries and fellow subsidiaries a party to any arrangement to enable the Directors, their respective spouse or minor children to acquire benefits by means of the acquisition of shares in, or debentures of, the Company or in any other body corporate.

SHARE AWARD SCHEME

The Company

The Board approved and adopted the share award scheme (the "NetDragon Share Award Scheme") on 2 September 2008 to recognise the contributions of certain employees and to provide them with incentives in order to retain them for the continual operation and development of the Group and to attract suitable personnel for further development of the Group and it was amended by the resolution passed on 31 August 2018 to extend a period of 10 years, in which selected employees of the Group are entitled to participate. Unless early terminated by the Board, the NetDragon Share Award Scheme shall be valid and effective for a term of ten years commencing on 31 August 2018. The Board shall not grant any award of shares if the nominal value of awards in aggregate granted by the Board under the NetDragon Share Award Scheme is over 10% of the issued capital of the Company from time to time.

The total number of shares which may be issued upon exercise of all awards granted and to be granted under the NetDragon Share Award Scheme is 5,407,436 shares, representing 10% of the issued shares of the Company from time to time and as at the date of this annual report. The maximum number of shares which may be awarded to a selected employee shall not exceed 1% of the issued share capital of the Company from time to time. The vesting date of the share awards granted is the date on which a selected employee's entitlement to the awarded shares accrues in accordance with the conditions imposed by the directors.

Pursuant to the rules of the NetDragon Share Award Scheme, the Group has signed an agreement with Bank of Communications Trustee Limited (the "Trustee"), for the purpose of administering the NetDragon Share Award Scheme and holding the awarded shares before they are vested.

Details of the shares awarded under the NetDragon Share Award Scheme during the year ended 31 December 2022 are as follows:

Grantee	Date of grant	Average price per share *(HKD)* *(Note)*	Outstanding at 1 January 2022	Granted during period	Awards vested during period	Forfeited during period	Outstanding at 31 December 2022	Vesting period
Executive Directors								
Leung Lim Kin, Simon	19 April 2018	18.96	218,160	–	190,890	27,270	–	30 April 2018 – 30 April 2022
Others								
Employees	19 April 2018	18.96	148,080	–	87,420	60,660	–	30 April 2018 – 30 April 2022
			366,240	–	278,310	87,930	–	

Note:

1. These shares were purchased by the Trustee of the Share Award Scheme at an average price of HKD18.96 per share.

2. In 2022, the weighted average closing price of the shares immediately before the vesting date of the awarded shares was HK$15.12.

SHARE AWARD SCHEME (Cont'd)

The Company (Cont'd)

The awarded shares, will be transferred to the selected directors or employees at nil consideration, subject to receipt by the Trustee of (i) transfer documents duly signed by the Trustee and the selected employee within the period stipulated in the vesting notice issued by the Trustee to the selected employee; and (ii) a confirmation letter from the Company that all vesting conditions having been fulfilled.

Subject to the acceptance by the relevant selected employees, such transferred awarded shares may be held by the selected employees in their own names or such nominees, including any trustees, as designated by the selected employees.

Best Assistant Education Online Limited ("Best Assistant")

Best Assistant approved and adopted the share award scheme (the "Best Assistant Share Award Scheme") on 7 August 2012 and it was amended by the resolution passed on 5 August 2022 to extend a period of 10 years, in which selected participants include senior management employees of Best Assistant and/or its subsidiaries ("Best Assistant Group"), consultants to Best Assistant Group employed by any member of the Company, its associated companies or their subsidiaries (excluding Best Assistant Group) and any person who contributes to the development of Best Assistant Group which has been certified and determined by the board of directors of Best Assistant with the affirmative vote of one director appointed by IDG Investors, Vertex or Alpha.

Subject to early termination, the Best Assistant Share Award Scheme shall be valid and effective for a term of ten years commencing on 5 August 2022. Best Assistant may also transfer shares awarded under the Best Assistant Share Award Scheme whether vested or unvested to other trusts and if there is a change in control of Best Assistant, all awarded shares shall immediately be vested. The board of directors of Best Assistant may also waive any vesting conditions with the affirmative vote of one director appointed by IDG Investors, Vertex or Alpha. The maximum number of shares which may be granted to the participants under the Best Assistant Share Award Scheme shall not exceed ten percent (10%) of the total issued share capital of Best Assistant from time to time or such number of shares as determined by the board of directors of Best Assistant with the affirmative vote of one director appointed by IDG Investors, Vertex or Alpha.

Pursuant to the rules of the Best Assistant Share Award Scheme, Best Assistant has signed an agreement with the Trustee, for the purpose of administering the Best Assistant Share Award Scheme and holding the awarded shares before they are vested.

Subject to, inter alia, the receipt by the Trustee of (i) the prescribed transfer documents duly signed by the selected participants within the period stipulated in the vesting notices; and (ii) confirmation from Best Assistant that all vesting conditions having been fulfilled, the awarded shares will be transferred to the selected participants at nil consideration upon vesting.

As at 31 December 2022, no awarded shares were granted under the Best Assistant Share Award Scheme.

ISSUE OF SERIES A PREFERRED SHARES BY BEST ASSISTANT

On 6 January 2015, Best Assistant entered into a subscription agreement ("Series A Agreement") with IDG-Accel China Growth Fund-L.P., IDG-Accel China Growth Fund-A L.P., IDG-Accel China Investors L.P. (together referred to as "IDG Investors"), Vertex Legacy Continuation Fund Pte Ltd. (formerly held by Vertex Asia Fund Pte. Ltd.) ("Vertex"), Hong Kong Alpha Group Limited ("Alpha"), Catchy Holdings Limited, DJM Holding Ltd., Creative Sky International Limited and NetDragon Websoft Inc. ("NetDragon BVI"), a direct wholly owned subsidiary of the Company (collectively referred to as "Series A Investors") for the allotment and issue of an aggregate of 180,914,513 Series A preferred Shares ("Series A Preferred Shares") for a total consideration of USD52.5 million (equivalent to approximately HKD409.5 million). The Series A Agreement and the issue and allotment of the Series A Preferred Shares were completed on 13 February 2015.

Assuming all of the Series A Preferred Shares are fully converted into ordinary shares of Best Assistant, the Company's interest in ordinary shares of Best Assistant will be reduced from 90.50% to approximately 83.61%.

As at 31 December 2022, no Series A Preferred Shares have been converted into ordinary shares of Best Assistant.

ACQUISITION OF EDMODO AND ISSUE OF SERIES B PREFERRED SHARES BY BEST ASSISTANT

On 6 April 2018, Best Assistant, Digital Train Limited ("Digital Train") as purchaser, a wholly-owned subsidiary of Best Assistant, Educate Merger Sub, Inc. ("Merger Sub"), a wholly-owned subsidiary of the purchaser, Edmodo, LLC (formerly known as "Edmodo Inc.") ("Edmodo"), Fortis Advisors LLC, in its capacity as representative of the shareholders of Edmodo, and the Company, solely with respect as guarantor for the timely performance of the obligations of Best Assistant and Digital Train entered into an agreement and plan of merger (the "Agreement and Plan of Merger"), pursuant to which Digital Train acquired Edmodo, for consideration in the form of cash and stock collectively valued in the amount of USD137.5 million, by way of merger under the laws of the State of Delaware.

Upon closing which took place on 2 May 2018, the Merger Sub merged with and into Edmodo, the separate corporate existence of Merger Sub ceased, and Edmodo shall continue its corporate existence as a wholly owned subsidiary of Digital Train in accordance with Delaware law.

The consideration (subject to downward adjustment as provided in the Agreement) was satisfied by (i) payment of an amount in cash equal to USD15 million and (ii) the issue of 112,560,245 Best Assistant Series B Shares.

As at 31 December 2022, no Series B Preferred Shares have been converted into ordinary shares of Best Assistant.

ISSUE OF SECURED CONVERTIBLE AND EXCHANGEABLE BONDS BY BEST ASSISTANT AND ISSUE OF UNLISTED WARRANT UNDER SPECIFIC MANDATE

On 10 November 2019, the Company, Best Assistant, NetDragon BVI, Digital Train, Promethean World Limited, Nurture Education (Cayman) Limited (the "Investor"), Madison Pacific Trust Limited as the Agent and the Security Agent entered into the Bond and Warrant Purchase Agreement (the "Purchase Agreement"), pursuant to which (i) Best Assistant agreed to issue to the Investor and the Investor agreed to purchase the Convertible and Exchangeable Bonds in the aggregate principal amount of USD150 million (equivalent to approximately HKD1,174.5 million); and (ii) simultaneously with the issue of the Convertible and Exchangeable Bonds, the Company would issue to the Investor the unlisted warrants. The issue of Convertible and Exchangeable Bonds and the Warrants to the Investor is a strategic collaboration with the Investor, an institutional investor with extensive experience and active investments in the Greater China education sector.

Closing of the Purchase Agreement took place on 9 March 2020, and Best Assistant has issued to the Investor, Convertible and Exchangeable Bonds which can be converted to 279,510,479 ordinary shares of Best Assistant, representing 11.16% of the total outstanding share capital of Best Assistant on a fully diluted and as-converted basis, and the Company has issued the unlisted Warrant to the Investor which can be converted to 11,502,220 Warrant Shares of the Company. As a result of the payment of the Company's dividend and pursuant to the relevant warrant instrument, the subscription price of the relevant warrant instrument is adjusted from HKD21.1998 to HKD19.6698 on 28 February 2022, and further adjusted to HKD18.8698 on 31 October 2022. The net proceeds raised from the issuance of Convertible and Exchangeable Bonds and warrants were also applied and fully utilized as intended.

As at 31 December 2022, no Convertible and Exchangeable Bonds were converted into ordinary shares of Best Assistant and no warrants were converted into shares of the Company.

USE OF PROCEEDS FROM TOP-UP PLACING AND SUBSCRIPTION

On 13 February 2020, the Company entered into the placing and subscription agreement (the "Placing and Subscription Agreement") with DJM Holding Ltd. (the "Vendor"), Mr. Liu Dejian and China International Capital Corporation Hong Kong Securities Limited (the "Placing Agent"), pursuant to which (i) the Vendor agreed to place, through the Placing Agent, on a fully underwritten basis, 33,000,000 ordinary shares held by the Vendor (the "Top-up Placing Shares") at the price of HKD23.70 per Top-up Placing Share; and (ii) the Vendor conditionally agreed to subscribe for 33,000,000 new ordinary Shares to be subscribed for by the Vendor, being the number of the Top-up Placing Shares actually placed by the Placing Agent on behalf of the Vendor pursuant to the terms of the Placing and Subscription Agreement (the "Top-up Subscription Shares") at the Price of HKD23.70 per Top-up Subscription Share (the "Top-up Placing and Subscription"). The aggregate nominal value of the Top-up Subscription Shares is USD330,000. The closing price per share as quoted on the Stock Exchange on the date of the Placing and Subscription Agreement was HKD23.20. The Directors are of the view that the Top-up Placing and Subscription will benefit the Group's long term development and broaden the Company's equity base to facilitate the future growth and development of its business.

USE OF PROCEEDS FROM TOP-UP PLACING AND SUBSCRIPTION (Cont'd)

Completion of the Top-up Placing took place on 17 February 2020 and the Top-up Subscription took place on 25 February 2020. A total of 33,000,000 Top-up Placing Shares have been successfully placed to not less than six placees and the 33,000,000 Top-up Subscription Shares had been allotted and issued to Mr. Liu Dejian pursuant to the general mandate. The aggregate gross proceeds from the Top-up Placing and Subscription are approximately HKD782.10 million and the aggregate net proceeds from the Top-up Placing and Subscription are approximately HKD774.28 million after deducting the commission payable to the Placing Agent, professional fee and other related costs and expenses in relation to the Top-up Placing and Subscription. On such basis, the net price of each Top-up Subscription Share is approximately HKD23.44.

All net proceeds from the Top-up Placing and Subscription have been utilised in 2021 as intended for funding the expansion of education business.

AUDITOR

The consolidated financial statements for the year ended 31 December 2022 have been audited by Deloitte Touche Tohmatsu ("Deloitte"), the auditor of the Company. A resolution will be submitted in the AGM of the Company to re-appoint Deloitte as auditor of the Company.

On behalf of the Board

Leung Lim Kin, Simon
Vice Chairman

Hong Kong, 27 March 2023

The Directors believe that good corporate governance practices serve as an effective risk management for the Company and hence, the shareholders of the Company will benefit from the high standard of corporate governance.

The Company has applied the principles set out in the Corporate Governance Code (the "CG Code") contained in Appendix 14 of the Listing Rules.

Throughout the year, save as disclosed in this Corporate Governance Report, the Company has complied with the provisions as set out in the CG Code in Appendix 14 to the Listing Rules.

On 1 January 2022, the amendments to the CG Code came into effect and also applied to corporate governance reports for financial year commencing on or after 1 January 2022. The Board will continue to review and enhance its corporate governance practice of the Company to ensure compliance with the CG Code and align with the latest developments.

MODEL CODE FOR SECURITIES TRANSACTIONS BY DIRECTORS

The Company has established its code of conduct regarding securities transaction by Directors, senior management and relevant employees on terms no less exacting than the required standard indicated by the Model Code as set out in Appendix 10 to the Listing Rules. Having made specific enquiry of all Directors, all Directors confirmed that they have complied with the required standard set out in the Model Code and its code of conduct regarding directors' securities transactions during the year under review.

THE BOARD

The Board is composed of five executive Directors (including the Chairman and the Chief Executive Officer of the Company) and four non-executive Directors (of whom three are independent non-executive Directors), whose biographical details are set out in "Directors and Senior Management" section on pages 21 to 30. Save as disclosed herein, none of the members of the Board has any financial, business, family or other material relevant relationship to one another.

Each of the non-executive and independent non-executive Directors has entered into an appointment letter with the Company, all for an initial term of three years since the date of appointment and renewable automatically for successive terms of one year each commencing from the day next after the expiry of the current term unless and until terminated in accordance with the terms of the appointment letter or by either party thereto giving to the other not less than three months' prior written notice.

Duties of the Board including delegation to management

The Board is responsible for overall strategic formulation and performance monitoring of the Group. It delegates day-to-day operations of the Company to the committees and senior management within the control and authority framework set by the Board. In addition, the Board has also delegated various responsibilities to the audit committee, the remuneration committee, the nomination committee and the share award scheme committee. Further details of these committees are set out in this report.

Duties of the Board include:

(i) ensuring, maintaining and overseeing the internal control systems of the Group;

(ii) setting the objectives of management of the Group;

(iii) monitoring the performance of management of the Group;

(iv) ensuring that a framework of prudent and effective controls is in place to enable risks to be assessed and managed; and

(v) overseeing the management of NetDragon's relationships with stakeholders, such as, shareholders, customers, the community, interest groups, employees and others who have a legitimate interest in the responsible conduct of the Group's business.

During the year ended 31 December 2022, the Board held four meetings and the attendance of each of the Directors at Board, committee and general meetings held in 2022 is set out below:

Directors	Full Board	Audit Committee	Remuneration Committee	Nomination Committee	Share Award Scheme Committee*	Annual General Meeting
Executive Directors						
Liu Dejian (Chairman)	4/4	N/A	N/A	N/A	N/A	0/1
Leung Lim Kin Simon (Vice Chairman)	4/4	N/A	N/A	N/A	N/A	0/1
Liu Luyuan (Chief Executive Officer)	4/4	N/A	N/A	N/A	N/A	0/1
Zheng Hui	4/4	N/A	N/A	N/A	N/A	0/1
Chen Hongzhan	4/4	N/A	N/A	N/A	N/A	0/1
Non-executive Director						
Lin Dongliang	4/4	N/A	N/A	N/A	N/A	0/1
Independent non-executive Directors						
Chao Guowei, Charles (resigned on 30 December 2022)	1/4	1/4	1/1	1/1	N/A	0/1
Lee Kwan Hung, Eddie	4/4	4/4	1/1	1/1	N/A	1/1
Liu Sai Keung, Thomas	4/4	4/4	1/1	1/1	N/A	0/1
Sing Chung Matthias Li (appointed on 30 December 2022)	N/A	N/A	N/A	N/A	N/A	N/A

* The Share Award Scheme Committee of the Company did not hold any meeting during the year under review.

The CG Code provision F.2.2 requires that the Chairman of the Board should attend the annual general meeting of the Company ("AGM") and should invite the Chairman of the audit, remuneration, nomination and any other committee (as appropriate) to attend the AGM and in their absence, he should invite another member of the committee or failing this his duly appointed delegate(s) to attend. These persons should be available to answer questions at the AGM. At the AGM held on 2 June 2022, Mr. Lee Kwan Hung, Eddie, the chairman of remuneration committee, attended and answered shareholders' questions, the Chairman of the Board and the other Directors did not attend as they had other important business engagement.

Board and committee minutes are recorded in appropriate detail. Draft minutes are circulated to Directors for comments within reasonable time after each meeting and the final version is open for Directors' inspection.

The Directors are entitled, upon reasonable request, to seek independent professional advice in appropriate circumstances, at the Company's expenses. The Board shall resolve to provide separate appropriate independent professional advice to the Directors to assist the relevant Directors to discharge their duties.

In full compliance with Rule 3.10 of the Listing Rules, the Company has appointed three independent non-executive Directors, at least one of whom has appropriate professional accounting qualifications. The Board considers that all independent non-executive Directors have appropriate and sufficient industry or finance experience and qualifications to carry out their duties so as to protect the interests of the shareholders of the Company.

In addition, the Company has received, from each of the independent non-executive Directors, an annual confirmation of their independence pursuant to Rule 3.13 of the Listing Rules. Two of them have served on the Board for more than nine years and their independence have been verified. The Nomination Committee is fully satisfied that they demonstrate complete independence in character and judgement both in their designated roles and as board members. The Board considers that all independent non-executive Directors to be independent by reference to the factors stated in the Listing Rules.

All Directors have full and timely access to all relevant information as well as the advice and services of the Company Secretary, with a view to ensuring that Board procedures and all applicable rules and regulations are followed. The Directors are also provided with monthly updates which contain periodic financials with summaries and covering highlights of the Company's major businesses of key events, outlook and business related matters of the Group. The monthly updates present a balanced and understandable assessment of the Company's performance and position. The non-executive Director and independent non-executive Directors may take independent professional advice at the Company's expense in carrying out their functions, after making a request to the Board.

DIRECTORS' INTEREST IN TRANSACTION, ARRANGEMENT OR CONTRACT

With reference to the ND Structure Contracts entered into among TQ Digital, TQ Online and NetDragon (Fujian), the executive Directors, Messrs. Liu Luyuan and Zheng Hui, are interested in an aggregate of 99.96% in NetDragon (Fujian). Transactions between the Company, NetDragon (BVI), TQ Digital, TQ Online, NetDragon (Hong Kong) or NetDragon (USA) (all being wholly-owned subsidiaries of the Company) on one hand and NetDragon (Fujian) on the other hand, including the ND Structure Contracts and the ND Other Contracts would technically constitute connected transactions. Details for the ND Structure Contracts and the ND Other Contracts are set out in pages 42 to 46 in the section of "Report of the Directors" under the paragraphs of "ND Structure Contracts".

With reference to the Best Assistant Control Documents entered into among Fujian Huayu and NetDragon (Fujian), NetDragon (Fujian) and Fujian Huayu (being a subsidiary of NetDragon (Fujian)) are technically associates of Messrs. Liu Dejian, Liu Luyuan and Zheng Hui, and therefore connected persons of the Company. Transactions between the Company or its subsidiaries, except Best Assistant (Cayman) and subsidiaries of Best Assistant (Cayman) (the "Best Assistant Group Companies") on one hand and Best Assistant (Cayman) or Best Assistant Group Companies on the other hand, including the Best Assistant Control Documents would technically constitute connected transactions. Details for the Best Assistant Control Documents are set out in pages 47 to 51 in the section of "Report of the Directors" under the paragraphs of "Best Assistant Control Documents".

With reference to the continuing connected transactions for the Renewal Tenancy Agreement entered into between TQ Digital or NetDragon (Fujian) on one hand and Fuzhou 851 on the other and with reference to the continuing connected transactions for the Renewal Recreation Centre Agreement and the Renewal Recreation Centre Agreement entered into between TQ Digital or NetDragon (Fujian) on one hand and Fuzhou 851 on the other hand, Fuzhou 851 is wholly owned by DJM Holding Ltd., a substantial shareholder of the Company. Thus, Fuzhou 851 is deemed to be a connected person to the Company.

With reference to the Series A Agreement entered into, among others, Best Assistant (Cayman) and the Series A Investors for the allotment and issue of an aggregate of 180,914,513 Series A Preferred Shares for a total consideration of USD52.5 million (equivalent to approximately HKD409.5 million), DJM Holding Ltd. was allotted 2,987,605 Series A Preferred Shares. DJM Holding Ltd. is a substantial shareholder of the Company and is wholly owned by Mr. Liu Dejian, the chairman and an executive Director. Thus, DJM Holding Ltd. is considered as a connected person to the Company.

With reference to the Capital Contribution Agreement entered into among TQ Online, the Investors and the existing shareholders of Wuxi Mesh Tech, TQ online has, amongst other things, conditionally agreed to make Capital Contribution in the amount of RMB50 million to Wuxi Mesh Tech in two installments. Wuxi Mesh Tech is indirectly held as to approximately 61.53% by the family members of Mr. Lin Dongliang, a non-executive director of the Company (including his son and his spouse). Thus, Wuxi Mesh Tech is considered as a connected person to the Company.

Details for the continuing connected transactions are set out in pages 58 to 59 in the section of "Report of the Directors" under the paragraphs of "Continuing Connected Transactions".

Save as the above, none of the Directors is materially interested, either directly or indirectly, in any transaction, arrangement or contract of significance of the Company during the year ended 31 December 2022 or as at the end of the year.

CHAIRMAN AND CHIEF EXECUTIVE OFFICER

The positions of the chairman and the chief executive officer are held by Mr. Liu Dejian and Mr. Liu Luyuan, respectively.

In order to reinforce their respective independence, accountability and responsibility, the role of the chairman is separated from that of the chief executive officer. The chairman provides leadership and is responsible for the effective functioning of the Board in accordance with good corporate governance practice and ensuring the effectiveness of the Board. With the support of the senior management, the chairman is also responsible for ensuring that the Directors receive adequate, complete and reliable information in a timely manner and appropriate briefing on issues arising at Board meetings.

The chief executive officer focuses on managing the Company and its subsidiaries, developing and implementing objectives, policies and strategies approved and delegated by the Board. The chief executive officer is in charge of the Group's day-to-day management and operations and is also responsible for developing strategic plans and formulating the organisational structure, control systems and internal procedures and processes for the Board's approval.

AUDIT COMMITTEE

The Company established the audit committee (the "Audit Committee") on 15 October 2007 which has adopted written terms of reference in compliance with the CG Code Provision. The primary duties of our audit committee are to review and supervise our financial reporting process, risk management, internal control and corporate governance systems.

The Audit Committee reviews the quarterly, interim and annual consolidated financial results of the Group. In addition, the Audit Committee also reviews and approves the pricing policy and the performance for the continuing connected transactions and connected transactions relating to ND Structure Contracts, ND Other Contracts and Best Assistant Control Documents of the Group.

The Audit Committee held two meetings during the year ended 31 December 2022. The major work performed by the Audit Committee in respect of the year ended 31 December 2022 included reviewing and recommending the re-appointment of external auditor, approving the terms of engagement (including the remuneration) of the external auditor and the audit plan, reviewing the unaudited interim report and interim results announcement for the six months ended 30 June 2022, reviewing the audited financial statements and final results announcement for the year ended 31 December 2022, reviewing the work of the Group's internal audit and assessing the effectiveness of the Group's systems of internal control, risk management, corporate governance and cost control. The Audit Committee also discussed with the management to ensure that the Company is having adequate resources, qualified and experienced staff of the accounting and financial reporting function, and training programmes and budget.

Our Audit Committee comprises three independent non-executive Directors, namely Sing Chung Matthias Li, Lee Kwan Hung, Eddie and Liu Sai Keung, Thomas. Sing Chung Matthias Li is the chairman of the Audit Committee.

The Group's audited consolidated financial statements for the year ended 31 December 2022 have been reviewed by the Audit Committee. The Audit Committee is of the opinion that the preparation of such results complied with the applicable accounting standards and requirements and that adequate disclosures have been made.

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

INTERNAL CONTROL AND RISK MANAGEMENT

The Board recognises its responsibility for maintaining a sound and effective system of internal control and risk management on an ongoing basis to safeguard the shareholders' investment and the Company's assets, and reviewing its effectiveness at least annually. The Board has entrusted the Audit Committee and professional external consultant with the responsibility to review the internal control and risk management systems of the Group annually, which include the review of financial, operational and compliance controls and risk management functions.

During the year under review, the Board has conducted a review on the effectiveness of the internal control and risk management system of the Group through discussion with the Audit Committee on audit findings and control issues. These procedures provide reasonable and not absolute assurance against material errors, losses and fraud, and the system is designed to manage rather than eliminate risks of failure in the Group's operational systems and in the achievement of the Group's business objectives.

The Board has also considered the adequacy of resources, qualifications and experience of staff of the Company's accounting and financial reporting function, and their training programmes and budget.

The Board, based on the review of the Audit Committee, is satisfied that the Group has maintained sound and effective risk management and internal control system for the year ended 31 December 2022.

The procedures and internal controls of the Company for handling and dissemination of inside information includes handling corporate affairs in accordance with the Guidelines on Disclosure of Inside Information published by Securities and Futures Commission and the Listing Rules, and reminding the Directors and employees of the Group regularly about due compliance with all policies regarding the inside information.

REMUNERATION COMMITTEE

The Company established the remuneration committee (the "Remuneration Committee") on 15 October 2007 which adopts the model as described in E.1.2 (c) (ii) of CG Code, which determines remuneration packages and policy for all executive Directors and senior management and makes recommendation on the remuneration of non-executive Directors to the Board. The remuneration of all our Directors and senior management is subject to regular monitoring by the Remuneration Committee to ensure that levels of their remuneration and compensation are appropriate.

During the year ended 31 December 2022, the Remuneration Committee held a meeting to review the salary structure of the employees of the Company as well as the remuneration of senior management staff. The Remuneration Committee also reviewed the remuneration of the Directors by assessing their performance and with reference to the remuneration level of directors of comparable listed companies and approved the terms of the executive Directors' service contracts.

Our Remuneration Committee comprises three independent non-executive Directors, namely Sing Chung Matthias Li, Lee Kwan Hung, Eddie and Liu Sai Keung, Thomas. Lee Kwan Hung, Eddie is the chairman of the Remuneration Committee.

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

EMPLOYEE AND EMOLUMENT POLICY

The emolument policy of the employees of the Company is set up by the Board on the basis of their merit, qualifications and competence.

The emoluments of the executive Directors and senior management of the Company are reviewed and determined by the Remuneration Committee, having regard to the Group's operating results, individual performance and comparable market statistics.

The Group has adopted the Share Option Scheme, the NetDragon Share Award Scheme and the Best Assistant Share Award Scheme to motivate Directors and eligible employees. Details of the schemes are set out in the paragraphs headed "Share Option Scheme" and "Share Award Scheme". None of the directors waived any emoluments during the year ended 31 December 2022.

NOMINATION COMMITTEE

The Company established a nomination committee (the "Nomination Committee") on 15 October 2007 which has adopted written terms of reference in compliance with the CG Code Provision. The Nomination Committee determines the nomination policy and follows a formal, fair and transparent procedure for the appointment of new Directors to the Board. The Nomination Committee reviews the structure, size and composition of the Board annually, identifies suitably qualified candidates to become Board members and select or make recommendations to the Board on the selection of candidates nominated for directorships and succession planning for directors, and accesses the independence of the independent non-executive Directors. During this process, the Nomination Committee considers candidates based on merit and with due regard to the benefits of diversity on the Board.

During the financial year ended 31 December 2022, a meeting was held to review the structure, size and composition of the Board and assessed the independence of the three independent non-executive Directors of the Company. The Nomination Committee is of the view that the current Board demonstrates a balanced composition with sufficient independence element.

Our Nomination Committee comprises three independent non-executive Directors, namely Sing Chung Matthias Li, Lee Kwan Hung, Eddie and Liu Sai Keung, Thomas. Liu Sai Keung, Thomas is the chairman of the Nomination Committee.

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

Potential new directors are selected on the basis of their qualifications, skill and experience which the Nomination Committee considers will make a positive contribution to the performance of the Board.

Board Diversity Policy

On 30 August 2013, the Board adopted the board membership diversity policy for maintaining the appropriate skills and experience required by the Company's business and a diversity of perspectives on the Board.

The following is a summary of the board diversity policy:

- reviewing and assessing the composition of the Board to maintain an appropriate range and balance of talents, skills, experience and background on the Board;

- recommending candidates for appointment to the Board by considering merit against objective criteria and with due regard for the benefits of diversity on the Board; and

- conducting an annual review of the effectiveness of the Board by considering the balance of talents, skills, experience, independence and knowledge of the Board and the diversity of the Board.

The achievement of these criteria will be measurable on an objective review, which can enhance the diversity of background and experience of individual directors and the effectiveness of the Board in protecting shareholders' interests.

The Board currently has no female Director. Under the revised Rule 13.92 of the Listing Rules that came into effect on 1 January 2022, a single gender Board will not be considered by the Stock Exchange to have achieved Board diversity. The Company targets to comply with this requirement by appointing at least one female director on the Board no later than 31 December 2024, being the end of the transitional period as specified by the Stock Exchange.

Details of the gender ratio in workforce (including senior management) are set out in the "Environment, Social and Governance Report" on page 120.

Nomination Policy

The Nomination Committee recommends candidates for nomination to the Board, which approves the final choice of candidates. The Nomination Committee was responsible to maintain the nomination policy of the Company (the "Nomination Policy") and review the same regularly. The objective of the Nomination Policy is to assist the Company in fulfilling its duties and responsibilities as provided in its terms of reference. This Nomination Policy sets out, inter alia, the selection criteria and the evaluation procedures in nominating candidates to be appointed or re-appointed as Directors of the Company.

When making recommendations regarding the appointment of any proposed candidate to the Board or re-appointment of any existing member(s) of the Board, the Nomination Committee shall consider a variety of factors including without limitation the following in assessing the suitability of the proposed candidate:

(a) Reputation for integrity;

(b) Accomplishment, experience and reputation in the business and other relevant sectors relate to the Company and/or its subsidiaries;

(c) Commitment in respect of sufficient time and attention to the Company's business;

(d) Diversity in all aspects, including but not limited to gender, age, cultural/educational and professional background, skills, knowledge and experience;

(e) The ability to assist and support management and make significant contributions to the Company's success;

(f) Compliance with the criteria of independence as prescribed under Rule 3.13 of the Rules Governing the Listing of Securities on Main Board of The Stock Exchange of Hong Kong Limited for the appointment of an independent non-executive Director; and

(g) Any other relevant factors as may be determined by the Nomination Committee or the Board from time to time.

The Committee believes that independence is an important part of fulfilling the Directors' duty to supervise the management of the business and affairs of the Company. Non-executive Directors and Executive Directors are required to disclose his/her competing businesses to the Company. Cross-directorships in Hong Kong or overseas between Directors are also reviewed annually. The Nomination Committee is accountable for assessing whether any competing businesses or interlocking directorships could materially interfere with the exercise of objective and unfettered judgement by relevant Directors or their ability to act in the best interests of the Group.

ND MANAGEMENT COMMITTEE

The Company established the ND Management Committee pursuant to the ND Structure Contracts to oversee the business and operations of NetDragon (Fujian).

The ND Management Committee comprises four members, of which each of TQ Digital and NetDragon (Fujian) is entitled to appoint two members from its respective board of directors. Other than by reason of retirement, resignation, incapability or death, a member of the ND Management Committee may only be removed by the party who originally appointed such member. As a general requirement, the members appointed by NetDragon (Fujian) must also be the equity holders of NetDragon (Fujian) as well as directors of TQ Digital. In the case where the number of members who concurrently act as a director of both TQ Digital and NetDragon (Fujian) is less than two, TQ Digital is entitled to appoint an additional member of the ND Management Committee. As such, under the ND Structure Contracts, the ND Management Committee is allowed to have a maximum of five members.

Currently, the ND Management Committee comprises Liu Dejian and Liu Luyuan who were appointed by NetDragon (Fujian), and Zheng Hui and Chen Hongzhan who were appointed by TQ Digital. The directors of NetDragon (Fujian) comprise Liu Dejian, Liu Luyuan, Zheng Hui, being executive Directors, and Wang Song, being a member of our senior management. Further details of the above members of the ND Management Committee are set out in the section headed "Directors and Senior Management" in this annual report.

BEST ASSISTANT MANAGEMENT COMMITTEE

The Best Assistant Management Committee was established on 3 March 2015 pursuant to the Best Assistant Control Documents to oversee the business and operations of Fujian Huayu. Through its control over Fujian Huayu, the Best Assistant Management Committee is also able to oversee the business and operations of the subsidiaries of Fujian Huayu. The Best Assistant Management Committee comprises four members, of which each of Fujian Tianquan and Fujian Huayu is entitled to appoint two members from its respective board of directors. Other than by reason of retirement, resignation, incapability or death, a member of the Best Assistant Management Committee may only be removed by the party who originally appointed such member. In the case where the number of members who concurrently act as a director of both Fujian Tianquan and Fujian Huayu is less than two, Fujian Tianquan is entitled to appoint an additional member of the Best Assistant Management Committee. As such, under the Best Assistant Control Documents, the Best Assistant Management Committee is allowed to have a maximum of five members.

Currently, the Best Assistant Management Committee comprises Liu Dejian and Liu Luyuan who were appointed by Fujian Huayu, and Zheng Hui and Wang Song, who were appointed by Fujian Tianquan. The directors of Fujian Huayu comprise Liu Dejian, Liu Luyuan, Zheng Hui, Chen Hongzhan, being executive Directors, and Wang Song. Zheng Hui is also the general manager of Fujian Huayu.

SHARE AWARD SCHEME COMMITTEE

In recognition of the contribution of employees and to provide them with incentives in order to retain them for the continual operation and development of the Group and to attract suitable personnel for further development of the Group, the Company established a share award scheme committee on 2 September 2008 for the purpose of administration of the Share Award Scheme.

Our share award scheme committee comprises two independent non-executive Directors, namely Lee Kwan Hung, Eddie and Liu Sai Keung, Thomas and members of the senior management, namely Yam Kwok Hei, Benjamin and Lau Hak Kin.

TRAINING AND SUPPORT OF DIRECTORS

All Directors have been given relevant guideline materials regarding the duties and responsibilities of being a Director, the relevant laws and regulations applicable to the Directors, duty of disclosure of interest and business of the Group and such induction materials will also be provided to newly appointed Directors shortly upon their appointment as Directors. All Directors have been updated on the latest developments regarding the Listing Rules and other applicable regulatory requirement to ensure compliance and enhance their awareness of good corporate governance practices. The Directors confirmed that they have complied with the Code Provision C.1.4 of the CG Code on Directors' training. In 2022, all Directors have participated in continuous professional development by reading materials/in house briefing on regulatory and corporate governance matters to develop and refresh their knowledge.

DIRECTORS' INSURANCE

The Company has arranged appropriate insurance cover in respect of the legal action against the Directors.

AUDITOR'S REMUNERATION

During the year under review, the remuneration paid to the Company's external auditors, is set out as follows:

	RMB million
Audit services	9
Non-audit services	2
	11

The above non-audit services include professional advisory fees relating to the quarterly review services, accounting services and internal control review.

DIRECTORS' RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The Directors are responsible for the preparation and the true and fair presentation of these consolidated financial statements in accordance with Hong Kong Financial Reporting Standards issued by the Hong Kong Institute of Certified Public Accountants and the disclosure requirements of the Hong Kong Companies Ordinance. This responsibility includes designing, implementing and maintaining internal control relevant to the preparation and the true and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances. The Directors acknowledge such responsibilities. The Directors, having made appropriate enquiries, confirm that they 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 statements of the Company's external auditors regarding their responsibilities on the financial statements are set out in the Independent Auditor's Report on pages 127 to 131.

COMPANY SECRETARY

Mr. Lau Hak Kin, Financial Controller and Head of Compliance and Corporate Affairs of the Company, has been appointed by the Company as company secretary since September 2014. He is also the primary contact person of the Company. During the year ended 31 December 2022, Mr. Lau Hak Kin has taken no less than 15 hours of relevant professional trainings to update his skills and knowledge.

PROCEDURES FOR SHAREHOLDERS TO CONVENE AN EXTRAORDINARY GENERAL MEETING

There are no provisions allowing shareholders to propose new resolutions at the general meetings under the Companies Act of the Cayman Islands, as amended from time to time. However, according to article 58 of the Articles of Association of the Company, any one or more shareholders holding at the date of deposit of the requisition not less than one-tenth of the paid up capital of the Company carrying the right of voting at general meetings of the Company shall at all times have the right, by written requisition to the Board or the Secretary of the Company, to require an extraordinary general meeting to be called by the Board for the transaction of any business specified in such requisition; and such meeting shall be held within two (2) months after the deposit of such requisition. If within twenty-one (21) days of such deposit the Board fails to proceed to convene such meeting the requisitionist(s) himself (themselves) may do so in the same manner, and all reasonable expenses incurred by the requisitionist(s) as a result of the failure of the Board shall be reimbursed to the requisitionist(s) by the Company.

PROCEDURES FOR SHAREHOLDERS TO PROPOSE A PERSON FOR ELECTION AS A DIRECTOR

The provisions for a shareholder to propose a person for election as a director of the Company are laid down in article 88 of the Company's Articles of Association. No person other than a Director retiring at the meeting shall, unless recommended by the Directors for election, be eligible for election as a Director at any general meeting unless a notice signed by a shareholder (other than the person to be proposed) duly qualified to attend and vote at the meeting for which such notice is given of his intention to propose such person for election and also a notice signed by the person to be proposed of his willingness to be elected shall have been lodged at the head office or at the registration office provided that the minimum length of the period, during which such notice(s) are given, shall be at least seven (7) days and that (if the notices are submitted after the dispatch of the notice of the general meeting appointed for such election) the period for lodgment of such notice(s) shall commence on the day after the dispatch of the notice of the general meeting appointed for such election and end no later than seven (7) days prior to the date of such general meeting.

PROCEDURES FOR SENDING ENQUIRIES TO THE BOARD

Shareholders should direct their questions about their shareholdings to the Company's Hong Kong branch share registrar and transfer office: Tricor Investor Services Limited at 17/F, Far East Finance Centre, 16 Harcourt Road, Hong Kong.

For other enquiries or proposals to the Board, Shareholders may send written enquiries to the Company by fax: (852) 2850 7066 or mail to Units 2001-05 & 11, 20th Floor, Harbour Centre, 25 Harbour Road, Wan Chai, Hong Kong.

SUFFICIENCY OF PUBLIC FLOAT

As at the date of this report, based on the information that is publicly available to the Company and within the knowledge of the Directors, the Company maintains a sufficient public float with more than 25% of the issued shares of the Company being held by the public.

DIVIDEND POLICY

Dividend Policy is adopted and approved by the board of directors of the Company as the guideline on dividend distribution regarding future dividends to be paid by the Company with effect from 26 March 2019. The Company is committed to maintaining sufficient resources and flexibility to meet the Company's financial and operational requirements. At the same time, the Company continually seeks ways to enhance shareholders' value to ensure sustainable long-term yields for shareholders.

The dividend payout ratio shall be determined or recommended, as appropriate, by the Board at its absolute discretion after taking into account the Company's financial results, future prospects and other factors, and subject to:

- the Articles of Association of the Company;
- the applicable restrictions and requirements under the laws of the Cayman Islands;
- any banking or other funding covenants by which the Company is bound from time to time;
- the investment and operating requirements of the Company; and
- any other factors that have material impact on the Company.

Under the Cayman Islands Companies Act and the Articles of Association of the Company, all of our shareholders have equal entitlement to dividends and distributions. The Board shall have the right to review the Dividend Policy from time to time as it deems fit according to the financial and business development requirements of the Company.

COMMUNICATIONS WITH SHAREHOLDERS AND INVESTOR RELATIONS

The Company recognises the importance to maintain a transparent and on-going dialogue with the shareholders. A shareholders' communication policy, which is reviewed by the Board on regular basis, had been established to promote effective engagement with individual and institutional shareholders, investors and other stakeholders, giving them ready access to balanced and understandable information about the Company and corporate proposals.

The Board strives to encourage and maintain constant dialogue with the shareholders through various means. The Directors convene annual general meeting every year to meet the shareholders and answer their enquiries. The management personnel responsible for investor relations meets regularly with equity research analysts, fund managers and institutional shareholders and investors. The Company updates the shareholders on its latest business developments and financial performance through corporate communication documents like annual and interim reports. The Company's website (www.nd.com.cn) provides the latest corporate information and serves as an effective communication platform with the public and shareholders.

The Company has assessed the above communication channels with the Shareholders and considered that the Shareholder Communication Policy is well implemented and effective for the year ended 31 December 2022.

There has not been any significant changes in the Company's constitutional documents during the year ended 31 December 2022.

The AGM will be held at Boardroom 3-4, Renaissance Harbour View Hotel, 1 Harbour Road, Wanchai, Hong Kong on Thursday, 1 June 2023.

1. ABOUT THIS REPORT

Reporting Period and Scope

This Environmental, Social and Governance ("ESG") Report (the "ESG Report") covers NetDragon Websoft Holdings Limited and together with its subsidiaries (stock code: 0777) ("NetDragon" or the "Group") sustainability strategies and the environmental, social and governance ("ESG") performance during the period from 1 January to 31 December 2022 (the "Reporting Period" or "the Year").

This report encompasses NetDragon's core businesses based in the People's Republic of China (the "PRC") and United States including operations in gaming and education. The report also contains details of our sustainable development, vision and progress made on the implementation of our ESG strategy during the year.

The qualitative and quantitative information regarding the Group's approach, initiatives and priorities in managing material environmental and social governance ("ESG") aspects are disclosed in the report. For further disclosures on corporate governance, please refer to the Corporate Governance Report of the NetDragon's Annual Report 2022.

Reporting standard

This Report has been prepared in accordance with the "mandatory disclosure requirements" and adheres to the "comply or explain" provisions set out in the Environmental, Social and Governance Reporting Guide ("ESG Guide") under Appendix 27 of the Main Board Listing Rules issued by The Stock Exchange of Hong Kong Limited ("HKEx").

Reporting Principles

- **Materiality:** Material topics are identified, assessed, reviewed and confirmed by senior management to ensure their significance.

- **Quantitative:** Quantitative data are presented with calculation methods and relevant terms are defined.

- **Balance:** The ESG performance data is disclosed on an unbiased basis with a full picture of both our accomplishments for the reporting period and potential for enhancement in the future.

- **Consistency:** The data is calculated using consistent methodologies to allow effective year-over-year comparisons.

Contact

We welcome feedback on our report, reporting content and sustainability performance, please contact us by our Investor Relations department:

Mail: Room 2001-05 & 11, 20th Floor, Harbour Centre, 25 Harbour Road, Wan Chai, Hong Kong.

Email: IR@netdragon.com

2. SUSTAINABILITY GOVERNANCE

The Group considers it our duty as a global leader to create online communities to advance sustainable development, contribute to creating a just and equal society, and uphold high standards of corporate governance. By successfully implementing the governance structure and sustaining the Group's sustainability vision and approach, the Group is dedicated to pursuing sustainable development. As a Group, we can provide investors with a sustainable return as we implement our sustainability ambitions.

Roles and responsibilities in managing ESG matters are defined by NetDragon as follows:

NetDragon Board of Directors	• Monitors corporate governance practices and procedures • Maintains appropriate and effective risk management and internal control systems of the Group to ensure compliance with applicable rules and regulations • Reviews and approves the ESG Report

Audit Committee	• Assists the Board in ensuring the objectivity and credibility of financial reporting, and that the directors have exercised care, diligence and skills prescribed by law when presenting results to shareholders • Assists the Board in ensuring that effective risk management and internal control systems are in place and good corporate governance standards and practices are maintained • Reviews and recommends the ESG report for the Board's approval
Executive Chairman	Operates as a general management advisor with overall delegated authority from the Board
Group Functions and Business Units	• Serve as a bridge between the senior management and the departments/BUs • Facilitate implementation of CSR initiatives • Raise CSR awareness among colleagues • Assist in ESG reporting and ESG-related surveys
External Assurance[1]	**Note 1:** The Audit Committee with the help of Moore Advisory Services Limited (member firm of Moore Global) conducts reviews twice a year on the effectiveness of our internal controls in order to fulfill the relevant requirements under the Corporate Governance Code of the Main Board listing Rules issued by HKEX.

2.1 Board Independence, Diversity and Performance

Diversity on the Board could also enhance the quality of the Company's performance, which the Company recognizes and embraces. In addition to skills, knowledge, and professional experience, a truly diverse Board will take advantage of differences in background, ethnicity, age, gender, and service experience of its members. When possible, these differences should be balanced when determining the optimal composition of the Board. It is the Board's responsibility to make all appointments of its members on merit, considering the above-mentioned criteria that the Board considers to be effective in supporting the Company's strategic goals as well as its sustainable development as a whole.

In addition, the Company has also received annual confirmation of their independence from each independent non-executive Director in accordance with Rule 3.13 of the Listing Rules. These Directors have more than 10 years of board experience, and it has been confirmed that they are independent. The Nomination Committee is confident that they exhibit total independence of character and judgement in their duties as board members and designated roles. According to the factors outlined in the Listing Rules, the Board believes that all independent non-executive Directors are considered independent. It is worth mentioning that one new Board member has been appointed in replace of long time serving member for embracing diversified experience pool and optimal Board tenure.

Besides diversity criteria and independence requirements, we have regular self-assessment of board performance in place for monitoring Board effectiveness and systematically evaluate their performance for the past financial year. We have designed the Board Diversity Policy in 2013 with continuous monitoring and maintenance since then.

2.2 Business Ethics and Compliance

2.2.1. Anti-corruption

As part of the Group's commitment to business ethics, all employees are expected to adhere to the highest standards. A comprehensive set of business ethics rules along with a code of conduct were published in December 2001 by the Group under the title 'Employee Disciplinary Action Measures'. There have been 15 rounds of updates to the policy in the past two decades, and it is now at version 7.3. Besides provide training to our employees, the Group's Internal Audit Department, together with Human Resource Department, actively communicates the relevant business ethics principles to its suppliers and business partners. Through its unique technological capability, the Group also developed functions in its internal Office Automation (OA) system to collect, handle and resolve complaints and compliments from employees at middle and senior levels. It is the purpose of these two functions to collect anonymous complaints about unfair policies and rules, or unethical behavior by employees, especially at the middle and senior levels.

In addition, whistleblower information is kept strictly confidential. The Human Resources Department and the Internal Audit Department work together to ensure that the program is executed properly. As a result of this robust governance measure, numerous problems have been detected within Group operations, resulting in internal processes and procedures to prevent them.

Besides the above, the Group requires all subsidiaries to comply with relevant global regulations, such as Hong Kong's 'Prevention of Bribery Ordinance' and the US's 'Foreign Corrupt Practices Act', as well as implementing OECD Anti-Bribery Convention rules into its policies.

During 2022, the Group did not have any fraud cases such as bribery, extortion, fraud and money laundering.

2.2.2. WhistleBlowing, Reporting channels

There is no tolerance for unethical business conduct at our company. For personnel to report suspected misconduct, we provide an array of channels, including the Internet, a hotline, email, and an intranet. In our internal OA system, we have developed the so-called "BUG" function to collect, handle and resolve suspected breaches of conduct reported by our employees, and we are open to external reports via our corporate email. Investigations are conducted by our internal audit department, and wrongdoers are dealt with by relevant departments and officers, according to the established BUG resolving processes. As soon as it discovers a loophole in the system, it must close it so similar cases won't happen again.

At Promethean, the Confidential Reporting (Whistle-blowing) Hotline Policy, Procedures and User Guidelines (the Guidelines) is published for internal and external publication. Besides providing sufficient protection and anonymity to the whistle-blowers by publicly committing anyone raising a genuine, good-faith concern using the process set out in this policy document will not suffer victimisation or other detriments as a result of doing so, the Guidelines list in detail the stages of reporting, the various contacts and respective reporting channels (telephone, email, mailing address, and web portal), as well as a detailed situation analysis concerning what is and what is not reportable matter to help whistle blowers identify how things stand under the right circumstances.

2.2.3. Business Ethics and Oversight

Our company has remained committed to sound corporate governance as a key driver of sustainable development for many years, and we place high value on business ethics and integrity. To ensure managerial effectiveness, the highest governing body places a high value on integrity and maintains a transparent governance structure. In all Group functions and Business Units, we adhere to the highest ethical standards in our commercial activities. At least once a year, our internal audit functions will assess our ethics standards and report any loopholes to the Board.

2.3 Managing ESG Risks

NetDragon's long-term success depends on its ability to effectively manage risks. Identified hazards may harm our activities in their entirety. To address the risks, the management of each department is responsible for identifying, assessing, and managing the risks that pose hazards to our business, including sustainability-related risks.

In order to manage risk, each department contributes to the Company's continuing process of updating NetDragon's risk profile. Once risks have been identified, they are communicated to senior management, and NetDragon develops action plans and management objectives to mitigate them.

In addition, in recognition of the looming concerns posed by climate change, NetDragon takes the necessary steps to manage physical hazards and transitional risks in order to establish climate resilience and ensure that our operations are not adversely impacted. Please see the Environment section for further information.

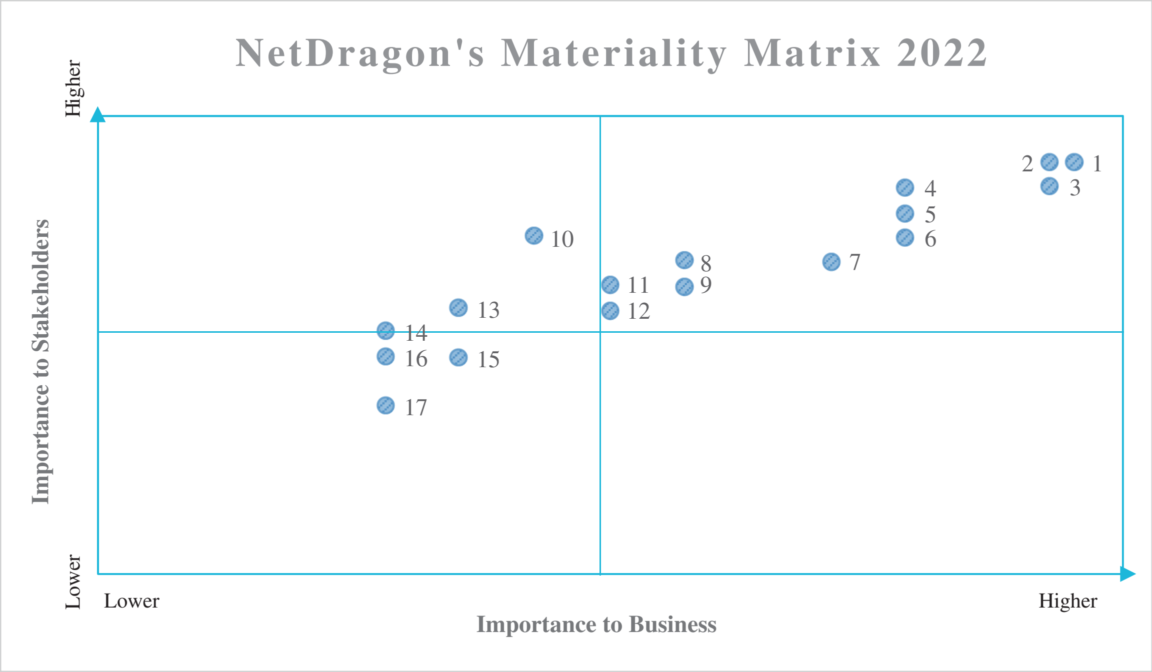
3. STAKEHOLDER ENGAGEMENT AND MATERIALITY ASSESSMENT

3.1 Stakeholder Engagement Approach

A continuous improvement process requires the input of stakeholders for the Group to achieve its objectives. It is essential for the Group to maintain regular communication channels with key stakeholders, such as customers, employees, suppliers, media and shareholders, regulators, and the communities, to understand their expectations and address their concerns. A wide range of channels are used by the Group to collect feedback from stakeholders regularly, including general meetings, the Company's website, interviews, constructive discussions, surveys, and feedback programmes.

3.2 Identification and Update of Material Topics

The involvement of stakeholders facilitates the identification of potential risks and opportunities. ESG issues were ranked and prioritized according to their importance for stakeholders and the Group's business development based on feedback from various communication channels. This year, we have performed major revamp of material topics according to our newly updated ESG strategies and opinions from external parties; according to the materiality matrix presented below, the following results were found:



Material Topics

1	Respect for Intellectual property rights
2	Data Security and Privacy Protection
3	Product and Services safety and quality
4	Corporate Governance
5	Bribery and Corruption
6	Innovation Management

Moderate Topics

7	Community Investment
8	Diversity, Inclusion and Equal Opportunities
9	Labour Practices and Human Rights
10	Responsible Supply Chain Management
11	Occupational Health and Safety
12	Talent Attraction, Retention & Development
13	Climate Change
14	Air Emissions Management
15	Water Consumption and Conservation
16	Energy Management and Carbon emissions
17	Waste Management

Based on the observed results, there is a change in the priority of the top issues rated by the stakeholders.

This year, stakeholders have rated "Respect for Intellectual property rights", "Data Security and Privacy Protection", "Product and Services safety and quality", "Corporate Governance", "Bribery and Corruption" and "Innovation Management" as most material issues due to their material impact on the Environment and Society and Enterprise Value of NetDragon. These matters are closely related to NetDragon's business model and therefore must be included in the Company business strategy and targets.

Whilst other topics has been changed to moderate topics where these issues that have significant impact on the Environment and Society and Enterprise Value of NetDragon. These issues are being addressed through NetDragon's Policies, ESG target setting and risk management.

Additionally, we monitor industry trends, updates on regulations, and investor expectations when determining ESG material issues.

4. USER RIGHTS PROTECTION

4.1 Cyber Security

Cyber security is one of the top priorities for NetDragon as a global leader in building Internet communities. From the top to bottom we have constructed our cyber security management framework for streamlined management oversight and operational smoothness. To ensure solid cyber security governance, we have clearly defined roles, responsibilities, and reporting lines; to safeguard our operations, our internal cyber security management policies and approaches have been optimized to ensure not only compliance with applicable laws, but also the integration of cyber security with the risk management framework.

Governance

NetDragon Group has formulated and promulgated information security-related management measures covering the entire group, including cyber security management measures. Attaching great importance to cyber security, the Group has established a Security Compliance Committee, with the chairman of NetDragon (Fujian) serving as the committee's chairman. In addition, the group has a professional security functional team: Information Security Department, which is directly managed by the vice president of NetDragon and will be responsible for the group's information and cyber security affairs, as well as the regular internal and external audits and assessments from various parties (see *Internal and External Assessment* for further details). Any decisions related to cyber security are handled collaboratively by the above organizations.

At Promethean, members of the Board are actively and regularly involved in privacy and cyber security management and practices. The Promethean executive team and Board members are engaged with external audit schedules, evaluation of vulnerability scanning tools, employee training and incident response planning.

Measures and Approach

On the infrastructure level, we routinely assess the appropriateness of the computer systems and execute platform upgrades. In order to find potential security problems, network vulnerability assessments and penetration testing are continuously conducted. A dedicated system that compiles and analyses logs and sends alerts for potential cyberattacks or suspicious activity is applied to all critical IT infrastructure and IT systems.

On the regulation level, NetDragon Group has constructed comprehensive information security management guidelines, including key messages regarding improving cyber security and personal privacy protection capabilities. The Group regularly reviews the developed standards for security tests and regulations or procedures for testing to our defined five key areas: protection of personal privacy on mobile Apps, information security for users, real-name registration, content security, and anti-addiction system of games.

At the same time, the Group has also consulted internationally recognized external cyber security experts to improve the security level of the Group's network and business. In the future, it will continue to track the development of the information security industry, introduce excellent solutions, and improve the overall information security system of the Group.

Independent Assessment and Certifications

According to the defined management measures, the information security team will regularly conduct security audits on the Group's various information systems, business systems, and IT infrastructure, including self-examinations related to data security. At the same time, the Group will undertake a series of information security reviews from the local Communications Authority, including reviews pertaining to cyber security.

The Promethean Group of companies have and maintains Information Security Policies and Systems, which are subjected to periodic audits to include but not be limited to external independent audits completed at least once every 2 years.

The Group's game and education businesses have all obtained the State National Information Security Protection Level 3 Certification (三級認證) (the Certification), which is the most authoritative information security certification scheme in China. The Certification is designed based on the national information security protection regulations and related system regulations, following management norms and technical standards, and recognising the security level protection status of information systems of various institutions and assessments. Additionally, Fujian Province Huayu Education Technology Co. Ltd. ("Fujian Huayu"), a subsidiary of NetDragon Group, has obtained the ISO27001 Certification.

Cyber Security along the Value Chain

NetDragon Group also attaches great importance to information security assurance capabilities when selecting suppliers and partners. For example, besides obtaining the State National Information Security Protection Level 3 Certification itself, the Group will require the security qualifications of cloud service providers and other relevant suppliers to have the same capability, if not a higher level of Certification.

Promethean evaluates vendors and service providers, as appropriate, to ensure proper data protection and security measures are in place. As applicable, Promethean requests the Service Organization Control (SOC) Type 2 report from vendors or other evidence of data protection and cyber security measures employed by the appropriate vendor. As applicable, Promethean requires a written data processing agreement with the vendor that includes a description of the organisational and technical safeguards used by the vendor to protect data and cyber security.

Cyber Resilience Commercialization

Beyond our standard operations, we are keen to incorporate cyber security features into our products and services, commercializing cyber resilience by creating a sustainable design. Besides its own cyber security management, NetDragon has developed the capacity to assist corporate clients in safe operations by undertaking outsourced network security attacks and defence drills.

Promethean also endeavours to develop and improve its products and services with cyber security and resilience considerations. For example, the newest version of Promethean's ActivPanel product includes features that allow teachers to access their personal Promethean account (with their teaching resources) via a secure login using a Near-field communication (NFC) card issued to the teacher. Teachers can also log into their accounts via other secured methods, contributing to overall cyber resilience.

Legal Compliance

NetDragon's legal department regularly analyses key Chinese State laws and regulations related to information security, including but not limited to the Civil Code (《民法典》), Cybersecurity Law of the People's Republic of China (《中華人民共和國網絡安全法》), Personal Information Protection Law (《個人信息保護法》), Ministry of Industry and Information Notice of Special Rectification Actions Infringing on User Rights and Interests (《工業和信息化部關於開展縱深推進 APP 侵害用戶權益專項整治行動的通知》), Guidelines for Application and Use of Mobile Internet Application (App) System Permissions (《移動互聯網應用程序(APP)系統權限申請使用指南》), Guidelines for Practice of Network Security Standards-Mobile Internet Application (App) Personal Information Protection Frequently Asked Questions and Handling Guidelines (《網絡安全標準實踐指南－移動互聯網應用程序(App)個人信息保護常見問題及處置指南》), Methods for the identification of illegal collection and use of personal information by apps (《App 違法違規收集使用個人信息行為認定方法》), Information Security Technology Personal Information Security Specification-2020 (《信息安全技術個人信息安全規範-2020》).

Additionally, the Group communicate the testing reports on product conformity promptly in accordance with the requirements under the Cybersecurity Law of the People's Republic of China (《中華人民共和國網絡安全法》) and other pertinent laws and regulations. These steps assisted the Company's products adhere to laws and regulations where we operate.

In 2022, we continued our focus on compliance training in terms of data and information security on the Group level. The detailed program and progress include:

— Compliance seminar of gaming line`s security issues: total of 55 heads of various projects and functional departments and the heads of business sectors participated;

— NetDragon University mandatory training on safety compliance for new employees: all new employees totaled 602 people participated;

— Special training on safety and compliance for core business personnel: a total of 18 off-line training sessions were held with 1,650 participated;

— Voluntary Information security series certification: A total of 20 people certified.

Trainings are also organized within our information security functioning units:

1. Overseas DDoS Defense Course (1 hour training): 10 people participated;

2. Common vulnerabilities and prevention methods (1 hour training): 10 people participated;

3. Personal information protection course (2 hours course): 20 people participated;

4. Block-chain security course (2 hours training): 30 people participated.

4.2 Privacy and Data Protection

Privacy and Data Security Principle and Commitments

Operating one of the largest online communities in the world, we handle a tremendous amount of private and personal data. As such, data protection practices are considered in every aspect of our operation to demonstrate to our customers and users that we can be trusted with their data. For each of the phase of data management cycle we have below principles and commitments in place:

Data Collection Phase:

- Principle of Legality: No data collected from any illegal channels
- Principle of Minimum Necessity: Only collect the data necessary to fulfil the application
- Principle of Autonomy: Set isolated application scenarios and provide unbundled services, allowing for user's autonomy
- Principle of Authorized Consent: Fully inform users about the intent, method, and range of the data collection before their authorization, and no data collection without user authorization

Data Storage and Transmission Phase:

- Shortest Time Principle: The storage period is the minimum time required
- De-Identification Management: Apply de-identification after the data collection, store the data separately and strengthen access and usage control
- Encryption Measures: Apply national encryption standard during data storage and transmission

Data Access and Application Phase:

- Principle of Access Control: Implement minimum access control strategy, internal supervision and approval process for data revision and download

- Principle of Purpose Limitation: Data application must comply with the purpose stated during collection phase, any applications beyond the stated purpose need separate authorization

- Principle of Publicity Restrictions: Utilize de-identification technology to exclude sensitive information in the presentation of personal data to protect privacy and security

Privacy and Data Security Approach

The Group has conducted a strictly product inspection based on the standard for computerised software testing, which includes function tests, weak network tests, safety tests, compatibility tests, integration tests, and interface tests. To ensure the product functions and indexes meet the quality standard, automated testing technology was extensively applied to avoid and control the risks associated with human factors to the greatest extent possible. Moreover, for a further guarantee that product quality and production procedures will be continuously improved, the Group has established an analysis mechanism for determining the causes of defects and preventing defects through the management of "Big Data" for BUG, as well as regular technology exchange with corporate and university partners, as well as continuous improvement and testing for new tools and methods.

Scope of Privacy and Data Protection Policies

All business operations within the Group adhere to the protection of the rights of personal data owners. The public is informed of their rights relating to the data, including access, deletion, and the right to opt out of the sale of their personal data. Explicit rights and convenient channels are available to users for inquiring, revising, deleting, and rescinding data owner's consent. Promethean also published the Privacy Right Statement, which defines the data owner's rights and provides details regarding the personal data that may be collected.

In addition, Promethean has also published and has been maintaining the enterprise-wide Privacy Policy. The Policy governs all Promethean companies and subsidiaries. Moreover, Promethean has product-specific and business-line-specific policies for the operations that collect or process personal data:

- Promethean Software End User License, Service Agreement And Privacy Policy

- ClassFlow Privacy Policy

Personal Data Consents, Rights and Control

The game and education business of NetDragon provides users with personal information modification functions and permissions. For example, users can modify personal information such as mobile phone numbers from designated Apps for respective products. When the user cancels the account, the system will automatically delete the user's personal information.

Promethean employs physical and technical access control to Promethean facilities and systems. Regarding Promethean facilities, credentials are required to access Promethean facilities and visitors are logged. Regarding Promethean systems, access to personal data is limited to only those requiring access to it to perform their job duties. In addition, for Promethean services that process personal data, the personal data is encrypted in transit and at rest.

Promethean has developed and implemented automated deletion procedures to delete personal data processed by Promethean systems after a defined period if certain conditions are satisfied (e.g., the user has not logged into the service for the designated period of time). While yet to fully implement across all Promethean products/services, Promethean is committed to implementing this automated process across all Promethean products.

In addition, the data management systems are subjected to periodic audits, including but not limited to external independent audits that are completed at least once every 2 years.

Cross-border Data Management

In order to protect our oversea users' privacy and personal data, NetDragon complies with all applicable laws and regulations on the cross-border transmission where we operate. The Group also implemented efficient business structures and used the technical infrastructures of the Group to ensure segregated management of onshore and offshore personal data.

Privacy and Data Engagement and Certification

At the functional level, Promethean provides training on privacy laws and data security to all employees, particularly those with access to personal data, highlighting the importance of "Data Minimisation" and "Privacy by Design. From the operation perspective, the concepts as mentioned above have also been integrated into Promethean's products and services to minimise the personal data processed by default. For example, Promethean has deployed software scanning tools to review code for vulnerabilities to ensure that Promethean is evaluating code and delivering secure products and services.

Operating in the K-12 (kindergarten (K) and first through 12th grade (1-12)) education market within the U.S., Promethean has obtained certifications from iKeepSafe (the Internet Keep Safe Coalition©), a non-profit alliance that certifies digital products as compliant with state and federal requirements for handling protected personal information (e.g., student data). Additionally, Promethean's ClassFlow service has achieved the iKeepSafe's Children's Online Privacy Protection Act (COPPA) and Family Educational Rights and Privacy Act (FERPA) Certifications, as well as the California Student Privacy Certification.

Third-party Data Management

The Group does not rent, sell, or provide personal data to third parties for purposes other than to complete transactions or perform specific services under proper consent or when inquired by local jurisdictions and regulatory units to be compliant with the relevant requirements of laws and regulations.

Data Breach/Incident Response Plan

The Group employs multiple technical and physical measures to minimise data breach risks. The Group has established management measures and emergency response plans for overall information security issues, which covers the management measures and emergency disposal plans covering data security issues. In addition, the Group has and maintains an Incident Response Plan. During the reporting period, there were no substantial data leaks in the business operations of the Group.

4.3 Protection on Minors

As a precautionary measure, 16 of the Group's self-operated games (such as Eudemons, Conquer, and Heroes Evolved) use real-name registration to protect minors. Also, the Group implemented play-time controls for minor gamers in compliance with the National Administration of Press and Publication's "Notice on Further Strengthening Regulation to Effectively Prevent Online Gaming Addictions among Minors".

In accordance with the requirements of the China Audio-video and Digital Publishing Association, age-appropriate reminders are added to the game download, registration and login interfaces of the games, and similar age-appropriate reminders are placed throughout all promotional materials.

The Group launched an online parental supervision platform to help parents prevent minors from using online services excessively and to provide all-channel and seamless support. Gamer refund issues are handled by a dedicated process team in accordance with relevant regulations and industry best practices.

4.4 Intellectual Property Protection

Intellectual Property (IP) management is of utmost importance to the Group. For our gaming business, we are and have always been focused on developing and expanding our flagship IP. As a result, the Group has collaborated with well-known IPs both domestically and abroad, and is proud to be an IP partner of prestigious brands such as Disney and Lego. Various mechanisms have been implemented to safeguard IP rights in various fields at the highest level.

On our intranet, accessible to all employees, each IP related to our Gaming and Education is presented as individual modules with details such as official name, applicable jurisdiction, trademark and category, associated samples, etc. More importantly, each dominant IP has its dedicated user manual, articulating practical business scenarios, IP resource protection-related regulations, basic user specifications, applications case studies, etc.

4.5 Customer Engagement

We monitor and respond to customer feedback and enquiries relating to our products and services in our significant Education and Gaming businesses. In the PRC operation, an average of fewer than 0.03% of the annual customer enquiries received results in substantial compliance from the customer over the past six fiscal years.

Year	Contacts into Support (Chinese Gaming)	Contacts into Support (English Gaming)	Consolidated Gaming Contacts into Support	Complaints Received	% Complaints
2017	1,575,300	239,099	1,814,399	135	0.007%
2018	1,435,992	220,396	1,656,388	285	0.017%
2019	1,361,087	210,785	1,571,872	242	0.015%
2020	1,493,279	266,165	1,759,444	569	0.032%
2021	1,141,531	281,521	1,423,052	495	0.035%
2022	1,146,130	218,829	1,364,959	402	0.029%

At our overseas business, Promethean also monitors customer feedback and product-related enquiries. Of the customer enquiries received over the seven years ending 31 December 2022, less than 0.0007% of such queries result in a complaint. As per the table below, in seven 7 years, Promethean had 676,981 inbound contacts to the Contact Centre, 464 were complaints, and only 0.00068% were complaints.

Year	Contacts into Support	Complaints received	% Complaints
2016	91,615	41	0.0004%
2017	94,294	76	0.0008%
2018	99,818	111	0.0011%
2019	113,158	93	0.0008%
2020	77,600	38	0.0005%
2021	87,344	46	0.0005%
2022*	113,152	59	0.0005%
Total	676,981	464	0.00068%

* Up to 31st December 2022

The complaints are dealt with case-by-case via feedback Customer Satisfaction surveys. These are handled from within the Technical Support team, which records the feedback and, in return, contacts the customers to resolve the complaint, where appropriate best.

5. ENVIRONMENTAL

Currently, the Group engages in online gaming and online education. Its business is not related to manufacturing or other businesses that produce greenhouse gas emissions, waste (hazardous and non-hazardous), or other business activities with a significant environmental impact. Although the Group has no significant effect on these areas, we are dedicated to minimising our negative environmental impacts as much as possible while incorporating sustainable operations into our business model.

Climate change risks and their associated impacts on the Group's business operations must be addressed through policies and strategies that are aligned with best practices. Increasing sea levels, extreme weather events, and rising temperatures can impact the Group's assets, business, and stakeholders. To combat climate change and conserve resources, the Group monitors its most relevant environmental issues to do its part.

5.1 Climate change

All over the world, climate change has been an alarming issue. Some may even coin Climate "emergency". In light of this, the Group identified and assessed the risks posed by climate change and developed measures to safeguard its employees' safety, including strictly following the relevant extreme weather guidelines issued by the government. The Group has developed emergency guidelines and measures to reduce future damage from disastrous events. Additionally, the Group will follow the Carbon Neutrality Project, which aims to decarbonise the Group by reducing its transport, thereby increasing its environmental credentials and environmental footprint. Our climate change policies will be reviewed regularly to ensure they are effective.

We look for novel ways to set an example of environmental stewardship, whether it is through the use of renewable energy sources or the implementation of new recycling initiatives. Promethean has thus far committed to lowering its carbon impact moving forward and has already reached carbon neutrality in 2019 and 2020 through offset purchases. Promethean's goal for the current reporting period is to cut carbon emissions by 5% from consumption in the previous year.

5.2 Energy Management and Carbon Emissions

Through technological and recycling solutions, the Group has enhanced its management of emissions by reducing harmful pollutants and greenhouse gases, waste discharged into water and land, as well as hazardous and non-hazardous waste generation.

In line with the Paris Agreement, the Group commits to reducing Greenhouse Gases ("GHG") emissions. To reach this goal, the Group has set ambitious decarbonisation targets and will annually purchase enough carbon credits to compensate for the remaining GHG emissions.

In the Group's headquarter, offices, and sites, the Group has drastically reduced direct (scope 1) and indirect (scope 2) energy consumption. As part of its efforts to reduce emissions associated with the transportation of goods, the Group is promoting road travel whenever possible and opening three new US hubs that will drastically improve routing efficiency. Additionally, the Group will explore greener travel incentives for employees in locations where public transit is feasible and transition to electric vehicles.

We run our daily office operations with the objective of conserving energy, utilizing resources efficiently, recycling waste, and educating our employees about the environment. The Group has made every effort to promote "reducing," "re-use," and "recycling," as well as reduce energy consumption, by encouraging employees to use email for internal and external communications, use e-files on the server, encourage the use of recycled paper, encourage double-sided printing and photocopying, make every effort to recycle all office supplies and equipment, use LED lighting, and further install occupancy sensors.

5.3 Indoor Air Quality and Healthy Workplace

Indoor air quality goes beyond environmental concerns as it has long-lasting effects on the mental and physical health of our employees, who we treasure. Long-term and short-term exposure to indoor air pollution can result in various health problems, such as cancer, heart disease, dementia, and respiratory illnesses.

In line with the Human Resources Intelligence Club (HREC, "人力資源智享會") 's vision of "Healthy Workplace, Sustainable Growth", we are dedicated to improving corporate health management and sustainable development. We have received the Diamond Level China Healthy Workplace Certification ("中國健康工作場所認證") for the third consecutive year from Human Resource Excellence Center ("HREC"), a well-known human resource consulting firm in China. The certification standards were developed by experts from reputable organizations including Fudan University, Huawei, Medtronic, Volkswagen, Bayer, etc.

The certification criteria are designed based on multiple dimensions such as company organizational support, healthy environment, health management, management implementation, occupational safety and health. Health here is not only physical health but also includes the psychological, financial, physical environment, workplace environment and other aspects of health.

5.4 Water Consumption and Conservation

Water is primarily used for standard office cleaning and flushing in NetDragon. While we do not operate in water-stressed locations, our internal water management policies and guidelines specify our overall water conservation strategy, and we strive to use water resources responsibly.

From the overall management to working-level approaches, we closely monitor and adjust our water conservation strategy to ensure smooth implementation. Water facility check-up is part of our office estate management routine to ensure no water leakage. We benchmark water usage data from period to period to identify any possible consumption abnormality. We also weave the awareness of saving water into our office environment. Water-conscious publicity posters are displayed near the water facilities for all staff on why and how to save water.

5.5 Waste Management

All NetDragon business units work together to reduce waste generation and divert waste from landfills. For this reason, we have established guidelines for the collection, recycling, and disposal of all types of waste. Our waste management strategies are also updated regularly based on regulatory developments.

At our offices, recyclable materials are collected and processed using a centralised procedure in order to minimize waste production. Wastes such as plastic, paper, carton boxes, metals, batteries, and food waste can all be recycled at our facility. In the office buildings where we work, recycling bins and stations are located along with recycling instructions. We sent all recyclable materials to local recyclers or charitable organizations for proper handling. In the case of hazardous waste, we work with registered hazardous waste collectors. For example, these collectors will collect fluorescent lights and batteries to be processed further.

6. PEOPLE

A company's sustainable development is dependent upon the contribution of its employees. Having over 4,000 employees around the globe, NetDragon strives to maintain a healthy, rewarding, and courteous work environment for every one of its employees. In our Group, we have created a work environment in which individuals are able to achieve their full potential.

6.1 Talent Attraction and Retention

Recruiting and retaining the best talent worldwide is important to ensuring sustainable growth. Our employee value proposition includes competitive compensation, performance-related bonuses, leading-edge benefit programs that holistically support employees and their families, and recognition and career development programs for individuals and teams, as well as investing heavily in people management training to ensure our employees are fully engaged and can contribute to our future success.

Promethean's Compensation Committee believes our compensation program should reward actions and behaviours that build and support our long-term vision and strategy, while also rewarding short-term performance that enables success through the delivery of our Company strategy's values. Our objectives are to:

- Attract, motivate and retain exceptional talent

- Exemplify purpose-driven pay for performance that links our unique platform to the organization and our diverse employees' individual purpose to drive overall results, retention and engagement

- Align individual goals and compensation with Shareholder interest

Variable Compensation Schemes

In addition to the basic salary, we have comprehensive statutory benefits (including basic pension insurance, basic medical insurance, unemployment insurance, work injury insurance, maternity insurance, and housing provident fund) and a diversified incentive system (short-term incentives, long-term incentives, personalized benefits) as follows:

1. **Short-term Incentives:** According to different positions and performance, short-term incentives include performance bonuses, project bonuses, sales commission bonuses, special post allowances, project milestone awards, project completion bonuses, innovation incentive bonuses, annual awards Bonuses, part-time subsidies, etc.

2. **Long-term Incentives:** include merit points, similar to options, which are given to employees who have made long-term value contributions to the company and rewarding when the project achieves a breakthrough to earn people or make money.

3. **Other Benefits:** we develop themed benefits and point-collecting initiatives such as gamified star ratings, flexible welfare funds, lottery activities, point auctions, departmental team building, birthday cakes/gifts, various parent-child activities, festival activities, etc.

Engaging with Talents

The company conducts annual recruitment planning and forecasts for recruitment needs every year. In 2022, 17,482 fresh graduates at home and abroad participated our campus recruitment activities, and 186 outstanding new graduates are hired. At the same time, we actively responded to the call for job stability and employment, and promoted the introduction of students, work and education projects organized by the Fujian Provincial Department of Industry and Information Technology and the Department of College Students of the Ministry of Education, and reached strategic cooperation with several well-known universities to create innovative collaboration in the industry, education and research in the universe.

Recognized by the talents, we have won the "Fujian Province College Student Internship Base", "2022 N-Future Most Socially Responsible School Recruitment Employer Award", "2022 Favorite Employer Award", "2023 Human Resource Management Outstanding Employer Award", "2023 Best Talent Employer Award", etc.

6.2 Talent Development

It is a win-win situation for employees as well as for our company when we invest in learning and development. Learning, growth, and career enrichment are available to all employees. We provide our employees with the tools and resources so they can learn whenever, wherever, and how they choose.

Through various programs, resources, tools and support, the Group aims to unleash our employees' potential while providing coaching and support from our managers.

NetDragon University, a combined online-offline training platform for our internal employees, has continuously expanded its content and training capabilities across over 14 subjects/topics since 2007.

In 2022, NetDragon University plays an important role in supporting and empowering the entire organization in knowledge organization, and actively promote the implementation of knowledge organization affairs; We practice "Huayu"'s educational philosophy, through knowledge accumulation, best practice extraction, and auxiliary With different learning methods and learning products, NetDragon's overall professional ability can be improved to help NetDragon students' career development and NetDragon's talent upgrade.

In the new year, the company's annual keyword is "full staff training", because one of the company's core competencies is that we can continuously learn and master new technologies, and dare to use new technologies to create new products, new services and even new market. In the "all-staff training", we must not only provide equal and open training and learning opportunities for all workers, but also highlight that we will promote and implement what we have learned to support the company's and employees' shared growth.

NetDragon University Achievements in 2022

In order to cooperate with the company's strategic development and key business, in 2022, NetDragon University responded to the company's "Metaverse" annual keyword, participated in the company's metaverse organization project work, and completed the new keyword "openness, bravery, passion" and the refinement and publicity of the code of conduct; participate in the construction of a new model of office and employment in Metaverse, and complete the certification mechanism that matches the business; organize and implement new technology talent training programs such as blockchain, and cooperate with a number of higher vocational undergraduate universities Cooperate to promote the development of talents, and promote the narrowing of the gap between the company and the industry's talent needs; in terms of management leadership training, establish a management post learning area, iterate management post courses and push management post learning, and help the company's management continue to upgrade.

In 2022, NetDragon University held a total of 56 offline learning activities for various training sessions, with a total of 1,235 participants. (Excluding external forums and in-school lectures); a total of 8,689 people participated in thematic course learning on the eLearning online learning platform, with a total of 231,216.09 hours of teaching time, and an average of 26.61 hours per person; a total of 5,529 people participated in training special topics, with a total of 270,367.8 hours of teaching, and an average of 48.9 hours per person Hour. (A training topic usually includes multiple courses)

Routine Training Programs

New Staff Training: A total of 10 new employee training sessions were carried out, including 602 people who participated in online training; the first phase of school enrollment training was 60 people.

Skills Training: NetDragon University carried out 40 internal technical training sessions with 1,001 participants, including 16 tasting sessions of the game design department, 12 innovation review sessions, and 12 sharing sessions at Tianqing Main Course Club.

Innovative Training Programs

1. **Metaverse Organization Cultural Values Training Project:** Due to the demands of the yearly Metaverse organization development, three new cultural value keywords are extracted: "openness, enthusiasm, and bravery," and the abstract ideals are realized in 20 rules of conduct through co-creation. Promote consensus and aid in the establishment and growth of the metaverse organization by informing and training all corporate personnel using online and offline learning techniques.

2. **Blockchain technology training:** In response to the demand for blockchain talent training, a blockchain application development training camp was conducted as a type of training to encourage the transfer of skills and recruiting. Three training sessions on blockchain application development were conducted to attract excellent internal and foreign technical specialists.

3. **Management training projects:** update the learning content of the management post learning area, and discover potential management talents; combined with the problems encountered in the actual work of the management post, through research + online micro-class pre-learning + offline workshops, help the management post improves the management ability and helps the company's management continue to upgrade.

Certification Projects

The company encourages employees' continuous learning and improvement. By heavily investing in certification courses/materials, we have developed internal certifications with relevant certification courses and external expert reviews. Once employees pass our tailor-made certification exams, they obtain the most pertinent business knowledge they can further enhance by continuous learning within their job responsibilities. Currently, there are 1133 certification subjects developed by the company, covering 600+ job specialities.

In addition, the company also encourages employees to participate in external learning certification. For example, the company will reimburse the cost for students who apply for U3D certification, a gaming design and development certification by Unity. At present, a total of 35 students have obtained certification.

Other continuous-learning-related benefits are supported by NetDragon, such as reimbursement for external paid training, dedicated scholarships for employees who received exceptional learning track records, outstanding academic performance recognized by external certification bodies, etc.

1. **Business Certification:** Since 2020, the company has implemented the "business-centric" management concept. At the same time, we have implemented a certificate-holding and promotion mechanism. Core business practitioners in different positions need to pass the corresponding business certification exams to obtain certificates To be promoted from one position to another, not only must the performance results and cultural values meet the standards, but also must pass the transaction certification of the newly promoted position; at the same time, these certification mechanisms are fair, just and open to all employees, which not only accelerates the improvement of employees' capabilities, but also promotes their career development, and meets the company's growing demand for talents; throughout 2022, it will be iterated on the basis of the established certification system, according to the company's annual strategy To meet the needs of business development, a total of 19 record subjects were developed/optimized/cancelled/reused.

2. **U3D series certification:** Unity programming development primary certification, Unity programming development intermediate certification and Unity 3D engine application (advanced-official) certification will be organized on demand throughout 2022. A total of 26 people has passed the U3D series certification. Among them, 9 people passed the primary certification; 10 people passed the intermediate certification; 7 people passed the Unity 3D engine application (advanced-official) certification. This certification serves the company's talent development needs in Unity3D technology business development.

3. **Certification of Design Methodology:** Organization of primary certification of design methodology on demand, 137 people participated in certification; 17 people participated in certification of methodology improvement class certification, 15 people passed. The design methodology is derived from the essence of the design work from the beginning of the company's entrepreneurship to the present, and it is a special certification designed to meet the training needs of design talents inside and outside the company. Improve the ability of design talents.

e-Learning Training and Learning Platform Construction:

1. **Platform function construction:** Based on the requirements of the company's certification management methods, in 2022, the platform certificate acquisition condition function was optimized, and on the original basis, the function of obtaining a certificate after any pass of the bound resource was realized, and the automatic issuance of the certification certificate was realized. Greatly reduce the demand for operating personnel, and more application of AI automation capabilities to achieve operational work.

2. **Platform content construction:** In 2022, a total of 368 newly uploaded courses, 48 training and certification topics, and a total of 2,833 courses were added; among them, according to the needs of the company's business and talents, it is planned to target some courses, and external personnel can pass the learning center on the official website of the metaverse organization enters learning and certification, so as to accept the company's outsourcing affairs.

3. **Administrator training:** In 2022, a total of 8 administrators were trained, and a total of 292 administrators were trained, which promoted the construction of the company's training and learning ecology. More personnel from various business departments can use the tools of NetDragon University Empowerment, capability certification empowerment**, and jointly promote the development of business and talents.**

6.3 Occupational Health & Safety

Employee health and safety is the Group's most important obligation. Health and safety risks in the Group's operations are identified, assessed, and eliminated by the management team. The Group has not been aware of any material work-related health and safety incidents or work-related fatalities during the past three years.

6.3.1. Safety

To ensure a safe working environment, security staff are on duty 24 hours a day to monitor full coverage of all working venues and conduct patrols and inspections strictly. To improve our rescue and employees' safety awareness and self-rescue skills, we have established fire services systems and a professional fire services team, and we conduct regular training sessions on fire safety annually, including drills on fire and evacuation, rescue drills for lift-trapped victims, and explosion prevention drills.

For employee operational safety, we have also developed safety standards and rules for practices and operations in various job positions, accompanied by a comprehensive training program.

6.3.2. Health

We value human capital most highly. The health of our employees is very important to us, and we continue to promote practical, fashionable and fun initiatives to encourage a healthy and balanced lifestyle for our employees. At Promethean we have

The following are the four key areas we focus on:

Health Initiatives

Our healthy work environment, healthy food standard, sporting events, and fun festival activities all encourage employees to live a healthy lifestyle. NetDragon Games (i.e. Sports Day), 1/4 Marathon, and SEAL Challenge ("星際海豹挑戰賽") are among the annual events.

Health Check

Employees receive free health evaluations, body checks, and health reports.

Training/Education

Our global headquarters offers a wide range of inhouse sports facilities, sports training sessions, meditation courses, health lessons, and consultations to our employees. There are many internal communication channels for health and well-being, including our intranet, office automation, internal messaging, Enterprise Resource Planning pop-up notices, NetDragon Radio, etc., as well as on-campus posters, and display monitor screens.

Illness Prevention

Our global headquarters is equipped with clinics and health management rooms, where treatment is available at any time and expert doctors are invited periodically to provide in-depth consultations. Medical insurance packages are provided to all domestic employees. We also strictly adhere to epidemic control measures in all of our facilities.

6.4 Diversity, Inclusion and Equal Opportunities

We offer equal opportunity to all job seekers regardless of their race, colour, nationality, religion, gender, age, disability, or any other discrimination prohibited by law. In selecting the most appropriate person for particular jobs, the Group considers educational background, working experience, skills, personal integrity, as well as potential for growth within the Group. Every member of the Group's staff is treated equally, and their appointment, remuneration packages, and promotions will not be affected by their social identity. Using our values as a guide for what is right for our culture is demonstrated by our diversity, equity, and inclusion value "Be Discrimination Free". At Promethean, the Human Rights Policy and Slavery & Human Trafficking Statement have been openly published and internally communicated, which clearly defines the definition of equality and rights that every employees are entitled to, as well as our commitment to equality, diversity and inclusion.

Policy and Key Initiatives

As we strive for a Discrimination-Free environment where everyone takes active ownership, we recruit, engage, grow, and promote the best and brightest talent. Promethean's Employee Inclusion Groups (EIGs) have developed a Diversity, Equity & Inclusion strategy, which spikes Intersectional Discussion with the oversight and support from our management executives serving as event sponsors to explore how we can further recruit, engage and celebrate 1 of 4 groups: Gender/Ethnicity/LGBTQ+/Disability. At the same time, Promethean has also developed and maintained the Anti-Harassment policy, which guides the business conducts for an inclusive working environment.

1. **Fairness in Selection and Retention:** the company treats all employees equally during recruiting (hiring), promoting, promoting, reviewing professional and technical tenures, and training;

2. **Beyond Statutory Holidays:** To support female employees, the company provides statutory maternity inspection leave, maternity leave, and breastfeeding leave.

3. **New Working Model:** Metaverse's new office model helps employees balance work and family relationships better. As the company accelerates the pace of creating a Metaverse organization where "everyone participates in co-creation, and everyone shares value", we continue to promote the "efficiency-centred" ideology and transform into a new working model where employees can choose a more efficient working mode based on their working preferences for better work-life balance.

4. **Multicultural, Friendly and Humanized Workplace:** we fully respect each employee's individuality by creating a mutually respectful, healthy, free-from-prejudice and harassment-free working environment. Through employee satisfaction surveys, "BUG collection cabin", and listening to employees' voices, we are dedicated to solving employee demands through various forms and channels.

5. **Health of Everyone:** we arrange physical examinations for employees every year and provide warm, comfortable and independent space for female employees who are pregnant and breastfeeding.

Training and Communication

Based on the formulated strategies we provide relevant training to all our staff (including part-time staff) and people managers. Below are some tailored curriculums targeting specific issues to promote awareness and change behaviour to foster our diversified and inclusive working environment.

Anti-Harassment: the adverse effect of discrimination and harassment at the workplace are elaborated in detail, including low employee morale, reduced productivity, and even criminal liability. In addition to providing an overview of the types of behaviours that can give rise to discrimination and harassment (including sexual harassment), the course also discusses the benefits and strategies for promoting a respectful work environment. The course also addresses the implications of federal anti-discrimination and anti-harassment laws.

Unconscious Bias: No matter who you are, you are prey to unconscious biases. The course defines the issue and advocates for us to be part of a complex, diverse workplace. Taking steps to overcome unconscious bias, we will be taught to recognize how superficial differences can contribute to bias and lead to prejudice and social stereotypes. Specific tactics for combatting unconscious bias and adopting an anti-bias approach are also covered in the course, applicable across the organization and in the hiring process. We have an Affirmative Action Plan and are recognized as an Equal Opportunity employer as a government sub-contractor.

For each of the training courses, 175 (out of 317) managers participated in Anti-Harassment training in 2022, 99 (out of 143) managers participated in Unconscious Bias training in 2022, and 79 (out of 99) managers participated in Affirmative Action/Equal Employment Opportunity training in 2022.

Management Oversight

As discussed above, our management executives are elected as sponsors for each of our four EIGs. The EIG meetings occur every month, and Curious Conversations (all employees invited) occur quarterly.

Staff Overview

As of 31 December 2022, the Group had its overall headcount of 4,751 with 94% of full-time employees, 85% of the employees were based in PRC and Hong Kong and the remaining 15% were based overseas including US, UK, Australia, etc. Full-time male and female employees accounted for 64% and 36% of the overall headcount respectively. Employees aged between 30 and 50 accounted for 58% of the overall headcount while employees aged under 30 and above 50 accounted for 38% and 4% of the overall headcount respectively.

7. VALUE CHAIN

7.1 Innovation Management

Our innovation management approach emphasises on research and development of our owned IPs and collaboration with other brands and encourages internal cooperation through dedicated awards and recognitions. Annually we will short list top 3 in each of the categories among our Technology Innovation Awards (技術創新獎) and Design Innovation Awards (設計創新獎), which summarise the positive impacts and collaboration experiences from the projects.

7.2 Responsible Supply Chain Management

In 2022, Promethean had a total of 32 key suppliers. The geographical split of these suppliers was as follows:

Indicators	2022	2021	2020	2019	2018	2017	2016	2015
Number of Key suppliers[1]	29	23	22	21	23	17	15	11
By region:								
Asian countries other than PRC and Hong Kong	3	1	3	3	2	2	4	1
Australia	0	0	0	0	0	0	0	0
UK	1	1	0	1	2	0	0	1
US	14	8	7	8	11	5	1	1
PRC	4	5	6	7	6	7	5	4
UAE	0	0	1	0	0	0	0	0
Hong Kong	4	5	2	2	1	1	4	3
European Countries other than UK	3	3	3	0	1	2	1	1
Total amounts invoiced by key suppliers ($m)	422.0	335.9	198.2	175.1	246.9	183.7	95.8	90.7

1 Key Suppliers refers to suppliers of products/services whose total contract sum amounted to $1m or more in any given year.

Promethean has a documented supplier on-boarding process that is undertaken in respect of significant suppliers of products to the Group. This process includes a review of quality processes, Health & safety, training & development, labour ethics and the environment. The Promethean's operations team periodically visit significant suppliers in the normal course of business.

A documented supplier onboarding process is in place at Promethean for significant suppliers of products. A review of quality processes, health and safety, training and development, and labour ethics are all part of this process. Regular visits by Promethean's operations staff to significant suppliers are part of the company's normal operations.

A Quarterly Business Review (QBR) process is used to engage key Original Designed Manufacturer (ODM) suppliers. Approximately 70% of Promethean's spend on Interactive Flat Panels is managed by the QBR process. A business review is conducted every six or twelve months for other key suppliers based on pareto 80% value. As part of the QBR process, a presentation pack is produced for the review meeting, and subsequent actions are logged and reviewed/closed out.

During the year, the Promethean Group was not aware that any key suppliers had any significant actual and potential negative impact on business ethics, environment protection, human rights and labour practices nor was the Group aware that any of them had any non-compliance incident in respect of human rights issues.

7.3 Quality Management

Based on the framework in the "Information Safety Technology and Personal Information Safety Standard" (GB/T 35273-2020) released by the PRC Government in March 2020, the Group enforces a comprehensive set of internal policies and procedures on information security management. These policies and procedures apply to all Group business lines.

The following policies and procedures are included:

- Full-cycle preventive measures covering data collection, transmission, storage and usage phases
- Clear definition of data owners' right
- Mechanism to handle collection of complaints and response procedures
- Mechanism for reporting of data breach incidences
- Data protection impact assessment
- Organizational measures to strengthen information security management
- Regular engagement and cooperation with the regulatory bodies

The Group has taken the following measures to guarantee product quality:

- Giving out daily journals on quality, demonstrating on a multidimensional scale the quality and progress of the latest version of the products, and coordination for issues addressing on a timely basis to avoid and control risks to the largest extent in order to ensure the progress of the products.
- On the basis of the 7 x 24 cloud service of the automated testing technology, performing self-development of a tailored testing cloud platform to conduct various specific tests such as functions, compatibility, network and safety for the products for a comprehensive protection of quality;
- Strict implementation of the procedures and standards related to quality control, including review of product demand, test activities such as management of test plans, management of test rules, management of test performance, management of feedback on risks and management of bug information;

- Establishment of a quality monitoring and control system through online dial testing, by performing regular/triggered dial testing tasks automatically to discover production defects in a timely manner, instant monitoring and control of product quality can be guaranteed;

- In accordance with the requirements of relevant laws and regulations, the Group developed standards for security test and regulations or guidelines for testing in relation to five areas, namely protection of personal privacy on Apps, information security for users, real-name registration, content security and anti-addiction system of games. Moreover, the Group submitted testing reports on product conformity in a timely manner using self-developed security scanner and its online quality monitoring technology that is unique in the industry for the purpose of compliance. These measures supported the Company's products in complying with laws and regulations of the State.

Health, Safety Quality and Certification

Promethean, as an ISO 14001 certified body, is subject to annual surveillance audits and a recertification audit every three years, which cover:

- Reduced impact on the environment to maintain a healthy planet for future generations

- Legal compliance

- Reduced operational costs by improving efficiency

- Competitive advantage during a tender process

Product Recalls & Regulation Breach

In the year ending 31 December 2022, there have been no recalls related to health & safety. Promethean had no significant product failures during the reporting period ending 31 December 2022. In the event of normal run-rate failures, Promethean's warranty will cover them. The Group did not report any instances of non-compliance with regulations or voluntary codes relating to its products and services in 2022, including, but not limited to, information and labelling about products and services, marketing communications, advertising, promotion, sponsorship, and property rights, including intellectual property rights, which have a significant impact on the Group.

Quality Assurance

As part of our business strategy, Promethean is committed to continuously improving our processes and products. Both Promethean and our suppliers are committed to maintaining quality and achieving customer satisfaction. As a part of Promethean's global Quality Assurance program, we work with our suppliers and business partners to continuously improve our products and processes to ensure very high standards for Quality, Reliability, Cost and Delivery (QCD).

The overall responsibilities include ensuring that Quality Assurance principles are integrated into the supplier/business partners new product release and product life cycle processes; driving a culture of continual improvement while maintaining ISO 9001 Quality Management System certification, compliance and other relevant standards.

8. COMMUNITY INVESTMENTS

Through maintaining long-term sustainability of our businesses and communities in which we operate, the Group is committed to fulfilling its corporate social responsibility in providing feedback to the community.

The activities undertook by the Group as at 31 December 2022 include:

November, 2022 **NetDragon Offers Condolences to Anti-epidemic Workers**

The epidemic is merciless but people are sympathetic. In 2022, We worked together to fight the Covid pandemic. On the morning of November 14, Mr. Zheng Hui, our executive director, led a team to Wenquan Sub-district Office in Gulou District, Fuzhou City to offer condolences, and donated RMB50,000 in cash to help Fuzhou's epidemic prevention and control work. In the afternoon of the same day, the team went to the government of Hunan Town, Changle District, and donated a batch of anti-epidemic materials worth of RMB50,000, such as N95 masks and disinfectant, to send care and greetings to the front-line staff and volunteers.

November, 2022 **Cherrypicks provides tracking services for the new crown epidemic in Hong Kong**

In 2022, Cherrypicks provided development services for the Hong Kong Covid-19 Pandemic Tracking App "Leave Home Safe". During the pandemic, the app has been downloaded more than 8.7 million times and used in more than 140,000 places in Hong Kong. The program won the "2022 Best Public Health Partner Award" at the Huawei Asia Pacific Developers Conference.

October, 2022 **NetDragon's "Flag Run" was Held Successfully**

NetDragon Network held a unique running activity — "2022 NetDragon National Flag Run" at NetDragon Changle Base to celebrate the 73rd anniversary of the founding of the People's Republic of China with practical actions and welcome the 20th Party Congress with struggle. The event is not only an opportunity for NetDragon employees to ignite their energy. This is not only a way for NetDragon employees to ignite patriotic enthusiasm, but also an essential practice of NetDragon's party-building innovation. Among the hundreds of NetDragon employees who participated in the "National Flag Run", there were many CPC members. They said that as party members, they could join in the "National Flag Run" activity, which not only responded to the company's positive corporate culture of "10 km run", but also paid tribute to the motherland in a healthy way. In addition to the staff of NetDragon, there were many children in the "National Flag Run" team, and it is reported that they are students from NetDragon Xingjiyuan Primary School and Kindergarten, in addition to the students from Fuzhou Software Technology College also participated. Patriotic education should start with children, and NetDragon hopes to guide students to inherit the spirit of patriotism and firm ideal belief through the national flag run.

September, 2022 **NetDragon uses AI technology to help develop Chinese education in Egypt, with first Chinese teacher training session in full swing**

As a long-established Internet company, NetDragon connected with Egypt many years ago with its Prometheus interactive big screen. It has since worked closely with Egypt many times through products such as "Smart Space Classroom" and Edmodo online learning platform, contributing to the development of digital education in Egypt. NetDragon applies its digital education technology capability to empower — as the designated online teaching material partner of the Egyptian Ministry of Education, NetDragon will customize Chinese AI interactive courseware based on the official teaching material, so that Egyptian students can learn Chinese in a fun and interactive way under the guidance of 3D animation, interactive learning and AI helpers.

"NetDragon hopes to improve classroom experience, enhance classroom interactivity, reduce teachers' teaching pressure and increase students' interest through high-quality technology and products," said Chen Hong, Senior Vice President of NetDragon, Chief Technology Officer of Fujian Huayu and General Manager of NetDragon's Egypt business. Through education technology, teachers and students can benefit and contribute to achieving a more equitable and effective global education.

Currently, NetDragon's education map covers 192 countries and regions, with 150 million users and over 2 million classrooms. As NetDragon has explored the education market in countries along the "Belt and Road" in recent years, it has established strategic cooperation with more than 20 countries along the route, including Russia, Egypt, Nigeria, Kenya, and Malaysia, and has engaged in comprehensive cooperation in the field of digital education, combining specific real needs with macro national strategies. Chinese AI courseware's successful implementation in Egyptian Chinese curriculum will demonstrate NetDragon's commitment to global education equity and serve as an exemplary example of utilizing technology for Chinese education abroad.

July, 2022 **UNESCO's IITE and NetDragon Launch "Teacher e-Library" to Help Build Global Teacher Capacity**

The UNESCO Institute for Information Technologies in Education (UNESCO IITE) and NetDragon have officially launched the online platform "Teacher eLibrary". In addition to Serbia, Tunisia, Ghana, Egypt, Russia, Thailand, the platform has been formally launched in several other countries and institutions. With the platform, educators will be able to access advanced digital resources and educational solutions based on artificial intelligence, enabling them to provide their students with a quality and equitable education. Around 100,000 educators worldwide will be able to access open educational resources, free public tools, and online and on-site training through the platform once it launches. Moreover, the platform provides OER in different languages to meet the educational needs of different regions, currently covering English and Russian, with an Arabic version on the way. By providing technical support, NetDragon will combine its leading technical capabilities and meta-universe organizational advantages to bridge virtual and reality, enabling the platform to create a virtual society and digital educational world with ultra-distance, deep immersion, and a high level of experience. "NetDragon will continue to carry out its social responsibility as a listed company," said Xiong Li, CEO of NetDragon. Under the guidance of UNESCO, the company will continue investing in education, providing equal opportunities and supporting teachers' capacity building, and advancing the digitalization of education worldwide."

June, 2022 **NetDragon continues to explore new measures to prevent addiction**

June 1st marks the first anniversary of promulgating and implementing the newly revised "Law of the People's Republic of China on the Protection of Minors". China.com published "Strengthening the NetDragon for Minors' Protection NetDragon Continues to Explore New Measures to Prevent Addiction", focusing on NetDragon's efforts in implementing the anti-addiction policy. The article mentioned that NetDragon encourages technological innovation through internal lectures Continuously improve the internal anti-addiction mechanism of the game, actively fulfil the social responsibility of game companies, and further strengthen the network security protection network for minors. NetDragon has always paid great attention to anti-addiction in game design. Several anti-addiction lectures have been held within the company, requiring R&D, operations and other departments to strictly implement anti-addiction policies.

9. MAJOR RECOGNITION, AWARDS AND MEMBERSHIP

Award Issuer	Name of the Award
Zhitongcaijing, Hithink RoyalFlush Information Network	The 6th Golden Hong Kong Stocks "Most Valuable Education Company"
Fujian Software Industry Association	2022 Fujian's Top 50 Software & IT Services Industry Enterprises with Comprehensive Competitiveness
Fujian Federation of Commerce & Industry	2022 Fujian's Top 100 Private Enterprises
Internet Society of China	China's Top 100 Internet Enterprises
China Enterprise Directors Association, China Enterprise Confederation	2022 China's Top 500 Service Companies
China Federation of Electronics and Information Industry	2022 China's Top 100 Software and IT Service Companies
Fujian Enterprises and Entrepreneurs Confederation	2022 Fujian's Top 100 Service Companies
Internet Society of Fujian	2022 Fujian top 50 Internet enterprises with comprehensive competitiveness
Internet Society of China	2021-2022 China Internet Industry Self-discipline Contribution and Public Welfare Award
Fujian Enterprises and Entrepreneurs Confederation	2022 Fujian's Top 100 enterprises in Strategic Emerging Industries
Fujian Federation of Commerce & Industry	Top 100 Fujian Innovative Private Enterprises
China Culture & Entertainment Industry Association	2022 Golden Finger Award for Excellent Enterprise and Outstanding Entrepreneur
Fujian Information and Communication Industry Association	2018-2021 Fujian Information and Communication Industry Integrity Enterprise

10. PERFORMANCE DATA SUMMARY

Environmental performance

Environmental Performance in 2022		
KPI A1.1	The types of emissions and respective emissions data	Scope 2 — 38.9 tCO_2e (from office electricity consumption)* * *For scope 2 emission, we applied the Greenhouse gas reporting: conversion factors 2022 by the UK Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy, which is 0.19338 kg CO_2e/kWh*
KPI A1.3	Total hazardous waste produced and intensity	We are currently expanding our data collection scope to include disposed general wastes that are non-hazardous.
KPI A1.4	Total non-hazardous waste produced and intensity	Given the fact that we generate most revenue from online and mobile games, as well we education, the amount of hazardous waste of our operation is immaterial; however, we are currently expanding our data collection scope to include office supplies such as batteries and fluorescent tubes disposed.
KPI A2.1	Direct and/or indirect energy consumption by type in total and intensity	Total Energy Use 202,315 kWh
KPI A2.2	Water consumption in total and intensity	Total 359.00 m^3

Note:

1. Given our business operation depends almost purely on purchased electricity, we consider scope 1 emission immaterial;

2. The current disclosure scope includes Promethean's UK offices in Blackburn, UK. In the future, the management will continue to extend the data collection to other offices.

Social Performance

KPI B1.1 Total workforce by gender, employment type, age group and geographical region for the year

	2021 Number of staff	% of total	2022 Number of staff	% of total
Total workforce	4,834	—	4,751	—
Total workforce by employment type				
Full time	4,689	97	4,460	94
Part time	145	3	291	6
Full time workforce by gender				
Male	2,907	62	2,835	64
Female	1,782	38	1,625	36
Full time workforce by age group				
30 or below	2,063	38	1,686	44
31-50	2,251	58	2,584	48
51 or above	375	4	190	8
Full time workforce by employment category				
General staff and Supervisor	3,817	81	3,630	81
Middle management	653	14	622	14
Senior management	219	5	208	5
Full time workforce by geographic Region				
Hong Kong	22	1	20	1
PRC	4,151	88	3,767	84
Other Regions	516	11	673	15

KPI B1.2 Employee turnover rate by gender, age group and geographical region for the year

	2021	2022
Total employee turnover rate	39%	15%
Employee turnover rate by gender		
Male	22%	16%
Female	69%	8%
Employee turnover rate by age group		
Below 30	38%	9%
31-50	44%	54%
51 or above	10%	14%
Employee turnover rate by geographic region		
Hong Kong	7%	25%
PRC	42%	16%
Other Regions	21%	15%

Note: The turnover rate is calculated by: (number of employees who left the Group during the year/average number of employees at the beginning and end of the year) x 100%

KPI B2.1 Number and rate of work-related fatalities occurred in each of the past three years including the reporting period

KPI B2.2 Lost days due to work injury

Occupational Health and Safety	2020	2021	2022
Work-related fatalities	—	—	—
Lost day due to work injury	—	—	—

EMPLOYEE TRAINING

KPI B3.1 The percentage of employees trained by gender and employee category

KPI B3.2 The average training hours completed per employee by gender and employee category

Note: The Group is in the process of enhancing internal data collection practice. It is part of our plan to assign dedicated personnel to gather such data in the future.

11. HKEX REPORTING GUIDE CONTENT INDEX

General Disclosure and KPIs		Reference/Remarks
Aspect A1 — Emissions		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste	ENVIRONMENTAL
KPI A1.1	The types of emissions and respective emissions data.	PERFORMANCE DATA SUMMARY Environmental Performance
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity	
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity.	
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity.	
KPI A1.5	Description of emission target(s) set, and steps taken to achieve them.	ENVIRONMENTAL Energy Management and Carbon Emissions
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set, and steps taken to achieve them.	ENVIRONMENTAL Waste Management

Aspect A2 — Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water, and other raw materials	ENVIRONMENTAL
KPI A2.1	Direct and/or indirect energy consumption by type in total (kWh in ’000s) and intensity.	PERFORMANCE DATA SUMMARY Environmental Performance
KPI A2.2	Water consumption in total and intensity.	
KPI A2.3	Description of energy use efficiency target(s) set, and steps taken to achieve them.	
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set, and steps taken to achieve them.	ENVIRONMENTAL Water Consumption and Conservation
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	PERFORMANCE DATA SUMMARY Environmental performance
Aspect A3 — The Environmental and Natural Resources		
General Disclosure	Policies on minimising the issuer’s significant impacts on the environment and natural resources.	ENVIRONMENTAL
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	ENVIRONMENTAL
Aspect A4 — Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer	ENVIRONMENTAL
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	ENVIRONMENTAL Climate Change

Aspect B1 — Employment		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment, and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	PEOPLE
KPI B1.1	Total workforce by gender, employment type, age group and geographical region	PERFORMANCE DATA SUMMARY Social Performance
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	
Aspect B2 — Health and Safety		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	PEOPLE
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting period	PERFORMANCE DATA SUMMARY Social Performance
KPI B2.2	Lost days due to work injury	
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	PEOPLE Occupational Health & Safety
Aspect B3 — Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	PEOPLE
KPI B3.1	The percentage of employees trained by gender and employee category.	PERFORMANCE DATA SUMMARY Social Performance
KPI B3.2	The average training hours completed per employee by gender and employee category.	

Aspect B4 — Labour Standards		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	PEOPLE
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	PEOPLE Diversity, Inclusion and Equal Opportunities
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	
Aspect B5 — Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	VALUE CHAIN
KPI B5.1	Number of suppliers by geographical region.	PERFORMANCE DATA SUMMARY Social Performance
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	OUR VALUE CHAIN Responsible Supply Chain Management
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	

Aspect B6 — Product Responsibility		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling, and privacy matters relating to products and services provided and methods of redress	VALUE CHAIN
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	We do not have major product recall event for the reporting year.
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	VALUE CHAIN Quality Management
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights	USER RIGHTS PROTECTION Intellectual Property Protection
KPI B6.4	Description of quality assurance process and recall procedures.	VALUE CHAIN Quality Management
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	USER RIGHTS PROTECTION Privacy and Data Protection
Aspect B7 — Anti-corruption		
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud, and money laundering.	SUSTAINABILITY GOVERNANCE
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	PERFORMANCE DATA SUMMARY Social Performance
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored	
KPI B7.3	Description of anti-corruption training provided to directors and staff.	
Aspect B8 — Community Investment		
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	COMMUNITY INVESTMENTS
KPI B8.1	Focus areas of contribution	COMMUNITY INVESTMENTS
KPI B8.2	Resources contributed to the focus area.	COMMUNITY INVESTMENTS

Deloitte. 德勤

TO THE MEMBERS OF NETDRAGON WEBSOFT HOLDINGS LIMITED
(incorporated in the Cayman Islands with limited liability)

OPINION

We have audited the consolidated financial statements of NetDragon Websoft Holdings Limited (the "Company") and its subsidiaries (collectively referred to as the "Group") set out on pages 132 to 304, which comprise the consolidated statement of financial position as at 31 December 2022, and the consolidated statement of profit or loss and other comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

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 2022, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, 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.

TO THE MEMBERS OF NETDRAGON WEBSOFT HOLDINGS LIMITED (Cont'd)

KEY AUDIT MATTERS (Cont'd)

Key audit matter	How our audit addressed the key audit matter
Impairment of goodwill and intangible assets with indefinite useful lives	
We identified the impairment of goodwill and intangible assets with indefinite useful lives of the cash-generating unit, Promethean World Limited and its subsidiaries (collectively referred to as the "Promethean Group") arising from historical acquisition as a key audit matter due to the use of management's estimation of the value in use of the Promethean Group to which goodwill and intangible assets with indefinite useful lives are allocated, in the course of management's impairment assessment. In management's impairment assessment of the Promethean Group which goodwill and intangible assets with indefinite useful lives have been allocated, it requires the estimation of its recoverable amount, which is the higher of the value in use or fair value less costs of disposal. The value in use calculation requires the Group to estimate growth rates in cash flow forecasts and a suitable discount rate applied to these forecasts in order to calculate the present value. The carrying amounts of goodwill and intangible assets with indefinite useful lives of the Promethean Group were RMB287 million and RMB251 million respectively as at 31 December 2022. Details of goodwill and intangible assets with indefinite useful lives and the impairment testing on goodwill and intangible assets with indefinite useful lives are disclosed in Notes 17, 18 and 19 to the consolidated financial statements respectively.	Our procedures in relation to the impairment of goodwill and intangible assets with indefinite useful lives included: • obtaining the cash flow forecasts provided by the management of the Group, and assessing the reasonableness of the assumptions and methodologies used by management in their impairment assessment by comparing the cash flow forecasts, growth rates and discount rate used in these forecasts to the future business plan; • involving our internal valuation specialist to assess the appropriateness of the underlying valuation methodology and discount rate applied in the cash flow forecasts; • evaluating the accuracy of management's forecasts by comparing forecasts in previous years with historical results; and • evaluating the sensitivity analysis of the forecasts for reasonably possible change in any of the assumptions made.

TO THE MEMBERS OF NETDRAGON WEBSOFT HOLDINGS LIMITED (Cont'd)

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated financial statements and our auditor's report thereon.

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

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND THOSE CHARGED WITH GOVERNANCE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

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

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

Those charged with governance are responsible for overseeing the Group's financial reporting process.

TO THE MEMBERS OF NETDRAGON WEBSOFT HOLDINGS LIMITED (Cont'd)

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 solely to you, as a body, in accordance with our agreed terms of engagement, and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with 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 judgment and maintain professional skepticism 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.

TO THE MEMBERS OF NETDRAGON WEBSOFT HOLDINGS LIMITED (Cont'd)

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

- 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 those charged with governance 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 those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to 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 those charged with governance, 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 the independent auditor's report is Chung Chi Man.

Deloitte Touche Tohmatsu
Certified Public Accountants
Hong Kong
27 March 2023

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTES	2022 RMB million	2021 RMB million
Revenue	5	**7,866**	7,036
Cost of revenue		**(3,551)**	(2,513)
Gross profit		**4,315**	4,523
Other income and gains	6(a)	**223**	224
Impairment loss under expected credit loss model, net of reversal	8	**(14)**	(8)
Selling and marketing expenses		**(945)**	(956)
Administrative expenses		**(975)**	(956)
Research and development costs		**(1,224)**	(1,160)
Other expenses and losses	6(b)	**(213)**	(266)
Share of results of associates and joint ventures		**(17)**	(16)
Operating profit		**1,150**	1,385
Interest income on pledged bank deposits		**—**	1
Exchange (loss) gain on financial assets at fair value through profit or loss, bank borrowings, convertible and exchangeable bonds and derivative financial instruments		**(73)**	19
Fair value change on financial assets at fair value through profit or loss		**(33)**	20
Fair value change on derivative financial instruments		**15**	(3)
Finance costs	7	**(219)**	(186)
Profit before taxation		**840**	1,236
Taxation	9	**(76)**	(253)
Profit for the year	10	**764**	983
Other comprehensive income (expense) for the year, net of income tax:			
Item that may be reclassified subsequently to profit or loss:			
Exchange differences arising on translation of foreign operations		**47**	(25)
Item that will not be reclassified to profit or loss:			
Fair value change on equity instruments at fair value through other comprehensive income		**(2)**	(2)
Other comprehensive income (expense) for the year		**45**	(27)
Total comprehensive income for the year		**809**	956

CONSOLIDATED STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2022

	NOTE	2022 RMB million	2021 RMB million
Profit (loss) for the year attributable to:			
— Owners of the Company		834	1,062
— Non-controlling interests		(70)	(79)
		764	983
Total comprehensive income (expense) for the year attributable to:			
— Owners of the Company		879	1,036
— Non-controlling interests		(70)	(80)
		809	956

		RMB cents	RMB cents
Earnings per share	13		
— Basic		154.15	191.67
— Diluted		154.14	191.58

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AT 31 DECEMBER 2022

	NOTES	2022 RMB million	2021 RMB million
Non-current assets			
Property, plant and equipment	14	1,936	1,940
Deposits made for acquisition of property, plant and equipment		5	5
Right-of-use assets	15	380	428
Investment properties	16	59	77
Goodwill	17	287	217
Intangible assets	18	739	772
Interests in associates and joint ventures	20	34	50
Equity instruments at fair value through other comprehensive income	21	56	8
Financial assets at fair value through profit or loss	22	404	266
Loan receivables	23	8	8
Other receivables, prepayments and deposits	28	89	38
Deferred tax assets	24	347	135
		4,344	3,944
Current assets			
Properties under development	25	343	317
Properties for sale	25	303	205
Inventories	26	807	685
Financial assets at fair value through profit or loss	22	84	2
Loan receivables	23	4	22
Trade receivables	27	654	832
Other receivables, prepayments and deposits	28	549	494
Amounts due from joint ventures		5	3
Tax recoverable		29	25
Restricted bank balance and pledged bank deposits	29	1	9
Bank deposits with original maturity over three months	29	207	630
Cash and cash equivalents	29	3,701	3,717
		6,687	6,941

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AT 31 DECEMBER 2022

	NOTES	2022 RMB million	2021 RMB million
Current liabilities			
Trade and other payables	30	**1,513**	1,455
Contract liabilities	31	**406**	357
Lease liabilities	32	**67**	64
Provisions	33	**94**	89
Derivative financial instruments	22	**31**	43
Bank borrowings	34	**737**	403
Convertible and exchangeable bonds	35	**16**	15
Tax payable		**100**	128
		2,964	2,554
Net current assets		**3,723**	4,387
Total assets less current liabilities		**8,067**	8,331
Non-current liabilities			
Other payables	30	**19**	11
Lease liabilities	32	**50**	95
Bank borrowings	34	**2**	—
Convertible and exchangeable bonds	35	**1,317**	1,070
Convertible preferred shares	36	**—**	—
Deferred tax liabilities	24	**80**	80
		1,468	1,256
Net assets		**6,599**	7,075

CONSOLIDATED STATEMENT OF FINANCIAL POSITION

AT 31 DECEMBER 2022

	NOTE	2022 RMB million	2021 RMB million
Capital and reserves			
Share capital	37	**40**	40
Share premium and reserves		**6,859**	7,275
Equity attributable to owners of the Company		**6,899**	7,315
Non-controlling interests		**(300)**	(240)
		6,599	7,075

The consolidated financial statements on pages 132 to 304 were approved and authorised for issue by the Board of Directors on 27 March 2023 and are signed on its behalf by:

Zheng Hui	**Leung Lim Kin, Simon**
DIRECTOR	DIRECTOR

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022

	Attributable to owners of the Company															
	Share capital RMB million	Share premium RMB million	Capital redemption reserve RMB million (Note a)	Other reserve RMB million (Note b)	Capital reserve RMB million (Note c)	Statutory reserves RMB million (Note d)	Dividend reserve RMB million	Property revaluation reserve RMB million	Treasury share reserve RMB million (Note e)	Employee share-based compensation reserve RMB million	Translation reserve RMB million	Equity instruments at fair value through other comprehensive income reserve RMB million	Retained profits RMB million	Sub-total RMB million	Non-controlling interests RMB million	Total equity RMB million
At 1 January 2021	41	2,220	7	(145)	10	481	118	22	(19)	53	(115)	(3)	4,137	6,807	(156)	6,651
Profit (loss) for the year	–	–	–	–	–	–	–	–	–	–	–	–	1,062	1,062	(79)	983
Other comprehensive expense for the year	–	–	–	–	–	–	–	–	–	–	(24)	(2)	–	(26)	(1)	(27)
Total comprehensive (expense) income for the year	–	–	–	–	–	–	–	–	–	–	(24)	(2)	1,062	1,036	(80)	956
Repurchase and cancellation of shares	(1)	(241)	1	–	–	–	–	–	–	–	–	–	(1)	(242)	–	(242)
Shares issued upon exercise of share options	–	7	–	–	–	–	–	–	–	(2)	–	–	–	5	–	5
Recognition of equity-settled share-based payments, net of awarded shares and share options forfeited	–	–	–	–	–	–	–	–	–	7	–	–	7	14	–	14
Awarded shares vested to employees	–	–	–	–	–	–	–	–	6	(7)	–	–	1	–	–	–
Acquisition of additional equity interests from non-controlling shareholders	–	–	–	(3)	–	–	–	–	–	–	–	–	–	(3)	(4)	(7)
Final dividend for 2020 paid	–	–	–	–	–	–	(118)	–	–	–	–	–	1	(117)	–	(117)
Interim dividend for 2021 declared and paid	–	–	–	–	–	–	–	–	–	–	–	–	(185)	(185)	–	(185)
Special interim dividend for 2021 proposed	–	–	–	–	–	–	632	–	–	–	–	–	(632)	–	–	–
Final dividend for 2021 proposed	–	–	–	–	–	–	179	–	–	–	–	–	(179)	–	–	–
Transfers	–	–	–	–	–	44	–	–	–	–	–	–	(44)	–	–	–
At 31 December 2021	40	1,986	8	(148)	10	525	811	22	(13)	51	(139)	(5)	4,167	7,315	(240)	7,075
At 1 January 2022	40	1,986	8	(148)	10	525	811	22	(13)	51	(139)	(5)	4,167	7,315	(240)	7,075
Profit (loss) for the year	–	–	–	–	–	–	–	–	–	–	–	–	834	834	(70)	764
Other comprehensive income (expense) for the year	–	–	–	–	–	–	–	–	–	–	47	(2)	–	45	–	45
Total comprehensive income (expense) for the year	–	–	–	–	–	–	–	–	–	–	47	(2)	834	879	(70)	809
Repurchase and cancellation of shares	–	(68)	–	–	–	–	–	–	–	–	–	–	–	(68)	–	(68)
Contribution from non-controlling interests of a subsidiary	–	–	–	–	–	–	–	–	–	–	–	–	–	–	12	12
Recognition of equity-settled share-based payments, net of awarded shares and share options forfeited	–	–	–	–	–	–	–	–	–	6	–	–	–	6	–	6
Awarded shares vested to employees	–	–	–	–	–	–	–	–	4	(4)	–	–	–	–	–	–
Acquisition of additional equity interests from non-controlling shareholders	–	–	–	(8)	–	–	–	–	–	–	–	–	–	(8)	(2)	(10)
Final dividend for 2021 paid	–	–	–	–	–	–	(179)	–	–	–	–	–	2	(177)	–	(177)
Interim dividend for 2022 declared and paid	–	–	–	–	–	–	–	–	–	–	–	–	(185)	(185)	–	(185)
Special interim dividend for 2022 and 2021 declared and paid	–	–	–	–	–	–	(632)	–	–	–	–	–	(231)	(863)	–	(863)
Final dividend for 2022 proposed	–	–	–	–	–	–	193	–	–	–	–	–	(193)	–	–	–
Transfers	–	–	–	–	–	153	–	–	–	–	–	–	(153)	–	–	–
At 31 December 2022	40	1,918	8	(156)	10	678	193	22	(9)	53	(92)	(7)	4,241	6,899	(300)	6,599

Notes:

a. The amount represented the nominal value of the shares repurchased by the Company.

b. Other reserve represented the difference between the consideration and the carrying amount of net assets value resulting from disposal of equity interests in subsidiaries that do not result in loss of control, acquisition of additional equity interests in subsidiaries and contribution from non-controlling interests, which are accounted for as equity transactions.

c. Capital reserve arose on combining the results and financial positions of the companies of 福建網龍計算機網絡信息技術有限公司 (Fujian NetDragon Websoft Co., Ltd.) ("NetDragon (Fujian)") using the principles of merger accounting.

d. As stipulated by the relevant laws and regulations for enterprises in the People's Republic of China (the "PRC"), the Company's PRC subsidiaries are required to maintain statutory reserves. Appropriation to such reserve is made out of profit after taxation as reflected in the statutory financial statements of each of the PRC subsidiaries while the amounts and allocation basis are decided by its board of directors annually. The statutory reserves can be used to make up prior year losses, if any, and can be applied in conversion into capital by means of capitalisation issue.

e. Treasury share reserve comprises the consideration paid for the treasury shares held for the share award scheme, including any attributable incremental costs for the purchase of shares under the share award scheme.

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022

	2022 RMB million	2021 RMB million
OPERATING ACTIVITIES		
Profit for the year	**764**	983
Adjustments for:		
Taxation	**76**	253
Finance costs	**219**	186
Interest income on bank balances, loan receivables, refundable rental deposits and pledged bank deposits	**(33)**	(55)
Fair value change on derivative financial instruments	**(15)**	3
Fair value change on financial assets at fair value through profit or loss	**33**	(20)
Fair value change on investment properties	**5**	(2)
Amortisation of intangible assets	**126**	131
Depreciation of property, plant and equipment	**190**	197
Depreciation of right-of-use assets	**76**	79
Impairment loss of goodwill	**—**	19
Impairment loss of interest in an associate	**—**	23
Impairment loss of intangible assets	**77**	2
Impairment loss under expected credit loss model, net of reversal	**14**	8
Share-based payments	**6**	14
Share of results of associates and joint ventures	**17**	16
Forgiveness of partial bank borrowings	**(33)**	—
Write-down of inventories	**25**	1
Operating cash flows before movements in working capital	**1,547**	1,838

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022

	2022 RMB million	2021 RMB million
Increase in inventories	(129)	(369)
Decrease (increase) in trade receivables	199	(322)
Increase in other receivables, prepayments and deposits	(113)	(47)
Increase in properties under development	(106)	(54)
Decrease in properties for sale	1	49
(Decrease) increase in trade and other payables	(23)	389
Increase (decrease) in contract liabilities	47	(48)
Increase in provisions	29	20
Decrease in amount due to an associate and a joint venture	—	(3)
Cash generated from operations	1,452	1,453
Interest paid	(62)	(68)
Income tax paid	(320)	(358)
NET CASH FROM OPERATING ACTIVITIES	1,070	1,027

	2022 RMB million	2021 RMB million
INVESTING ACTIVITIES		
Purchase of property, plant and equipment	**(165)**	(138)
Purchase of intangible assets	**(129)**	(293)
Placement of bank deposits with original maturity over three months	**(275)**	(730)
Withdrawal of bank deposits with original maturity over three months	**702**	133
Deposits made for acquisition of property, plant and equipment	**(4)**	(6)
Investments in associates	**(1)**	(23)
Advance to a joint venture	**(2)**	(2)
Cash outflow on acquisition of operation through business combination	**(34)**	—
Net cash outflow on disposal of a subsidiary	**(3)**	—
Placement of restricted bank balance	**—**	(8)
Withdrawal of restricted bank balance and pledged bank deposits	**8**	147
Interest received	**44**	44
Repayment of loan receivables	**19**	2
Proceeds from disposal of property, plant and equipment	**2**	2
Purchase of financial assets at fair value through profit or loss	**(11,767)**	(6,957)
Proceeds from disposal of financial assets at fair value through profit or loss	**11,549**	6,990
Purchase of equity instruments at fair value through other comprehensive income	**(50)**	—
NET CASH USED IN INVESTING ACTIVITIES	**(106)**	(839)

CONSOLIDATED STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022

	2022 RMB million	2021 RMB million
FINANCING ACTIVITIES		
New bank borrowings raised	**878**	411
Proceeds from shares issued upon exercise of share options	**—**	5
Repayment of bank borrowings	**(537)**	(344)
Dividends paid	**(1,225)**	(302)
Repayment of lease liabilities	**(69)**	(65)
Payment for repurchase and cancellation of shares	**(68)**	(242)
Acquisitions of additional equity interests from non-controlling interests	**(10)**	(7)
Contribution from non-controlling interests of a subsidiary	**12**	—
NET CASH USED IN FINANCING ACTIVITIES	**(1,019)**	(544)
NET DECREASE IN CASH AND CASH EQUIVALENTS	**(55)**	(356)
CASH AND CASH EQUIVALENTS AT BEGINNING OF THE YEAR	**3,717**	4,114
EFFECT OF FOREIGN EXCHANGE RATE CHANGES	**39**	(41)
CASH AND CASH EQUIVALENTS AT END OF THE YEAR, REPRESENTED BY BANK BALANCES AND CASH	**3,701**	3,717

1. GENERAL INFORMATION

NetDragon Websoft Holdings Limited (the "Company") was incorporated in the Cayman Islands on 29 July 2004 as an exempted company with limited liability and its shares are listed on the Main Board of the Stock Exchange of Hong Kong Limited (the "Stock Exchange"). Its immediate and ultimate holding company is DJM Holding Ltd. ("DJM") and its ultimate controlling shareholders are Messrs. Liu Dejian, Liu Luyuan and Zheng Hui (the "Ultimate Controlling Shareholders"). The address of the registered office of the Company is Cricket Square, Hutchins Drive, P.O. Box 2681, Grand Cayman KY1-1111, Cayman Islands and its principal place of business is Units 2001-05 & 11, 20/F, Harbour Centre, 25 Harbour Road, Wan Chai, Hong Kong.

The Company is an investment holding company. The principal activities of the Company and its subsidiaries (collectively referred to as the "Group") are engaged in (i) online and mobile games development, including games design, programming and graphics and online and mobile games operation, (ii) education business, (iii) mobile solution, products and marketing business and (iv) property project business.

The consolidated financial statements are presented in Renminbi ("RMB"), which is the same as the functional currency of the Company. The units of presentation of the consolidated financial statements have been changed from thousand to million in the current year. The directors of the Company consider this presentation to be more understandable while does not omit material information.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs")

Amendments to HKFRSs that are mandatorily effective for the current year

In the current year, the Group has applied the following amendments to HKFRSs issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") for the first time, which are mandatorily effective for the annual period beginning on or after 1 January 2022 for the preparation of the consolidated financial statements:

Amendments to HKFRS 3	Reference to the Conceptual Framework
Amendments to HKAS 16	Property, Plant and Equipment — Proceeds before intended Use
Amendments to HKAS 37	Onerous Contracts — Cost of Fulfilling a Contract
Amendments to HKFRSs	Annual Improvements to HKFRSs 2018-2020

The application of the amendments to HKFRSs in the current year has had no material impact on the Group's financial positions and performance for the current and prior years and/or on the disclosures set out in these consolidated financial statements.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (Cont'd)

Amendments to HKFRSs that are mandatorily effective for the current year (Cont'd)

Impacts on application of Amendments to HKFRS 3 "Reference to the Conceptual Framework"

The Group has applied the amendments to business combinations for which the acquisition date was on or after 1 January 2022. The amendments update a reference in HKFRS 3 "Business Combinations" so that it refers to the Conceptual Framework for Financial Reporting 2018 issued in June 2018 (the "Conceptual Framework") instead of Framework for the Preparation and Presentation of Financial Statements (replaced by the Conceptual Framework for Financial Reporting 2010 issued in October 2010), add a requirement that, for transactions and events within the scope of HKAS 37 "Provisions, Contingent Liabilities and Contingent Assets" ("HKAS 37") or HK(IFRIC) — Int 21 "Levies" ("HK(IFRIC) — Int 21"), an acquirer applies HKAS 37 or HK(IFRIC) — Int 21 instead of the Conceptual Framework to identify the liabilities it has assumed in a business combination and add an explicit statement that an acquirer does not recognise contingent assets acquired in a business combination.

The application of the amendments in the current year has had no impact on the Group's consolidated financial statements.

New and Amendments to HKFRSs in issue but not yet effective

The Group has not early applied the following new and amendments to HKFRSs that have been issued but are not yet effective:

HKFRS 17 (including the October 2020 and February 2022 Amendments to HKFRS 17)	Insurance Contracts[1]
Amendments to HKFRS 10 and HKAS 28	Sale or Contribution of Assets between an Investor and its Associate or Joint Venture[2]
Amendments to HKFRS 16	Lease Liability in a Sale and Leaseback[3]
Amendments to HKAS 1	Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)[3]
Amendments to HKAS 1	Non-current Liabilities with Covenants[3]
Amendments to HKAS 1 and HKFRS Practice Statement 2	Disclosure of Accounting Policies[1]
Amendments to HKAS 8	Definition of Accounting Estimates[1]
Amendments to HKAS 12	Deferred Tax related to Assets and Liabilities arising from a Single Transaction[1]

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (Cont'd)

New and Amendments to HKFRSs in issue but not yet effective (Cont'd)

[1] Effective for annual periods beginning on or after 1 January 2023.

[2] Effective for annual periods beginning on or after a date to be determined.

[3] Effective for annual periods beginning on or after 1 January 2024.

Except for the amendments to HKFRSs mentioned below, the directors of the Company anticipate that the application of all other new and amendments to HKFRSs will have no material impact on the consolidated financial statements in the foreseeable future.

Amendments to HKAS 1 "Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)" (the "2020 Amendments") and Amendments to HKAS 1 "Non-current Liabilities with Covenants" (the "2022 Amendments")

The 2020 Amendments provide clarification and additional guidance on the assessment of right to defer settlement for at least twelve months from reporting date for classification of liabilities as current or non-current, which:

- specify that the classification of liabilities as current or non-current should be based on rights that are in existence at the end of the reporting period. Specifically, the amendments clarify that:

  (i) the classification should not be affected by management intentions or expectations to settle the liability within 12 months; and

  (ii) if the right is conditional on the compliance with covenants, the right exists if the conditions are met at the end of the reporting period, even if the lender does not test compliance until a later date; and

- clarify that if a liability has terms that could, at the option of the counterparty, result in its settlement by the transfer of the entity's own equity instruments, these terms do not affect its classification as current or non-current only if the entity recognises the option separately as an equity instrument applying HKAS 32 "Financial Instruments: Presentation" ("HKAS 32").

In addition, Hong Kong Interpretation 5 was revised as a consequence of the 2020 Amendments to HKAS 1 to align the corresponding wordings with no change in conclusion.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (Cont'd)

New and Amendments to HKFRSs in issue but not yet effective (Cont'd)

Amendments to HKAS 1 "Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)" (the "2020 Amendments") and Amendments to HKAS 1 "Non-current Liabilities with Covenants" (the "2022 Amendments") (Cont'd)

The 2022 Amendments modify the requirements introduced by the 2020 Amendments on how an entity classifies debt and other financial liabilities with covenants as current or non-current. The 2022 Amendments specify that only covenants with which the entity is required to comply with on or before the end of the reporting period affect the entity's right to defer settlement of a liability for at least twelve months after the reporting date. Covenants which are required to comply with only after the reporting period do not affect whether that right exists at the end of the reporting period. The 2022 Amendments also specify the disclosure requirements about information that enables users of financial statements to understand the risk that the liabilities could become repayable within twelve months after the reporting period, if the entity classify liabilities arising from loan arrangements as non-current when the entity's right to defer settlement of those liabilities is subject to the entity complying with covenants within twelve months after the reporting period.

The 2022 Amendments also defer the effective date of the 2020 Amendments to annual reporting periods beginning on or after 1 January 2024. The 2022 Amendments, together with the 2020 Amendments, are effective for annual reporting periods beginning on or after 1 January 2024, with early application permitted. If an entity applies the 2020 Amendments for an earlier period after the issue of the 2022 Amendments, the entity should also apply the 2022 Amendments for that period.

As at 31 December 2022, the Group's outstanding convertible instruments, comprising convertible and exchangeable bonds (Note 35) and convertible preferred shares (Note 36), include counterparty conversion options that do not meet equity instruments classification by applying HKAS 32. The Group classified as current or non-current based on the earliest date in which the Group has the obligation to redeem these instruments through cash settlement.

In respect of the convertible and exchangeable bonds, the host debt component is measured at amortised cost with carrying amount of RMB1,333 million, of which RMB16 million and RMB1,317 million are classified as current and non-current respectively as set out in Note 35 as at 31 December 2022, while the derivative component (including the conversion options) is measured at fair value with carrying amount of nil as at 31 December 2022 as set out in Note 22. For the convertible preferred shares, the financial liability component (representing the conversion feature) is measured at FVTPL and no financial liability component is measured at amortised cost.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (Cont'd)

New and Amendments to HKFRSs in issue but not yet effective (Cont'd)

Amendments to HKAS 1 "Classification of Liabilities as Current or Non-current and related amendments to Hong Kong Interpretation 5 (2020)" (the "2020 Amendments") and Amendments to HKAS 1 "Non-current Liabilities with Covenants" (the "2022 Amendments") (Cont'd)

Upon the application of the 2020 Amendments, in addition to the obligation to redeem through cash settlement, the transfer of equity instruments upon the exercise of the conversion options that do not meet equity instruments classification also constitute settlement of the convertible instruments. Given that the conversion options are exercisable anytime, the host liability and the derivative component of the Group's convertible and exchangeable bonds amounting to RMB1,317 million would be reclassified to current liabilities as the holders have the option to convert within twelve months. Based on the Group's outstanding liabilities as at 31 December 2022, the application of the 2022 Amendments has no impact to the classification of the Group's liabilities.

Amendments to HKAS 1 and HKFRS Practice Statement 2 "Disclosure of Accounting Policies"

HKAS 1 is amended to replace all instances of the term "significant accounting policies" with "material accounting policy information". Accounting policy information is material if, when considered together with other information included in an entity's financial statements, it can reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements.

The amendments also clarify that accounting policy information may be material because of the nature of the related transactions, other events or conditions, even if the amounts are immaterial. However, not all accounting policy information relating to material transactions, other events or conditions is itself material. If an entity chooses to disclose immaterial accounting policy information, such information must not obscure material accounting policy information.

HKFRS Practice Statement 2 "Making Materiality Judgements" (the "Practice Statement") is also amended to illustrate how an entity applies the "four-step materiality process" to accounting policy disclosures and to judge whether information about an accounting policy is material to its financial statements. Guidance and examples are added to the Practice Statement.

The application of the amendments is not expected to have significant impact on the financial position or performance of the Group but may affect the disclosures of the Group's significant accounting policies. The impacts of application, if any, will be disclosed in the Group's future consolidated financial statements.

2. APPLICATION OF AMENDMENTS TO HONG KONG FINANCIAL REPORTING STANDARDS ("HKFRSs") (Cont'd)

New and Amendments to HKFRSs in issue but not yet effective (Cont'd)

Amendments to HKAS 8 "Definition of Accounting Estimates"

The amendments define accounting estimates as "monetary amounts in financial statements that are subject to measurement uncertainty". An accounting policy may require items in financial statements to be measured in a way that involves measurement uncertainty — that is, the accounting policy may require such items to be measured at monetary amounts that cannot be observed directly and must instead be estimated. In such a case, an entity develops an accounting estimate to achieve the objective set out by the accounting policy. Developing accounting estimates involves the use of judgements or assumptions based on the latest available, reliable information.

In addition, the concept of changes in accounting estimates in HKAS 8 is retained with additional clarifications.

The application of the amendments is not expected to have significant impact on the Group's consolidated financial statements.

Amendments to HKAS 12 "Deferred Tax related to Assets and Liabilities arising from a Single Transaction"

The amendments narrow the scope of the recognition exemption of deferred tax liabilities and deferred tax assets in paragraphs 15 and 24 of HKAS 12 "Income Taxes" ("HKAS 12") so that it no longer applies to transactions that, on initial recognition, give rise to equal taxable and deductible temporary differences.

As disclosed in Note 3.2, for leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 requirements to the relevant assets and liabilities as a whole. Temporary differences relating to relevant assets and liabilities are assessed on a net basis.

Upon the application of the amendments, the Group will recognise a deferred tax asset (to the extent that it is probable that taxable profit will be available against which the deductible temporary difference can be utilised) and a deferred tax liability for all deductible and taxable temporary differences associated with the right-of-use assets and the lease liabilities.

The amendments are effective for annual reporting periods beginning on 1 January 2023, with early application permitted. As at 31 December 2022, the carrying amounts of right-of-use assets and lease liabilities which are subject to the amendments amounted to RMB106 million and RMB117 million respectively. The Group is still in the process of assessing the full impact of the application of the amendments.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES

3.1 Basis of preparation of consolidated financial statements

The consolidated financial statements have been prepared in accordance with HKFRSs issued by the HKICPA. For the purpose of preparation of the consolidated financial statements, information is considered material if such information is reasonably expected to influence decisions made by primary users. In addition, the consolidated financial statements include applicable disclosures required by the Rules Governing the Listing of Securities on the Stock Exchange ("Listing Rules") and by the Hong Kong Companies Ordinance.

The consolidated financial statements have been prepared on the historical cost basis except for certain financial instruments and investment properties that are measured at fair values at the end of each reporting period, as explained in the accounting policies set out below.

Historical cost is generally based on the fair value of the consideration given in exchange for goods and services.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, regardless of whether that price is directly observable or estimated using another valuation technique. In estimating the fair value of an asset or a liability, the Group takes into account the characteristics of the asset or liability if market participants would take those characteristics into account when pricing the asset or liability at the measurement date. Fair value for measurement and/or disclosure purposes in these consolidated financial statements is determined on such a basis, except for share-based payment transactions that are within the scope of HKFRS 2 "Share-based Payment" ("HKFRS 2"), leasing transactions that are accounted for in accordance with HKFRS 16 "Leases" ("HKFRS 16"), and measurements that have some similarities to fair value but are not fair value, such as net realisable value in HKAS 2 "Inventories" or value in use in HKAS 36 "Impairment of Assets" ("HKAS 36").

In addition, for financial reporting purposes, fair value measurements are categorised into Level 1, 2 or 3 based on the degree to which the inputs to the fair value measurements are observable and the significance of the inputs to the fair value measurement in its entirety, which are described as follows:

- Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date;
- Level 2 inputs are inputs, other than quoted prices included within Level 1, that are observable for the asset or liability, either directly or indirectly; and
- Level 3 inputs are unobservable inputs for the asset or liability.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies

Basis of consolidation

The consolidated financial statements incorporate the financial statements of the Company and entities including Structured Entities (as defined in Note 4) controlled by the Company and its subsidiaries. Control is achieved when the Company:

- has power over the investee;
- is exposed, or has rights, to variable returns from its involvement with the investee; and
- has the ability to use its power to affect its returns.

The Group reassesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control listed above.

Consolidation of a subsidiary begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Specifically, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated statement of profit or loss and other comprehensive income from the date the Group gains control until the date when the Group ceases to control the subsidiary.

Profit or loss and each item of other comprehensive income ("OCI") are attributed to the owners of the Company and to the non-controlling interests. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with the Group's accounting policies.

All intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

Non-controlling interests in subsidiaries are presented separately from the Group's equity therein, which represent present ownership interests entitling their holders to a proportionate share of net assets of the relevant subsidiaries upon liquidation.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Basis of consolidation (Cont'd)

Changes in the Group's interests in existing subsidiaries

Changes in the Group's interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's relevant components of equity and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries, including re-attribution of relevant reserves between the Group and the non-controlling interests according to the Group's and the non-controlling interests' proportionate interests.

Any difference between the amount by which the non-controlling interests are adjusted, and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, the assets and liabilities of that subsidiary and non-controlling interests (if any) are derecognised. A gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the carrying amount of the assets (including goodwill), and liabilities of the subsidiary attributable to the owners of the Company. All amounts previously recognised in OCI in relation to that subsidiary are accounted for as if the Group had directly disposed of the related assets or liabilities of the subsidiary (i.e. reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable HKFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under HKFRS 9 "Financial Instruments" ("HKFRS 9") or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Business combinations or asset acquisitions

Optional concentration test

The Group can elect to apply an optional concentration test, on a transaction-by-transaction basis, that permits a simplified assessment of whether an acquired set of activities and assets is not a business. The concentration test is met if substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. The gross assets under assessment exclude cash and cash equivalents, deferred tax assets, and goodwill resulting from the effects of deferred tax liabilities. If the concentration test is met, the set of activities and assets is determined not to be a business and no further assessment is needed.

Asset acquisitions

When the Group acquires a group of assets that do not constitute a business, the Group identifies and recognises the individual identifiable assets acquired and liabilities assumed by allocating the purchase price first to financial assets/financial liabilities at the respective fair values, the remaining balance of the purchase price is then allocated to the other identifiable assets and liabilities on the basis of their relative fair values at the date of purchase. Such a transaction does not give rise to goodwill or bargain purchase gain.

Business combinations

A business is an integrated set of activities and assets which includes an input and a substantive process that together significantly contribute to the ability to create outputs. The acquired processes are considered substantive if they are critical to the ability to continue producing outputs, including an organised workforce with the necessary skills, knowledge, or experience to perform the related processes or they significantly contribute to the ability to continue producing outputs and are considered unique or scarce or cannot be replaced without significant cost, effort, or delay in the ability to continue producing outputs.

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. Acquisition-related costs are recognised in profit or loss as incurred.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Business combinations or asset acquisitions (Cont'd)

Business combinations (Cont'd)

For business combinations in which the acquisition date is on or after 1 January 2022, the identifiable assets acquired and liabilities assumed must meet the definitions of an asset and a liability in the Conceptual Framework except for transactions and events within the scope of HKAS 37 or HK(IFRIC)-Int 21, in which the Group applies HKAS 37 or HK(IFRIC)- Int 21 instead of the Conceptual Framework to identify the liabilities it has assumed in a business combination. Contingent assets are not recognised.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognised at their fair value, except that:

- deferred tax assets or liabilities, and assets or liabilities related to employee benefit arrangements are recognised and measured in accordance with HKAS 12 and HKAS 19 "Employee Benefits" respectively;

- liabilities or equity instruments related to share-based payment arrangements of the acquiree or share-based payment arrangements of the Group entered into to replace share-based payment arrangements of the acquiree are measured in accordance with HKFRS 2 at the acquisition date (see the accounting policy below);

- assets (or disposal groups) that are classified as held for sale in accordance with HKFRS 5 "Non-current Assets Held for Sale and Discontinued Operations" are measured in accordance with that standard; and

- lease liabilities are recognised and measured at the present value of the remaining lease payments (as defined in HKFRS 16) as if the acquired leases were new leases at the acquisition date, except for leases for which (a) the lease term ends within 12 months of the acquisition date; or (b) the underlying asset is of low value. Right-of-use assets are recognised and measured at the same amount as the relevant lease liabilities, adjusted to reflect favourable or unfavourable terms of the lease when compared with market terms.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Business combinations or asset acquisitions (Cont'd)

Business combinations (Cont'd)

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net amount of the identifiable assets acquired and the liabilities assumed as at acquisition date. If, after re-assessment, the net amount of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognised immediately in profit or loss as a bargain purchase gain.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the relevant subsidiary's net assets in the event of liquidation are initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets.

When the consideration transferred by the Group in a business combination includes a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively. Measurement period adjustments are adjustments that arise from additional information obtained during the "measurement period" (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured to fair value at subsequent reporting dates, with the corresponding gain or loss being recognised in profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Business combinations or asset acquisitions (Cont'd)

Business combinations (Cont'd)

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (i.e. the date when the Group obtains control), and the resulting gain or loss, if any, is recognised in profit or loss or OCI, as appropriate. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in OCI and measured under HKFRS 9 would be accounted for on the same basis as would be required if the Group had disposed directly of the previously held equity interest.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted retrospectively during the measurement period (see above), and additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Goodwill

Goodwill arising on an acquisition of a business is carried at cost as established at the date of acquisition of business (see the accounting policy above) less accumulated impairment losses, if any.

For the purposes of impairment testing, goodwill is allocated to each of the Group's cash-generating units ("CGUs") (or group of CGUs) that is expected to benefit from the synergies of the combination, which represent the lowest level at which the goodwill is monitored for internal management purposes and not larger than an operating segment.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Goodwill (Cont'd)

A CGU (or group of CGUs) to which goodwill has been allocated is tested for impairment annually, or more frequently when there is indication that the unit may be impaired. For goodwill arising on an acquisition in a reporting period, the CGU (or group of CGUs) to which goodwill has been allocated is tested for impairment before the end of that reporting period. If the recoverable amount is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill and then to the other assets on a pro rata basis based on the carrying amount of each asset in the unit (or group of CGUs).

On disposal of the relevant CGU or any of the CGU within the group of CGUs, the attributable amount of goodwill is included in the determination of the amount of profit or loss on disposal. When the Group disposes of an operation within the CGU (or a CGU within a group of CGUs), the amount of goodwill disposed of is measured on the basis of the relative values of the operation (or the CGU) disposed of and the portion of the CGU (or the group of CGUs) retained.

The Group's policy for goodwill arising on the acquisition of an associate and a joint venture is described below.

Investments in associates and joint ventures

An associate is an entity over which the Group has significant influence. Significant influence is the power to participate in the financial and operating policy decisions of the investee but is not control or joint control over those policies.

A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint arrangement. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Investments in associates and joint ventures (Cont'd)

The results and assets and liabilities of associates and joint ventures are incorporated in these consolidated financial statements using the equity method of accounting. The financial statements of associates and joint ventures used for equity accounting purposes are prepared using uniform accounting policies as those of the Group for like transactions and events in similar circumstances. Under the equity method, an investment in an associate or a joint venture is initially recognised in the consolidated statement of financial position at cost and adjusted thereafter to recognise the Group's share of the profit or loss and OCI of the associate or joint venture. When the Group's share of losses of an associate or a joint venture exceeds the Group's interest in that associate or joint venture (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate or joint venture), the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate or joint venture.

An investment in an associate or a joint venture is accounted for using the equity method from the date on which the investee becomes an associate or a joint venture. On acquisition of the investment in an associate or a joint venture, any excess of the cost of the investment over the Group's share of the net fair value of the identifiable assets and liabilities of the investee is recognised as goodwill, which is included within the carrying amount of the investment. Any excess of the Group's share of the net fair value of the identifiable assets and liabilities over the cost of the investment, after reassessment, is recognised immediately in profit or loss in the period in which the investment is acquired.

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Investments in associates and joint ventures (Cont'd)

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 the investee with a resulting gain or loss being recognised in profit or loss. When the Group retains an interest in the former associate or joint venture and the retained interest is a financial asset within the scope of HKFRS 9, the Group measures the retained interest at fair value at that date and the fair value is regarded as its fair value on initial recognition. The difference between the carrying amount of the associate or joint venture and the fair value of any retained interest and any proceeds from disposing of the relevant interest in the associate or joint venture is included in the determination of the gain or loss on disposal of the associate or joint venture. In addition, the Group accounts for all amounts previously recognised in OCI in relation to that associate or joint venture on the same basis as would be required if that associate or joint venture had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognised in OCI by that associate or joint venture would be reclassified to profit or loss on the disposal of the related assets or liabilities, the Group reclassifies the gain or loss from equity to profit or loss (as a reclassification adjustment) upon disposal/partial disposal of the relevant associate or joint venture.

When a group entity transacts with an associate or a joint venture of the Group, profits and losses resulting from the transactions with the associate or joint venture are recognised in the Group's consolidated financial statements only to the extent of interests in the associate or joint venture that are not related to the Group.

Changes in the Group's interests in associates and joint ventures

The Group continues to use the equity method when an investment in an associate becomes an investment in a joint venture or an investment in a joint venture becomes an investment in an associate. There is no remeasurement to fair value upon such changes in ownership interests.

When the Group reduces its ownership interest in an associate or a joint venture but the Group continues to use the equity method, the Group reclassifies to profit or loss the proportion of the gain or loss that had previously been recognised in OCI relating to that reduction in ownership interest if that gain or loss would be reclassified to profit or loss on the disposal of the related assets or liabilities.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Investments in associates and joint ventures (Cont'd)

Acquisition of additional interests in associates or joint ventures

When the Group increases its ownership interest in an associate or a joint venture but the Group continues to use the equity method, goodwill is recognised at acquisition date if there is excess of the consideration paid over the share of carrying amount of net assets attributable to the additional interests in associates or joint ventures acquired. Any excess of share of carrying amount of net assets attributable to the additional interests in associates or joint ventures acquired over the consideration paid are recognised in the profit or loss in the period in which the additional interest are acquired.

Revenue from contracts with customers

The Group recognises revenue when (or as) a performance obligation is satisfied, i.e. when "control" of the goods or services underlying the particular performance obligation is transferred to the customer.

A performance obligation represents a goods and service (or a bundle of goods or services) that is distinct or a series of distinct goods or services that are substantially the same.

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

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Revenue from contracts with customers (Cont'd)

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

A contract asset represents the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer that is not yet unconditional. It is assessed for impairment in accordance with HKFRS 9. In contrast, a receivable represents the Group's unconditional right to consideration, i.e. only the passage of time is required before payment of that consideration is due.

A contract liability represents the Group's obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer.

A contract asset and a contract liability relating to the same contract are accounted for and presented on a net basis.

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

Output method

The progress towards complete satisfaction of a performance obligation on revenue from provision of mobile solution, products and marketing services is measured based on output method, which is to recognise revenue on the basis of direct measurements of the value of the goods or services transferred to the customer to date relative to the remaining goods or services promised under the contract, that best depict the Group's performance in transferring control of goods or services.

As a practical expedient, if the Group has a right to consideration in an amount that corresponds directly with the value of the Group's performance completed to date, the Group recognises revenue in the amount to which the Group has the right to invoice. The contracts on provision of mobile solution, products and marketing services include payment schedules which require stage payments over the service period with reference to different pre-determined milestones reached.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Revenue from contracts with customers (Cont'd)

Over time revenue recognition: measurement of progress towards complete satisfaction of a performance obligation (Cont'd)

Input method

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

Variable consideration

For contracts that contain variable consideration whereby the Group will actually transfer cash or credit note to a distributor when a rebate has been achieved, the Group estimates the amount of consideration to which it will be entitled using the most likely amount, and using the method that best predicts the amount of consideration to which the Group will be entitled.

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

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Revenue from contracts with customers (Cont'd)

Existence of significant financing component

In determining the transaction price, the Group adjusts the promised amount of consideration for the effects of the time value of money, if the timing of payments agreed (either explicitly or implicitly) provides the customer or the Group with a significant benefit of financing the transfer of goods or services to the customer. In those circumstances, the contract contains a significant financing component. A significant financing component may exist regardless of whether the promise of financing is explicitly stated in the contract or implied by the payment terms agreed to by the parties to the contract.

For advance payments received from customers before the transfer of the associated goods or services in which the Group adjusts for the promised amount of consideration for a significant financing component, the Group applies a discount rate that would be reflected in a separate financing transaction between the Group and the customer at contract inception. The relevant interest expenses during the period between the advance payments were received and the transfer of the associated goods and services are accounted for on the same basis as other borrowing costs.

Warranties

If a customer has the option to purchase an extended warranty separately, the Group accounts for the extended warranty as a separate performance obligation and allocates a portion of the transaction price to that performance obligation.

If a customer does not have the option to purchase an extended warranty separately, the Group accounts for the basic warranty in accordance with HKAS 37 unless the warranty provides the customer with a service in addition to the assurance that the product complies with agreed-upon specifications (i.e. service-type warranties).

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Revenue from contracts with customers (Cont'd)

Principal versus agent

When another party is involved in providing goods or services to a customer, the Group determines whether the nature of its promise is a performance obligation to provide the specified goods or services itself (i.e. the Group is a principal) or to arrange for those goods or services to be provided by the other party (i.e. the Group is an agent).

The Group is a principal if it controls the specified good or service before that good or service is transferred to a customer. The Group is an agent if its performance obligation is to arrange for the provision of the specified good or service by another party. In this case, the Group does not control the specified good or service provided by another party before that good or service is transferred to the customer. When the Group acts as an agent, it recognises revenue in the amount of any fee or commission to which it expects to be entitled in exchange for arranging for the specified goods or services to be provided by the other party.

Leases

Definition of 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.

For contracts entered into or modified on or after the date of initial application of HKFRS 16 or arising from business combinations, the Group assesses whether a contract is or contains a lease based on the definition under HKFRS 16 at inception or modification date. Such contract will not be reassessed unless the terms and conditions of the contract are subsequently changed.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessee

Short-term leases

The Group applies the short-term lease recognition exemption to leases of land and buildings that have a lease term of 12 months or less from the commencement date and do not contain a purchase option. Lease payments on short-term leases are recognised as expense on a straight-line basis over the lease term.

Right-of-use assets

The cost of right-of-use asset includes:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentives received;
- any initial direct costs incurred by the Group; and
- an estimate of costs to be incurred by the Group in dismantling and removing the underlying assets, restoring the site on which it is located or restoring the underlying asset to the condition required by the terms and conditions of the lease.

Except for those that are classified as investment properties and measured under fair value model, right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessee (Cont'd)

Right-of-use assets (Cont'd)

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

The Group presents right-of-use assets that do not meet the definition of investment property, properties under development and properties for sale as a separate line item on the consolidated statement of financial position. Right-of-use assets that meet the definition of investment property and inventory are presented within "investment properties", "properties under development" or "properties for sale", as appropriate.

Refundable rental deposits

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

Lease liabilities

At the commencement date of a lease, the Group recognises and measures the lease liability at the present value of lease payments that are unpaid at that date. In calculating the present value of lease payments, the Group uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease is not readily determinable.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessee (Cont'd)

Lease liabilities (Cont'd)

The lease payments include:

- fixed payments (including in-substance fixed payments) less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise the option; and
- payments of penalties for terminating a lease, if the lease term reflects the Group exercising an option to terminate the lease.

After the commencement date, lease liabilities are adjusted by interest accretion and lease payments.

The Group remeasures lease liabilities (and makes a corresponding adjustment to the related right-of-use assets) whenever:

- the lease term has changed or there is a change in the assessment of exercise of a purchase option, in which case the related lease liability is remeasured by discounting the revised lease payments using a revised discount rate at the date of reassessment.
- the lease payments change due to changes in market rental rates following a market rent review, in which cases the related lease liability is remeasured by discounting the revised lease payments using the initial discount rate.

The Group presents lease liabilities as a separate line item on the consolidated statement of financial position.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessee (Cont'd)

Lease modifications

The Group accounts for a lease modification as a separate lease if:

- the modification increases the scope of the lease by adding the right to use one or more underlying assets; and
- the consideration for the leases increases by an amount commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to that stand-alone price to reflect the circumstances of the particular contract.

For a lease modification that is not accounted for as a separate lease, the Group remeasures the lease liability based on the lease term of the modified lease by discounting the revised lease payments using a revised discount rate at the effective date of the modification.

The Group accounts for the remeasurement of lease liabilities by making corresponding adjustments to the relevant right-of-use asset. When the modified contract contains a lease component and one or more additional lease or non-lease components, the Group allocates the consideration in the modified contract to each lease component on the basis of the relative stand-alone price of the lease component and the aggregate stand-alone price of the non-lease components.

Changes in the basis for determining the future lease payments as a result of interest rate benchmark reform

For changes in the basis for determining the future lease payments as a result of interest rate benchmark reform, the Group applies the practical expedient to remeasure the lease liabilities by discounting the revised lease payments using the unchanged discount rate and makes a corresponding adjustment to the related right-of-use assets. A lease modification is required by interest rate benchmark reform if, and only if, both of these conditions are met:

- the modification is necessary as a direct consequence of interest rate benchmark reform; and
- the new basis for determining the lease payments is economically equivalent to the previous basis (i.e. the basis immediately preceding the modification).

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessor

Classification and measurement of leases

Leases for which the Group is a lessor are classified as finance or operating leases. Whenever the terms of the lease transfer substantially all the risks and rewards incidental to ownership of an underlying asset to the lessee, the contract is classified as a finance lease. All other leases are classified as operating leases.

Rental income from operating leases is recognised in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset, and such costs are recognised as an expense on a straight-line basis over the lease term except for investment properties measured under fair value model.

Rental income which are not derived from the Group's ordinary course of business are presented as other income.

Refundable rental deposits

Refundable rental deposits received are accounted for under HKFRS 9 and initially measured at fair value. Adjustments to fair value at initial recognition are considered as additional lease payments from lessees.

Sublease

When the Group is an intermediate lessor, it accounts for the head lease and the sublease as two separate contracts. The sublease is classified as a finance or operating lease by reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Leases (Cont'd)

The Group as a lessor (Cont'd)

Lease modification

Changes in considerations of lease contracts that were not part of the original terms and conditions are accounted for as lease modifications, including lease incentives provided through forgiveness or reduction of rentals.

The Group accounts for a modification to an operating lease as a new lease from the effective date of the modification, considering any prepaid or accrued lease payments relating to the original lease as part of the lease payments for the new lease.

Changes in the basis for determining the future lease payments as a result of interest rate benchmark reform

For changes in the basis for determining the future lease payments as a result of interest rate benchmark reform for a finance lease that is not accounted for as a separate lease, the Group applies the same accounting policies as those applicable to financial instruments (see accounting policy below).

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Foreign currencies

In preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency (foreign currencies) are recognised at the rates of exchange prevailing on the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing on the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

Exchange differences arising on the settlement of monetary items, and on the retranslation of monetary items, are recognised in profit or loss in the period in which they arise.

For the purposes of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are translated into the presentation currency of the Group (i.e. RMB) using exchange rates prevailing at the end of each reporting period. Income and expense items are translated at the average exchange rates for the period. Exchange differences arising, if any, are recognised in OCI and accumulated in equity under the heading of translation reserve (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, or a partial disposal of an interest in a joint arrangement or an associate that includes a foreign operation of which the retained interest becomes a financial asset), all of the exchange differences accumulated in equity in respect of that operation attributable to the owners of the Company are reclassified to profit or loss.

In addition, in relation to a partial disposal of a subsidiary that does not result in the Group losing control over the subsidiary, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests and are not recognised in profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Foreign currencies (Cont'd)

Goodwill and fair value adjustments on identifiable assets acquired and liabilities assumed through acquisition of a foreign operation are treated as assets and liabilities of that foreign operation and translated at the rate of exchange prevailing at the end of each reporting period. Exchange differences arising are recognised in OCI.

Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets, which are assets that necessarily take a substantial period of time to get ready for their intended use or sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale. For properties under development for which revenue is recognised over time, the Group ceases to capitalise borrowing costs as soon as the properties are ready for the Group's intended sale.

Any specific borrowing that remain outstanding after the related asset is ready for its intended use or sale is included in the general borrowing pool for calculation of capitalisation rate on general borrowings. Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

All other borrowing costs are recognised in profit or loss in the period in which they are incurred.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Government grants

Government grants are not recognised until there is reasonable assurance that the Group will comply with the conditions attaching to them and that the grants will be received.

Government grants are recognised in profit or loss on a systematic basis over the periods in which the Group recognises as expenses the related costs for which the grants are intended to compensate. Specifically, government grants whose primary condition is that the Group should purchase, construct or otherwise acquire non-current assets are recognised as other payables in the consolidated statement of financial position and transferred to profit or loss on a systematic and rational basis over the useful lives of the related assets.

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

Employee benefits

Retirement benefit costs

Payments to defined contribution retirement benefit plans, including state-managed retirement benefit schemes and the Mandatory Provident Fund Scheme, are recognised as an expense when employees have rendered services entitling them to the contributions.

Termination benefits

A liability for a termination benefit is recognised at the earlier of when the Group entity can no longer withdraw the offer of the termination benefit and when it recognises any related restructuring costs.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Employee benefits (Cont'd)

Short-term and other long-term employee benefits

Short-term employee benefits are recognised at the undiscounted amount of the benefits expected to be paid as and when employees rendered the services. All short-term employee benefits are recognised as an expense unless another HKFRS requires or permits the inclusion of the benefit in the cost of an asset.

A liability is recognised for benefits accruing to employees (such as wages and salaries, annual leave and sick leave) after deducting any amount already paid.

Liabilities recognised in respect of other long-term employee benefits are measured at the present value of the estimated future cash outflows expected to be made by the Group in respect of services provided by employees up to the reporting date. Any changes in the liabilities' carrying amounts resulting from service cost, interest and remeasurements are recognised in profit or loss except to the extent that another HKFRS requires or permits their inclusion in the cost of an asset.

Share-based payments

Equity-settled share-based payment transactions

Share options granted to employees

Equity-settled share-based payments to employees and others providing similar services are measured at the fair value of the equity instruments at the grant date.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Share-based payments (Cont'd)

Equity-settled share-based payment transactions (Cont'd)

Share options granted to employees (Cont'd)

The fair value of the equity-settled share-based payments determined at the grant date without taking into consideration all non-market vesting conditions is expensed on a straight-line basis over the vesting period, based on the Group's estimate of equity instruments that will eventually vest, with a corresponding increase in equity (employee share-based compensation reserve). At the end of each reporting period, the Group revises its estimate of the number of options expected to vest. The impact of the revision of the original estimates, if any, is recognised in profit or loss such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to employee share-based compensation reserve.

When share options are exercised, the amount previously recognised in employee share-based compensation reserve will be transferred to share premium. When share options are forfeited after the vesting date or are still not exercised at the expiry date, the amount previously recognised in employee share-based compensation reserve will be transferred to retained profits.

Share award scheme

The Group operates share award scheme which allows it to grant shares to selected employees. For the shares granted to the employees, the fair value of the employee services received in exchange for the grant of the shares is recognised as an expense over the vesting period. The total amount to be expensed over the vesting period is determined by reference to the fair value of the shares granted.

At the end of each reporting period, the Group revises its estimate of the number of shares that are expected to vest. The impact of the revision of original estimates, if any, is recognised in profit or loss, such that the cumulative expense reflects the revised estimate, with a corresponding adjustment to employee share-based compensation reserve.

At the time when the awarded shares are vested, the amount previously recognised in treasury share reserve and the amount of the employee share-based compensation reserve will be transferred to retained profits.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Taxation

Income tax expense represents the sum of the tax currently payable and deferred tax.

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

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

Deferred tax liabilities are recognised for taxable temporary differences associated with investments in subsidiaries and interests in associates and joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such investments and interests are only recognised to the extent that it is probable that there will be sufficient taxable profits against which to utilise the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Taxation (Cont'd)

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

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realised, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

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

For the purposes of measuring deferred tax liabilities and deferred tax assets for investment properties that are measured using the fair value model, the carrying amounts of such properties are presumed to be recovered entirely through sale, unless the presumption is rebutted. The presumption is rebutted when the investment property is depreciable and is held within a business model whose objective is to consume substantially all of the economic benefits embodied in the investment property over time, rather than through sale.

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Taxation (Cont'd)

For leasing transactions in which the tax deductions are attributable to the lease liabilities, the Group applies HKAS 12 "Income Taxes" requirements to the leasing transaction as a whole. Temporary differences relating to right-of-use assets and lease liabilities are assessed on a net basis. Excess of depreciation on right-of-use assets over the lease payments for the principal portion of lease liabilities resulting in net deductible temporary differences.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to set off current tax assets against current tax liabilities and when they relate to income taxes levied to the same taxable entity by the same taxation authority.

Current and deferred tax are recognised in profit or loss, except when they relate to items that are recognised in OCI or directly in equity, in which case, the current and deferred tax are also recognised in OCI or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

In assessing any uncertainty over income tax treatments, the Group considers whether it is probable that the relevant tax authority will accept the uncertain tax treatment used, or proposed to be used by individual group entities in their income tax filings. If it is probable, the current and deferred taxes are determined consistently with the tax treatment in the income tax filings. If it is not probable that the relevant taxation authority will accept an uncertain tax treatment, the effect of each uncertainty is reflected by using either the most likely amount or the expected value.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Property, plant and equipment

Property, plant and equipment are tangible assets that are held for use in the production or supply of goods or services, or for administrative purposes (other than construction in progress). Property, plant and equipment are stated in the consolidated statement of financial position at cost less subsequent accumulated depreciation and subsequent accumulated impairment losses, if any.

Properties in the course of construction for production, supply or administrative purposes are carried at cost, less any recognised impairment loss. Costs include any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and, for qualifying assets, borrowing costs capitalised in accordance with the Group's accounting policy. Depreciation of these assets, on the same basis as other property assets, commences when the assets are ready for their intended use.

When the Group makes payments for ownership interests of properties which includes both leasehold land and building elements, the entire consideration is allocated between the leasehold land and the building elements in proportion to the relative fair values at initial recognition.

To the extent the allocation of the relevant payments can be made reliably, interest in leasehold land that is accounted for as an operating lease is presented as "right-of-use assets" in the consolidated statement of financial position except for those that are classified and accounted for as investment properties under the fair value model. When the consideration cannot be allocated reliably between non-lease building element and undivided interest in the underlying leasehold land, the entire properties are classified as property, plant and equipment.

Depreciation is recognised so as to write off the cost of assets (other than properties under construction) less their residual values over their estimated useful lives, using the straight-line method. The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on the disposal or retirement of an item of property, plant and equipment is determined as the difference between the sales proceeds and the carrying amount of the asset and is recognised in profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Investment properties

Investment properties are properties held to earn rentals and/or for capital appreciation.

Investment properties are initially measured at cost, including any directly attributable expenditure. Subsequent to initial recognition, investment properties are measured at fair value, adjusted to exclude any prepaid or accrued operating lease income.

Gains or losses arising from changes in the fair value of investment properties are included in profit or loss in the period in which they arise.

An investment property is derecognised upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the profit or loss in the period in which the property is derecognised.

Intangible assets

Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortisation and any accumulated impairment losses. Amortisation for intangible assets with finite useful lives is recognised on a straight-line basis over their estimated useful lives.

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

Intangible assets with indefinite useful lives that are acquired separately are carried at cost less any subsequent accumulated impairment losses.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Intangible assets (Cont'd)

Intangible assets acquired in a business combination

Intangible assets acquired in a business combination are recognised separately from goodwill and are initially recognised at their fair value at the acquisition date (which is regarded as their cost).

Subsequent to initial recognition, intangible assets acquired in a business combination with finite useful lives are reported at cost less accumulated amortisation and accumulated impairment losses, on the same basis as intangible assets that are acquired separately. Intangible assets acquired in a business combination with indefinite useful lives are carried at cost less any subsequent accumulated impairment losses.

An intangible asset is derecognised on disposal, or when no future economic benefits are expected from use or disposal. Gains and losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognised in profit or loss when the asset is derecognised.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Intangible assets (Cont'd)

Internally-generated intangible assets — research and development expenditure

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

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

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

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

Subsequent to initial recognition, internally-generated intangible assets are reported at cost less accumulated amortisation and accumulated impairment losses (if any), on the same basis as intangible assets that are acquired separately.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill

At the end of each reporting period, the Group reviews the carrying amounts of its property, plant and equipment, right-of-use assets and intangible assets with finite useful lives to determine whether there is any indication that these assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the relevant asset is estimated in order to determine the extent of the impairment loss, if any. Intangible assets with indefinite useful lives are tested for impairment at least annually, and whenever there is an indication that they may be impaired.

The recoverable amount of property, plant and equipment, right-of-use assets, and intangible assets are estimated individually. When it is not possible to estimate the recoverable amount individually, the Group estimates the recoverable amount of the CGU to which the asset belongs.

In testing a CGU for impairment, corporate assets are allocated to the relevant CGUs when a reasonable and consistent basis of allocation can be established, or otherwise they are allocated to the smallest group of CGUs for which a reasonable and consistent allocation basis can be established. The recoverable amount is determined for the CGU or group of CGUs to which the corporate asset belongs, and is compared with the carrying amount of the relevant CGU or group of CGUs.

Recoverable amount is the higher of 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 (or a CGU) for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a CGU) is estimated to be less than its carrying amount, the carrying amount of the asset (or a CGU) is reduced to its recoverable amount. For corporate assets or portion of corporate assets which cannot be allocated on a reasonable and consistent basis to a CGU, the Group compares the carrying amount of a group of CGUs, including the carrying amounts of the corporate assets or portion of corporate assets allocated to that group of CGUs, with the recoverable amount of the group of CGUs.

In allocating the impairment loss, the impairment loss is allocated first to reduce the carrying amount of any goodwill (if applicable) and then to the other assets on a pro-rata basis based on the carrying amount of each asset in the unit or the group of CGUs. The carrying amount of an asset is not reduced below the highest of its fair value less costs of disposal (if measurable), its value in use (if determinable) and zero. The amount of the impairment loss that would otherwise have been allocated to the asset is allocated pro rata to the other assets of the unit or the group of CGUs. An impairment loss is recognised immediately in profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Impairment on property, plant and equipment, right-of-use assets and intangible assets other than goodwill (Cont'd)

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a CGU or a group of CGUs) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the asset (or a CGU or a group of CGUs) in prior years. A reversal of an impairment loss is recognised immediately in profit or loss.

Cash and cash equivalents

Cash and cash equivalents presented on the consolidated statement of financial position include:

- cash, which comprises of cash on hand and demand deposits, excluding bank balances that are subject to regulatory restrictions that result in such balances no longer meeting the definition of cash; and

- cash equivalents, which comprises of short-term (generally with original maturity of three months or less), highly liquid investments that are readily convertible to a known amount of cash and which are subject to an insignificant risk of changes in value and deposits arising from pre-sale of properties that are held for meeting short-term cash commitments. Cash equivalents are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes.

Bank balances for which use by the Group is subject to third party contractual restrictions are included as part of cash unless the restrictions result in a bank balance no longer meeting the definition of cash. Contractual restrictions affecting use of bank balances are disclosed in Note 29.

Inventories

Inventories are stated at the lower of cost and net realisable value. Costs of inventories are determined on first-in, first-out method. Net realisable value represents the estimated selling price for inventories less all estimated costs of completion and costs necessary to make the sale. Costs necessary to make the sale include incremental costs directly attributable to the sale and non-incremental costs which the Group must incur to make the sale.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Properties under development/properties for sale

Properties under development which are intended to be sold upon completion of development and properties for sale are classified as current assets. Except for the leasehold land element which is measured at cost model in accordance with the accounting policies of right-of-use assets, properties under development/properties for sale are carried at the lower of cost and net realisable value. Cost is determined on a specific identification basis including allocation of the related development expenditure incurred and where appropriate, borrowing costs capitalised. Net realisable value represents the estimated selling price for the properties less estimated cost to completion and costs necessary to make the sales. Costs necessary to make the sale include incremental costs directly attributable to the sale and non-incremental costs which the Group must incur to make the sale.

Properties under development are transferred to properties for sale upon completion.

Transfer from inventories to investment properties carried at fair value

The Group transfers a property from inventories to investment property when there is a change in use to hold the property to earn rentals or/and for capital appreciation rather than for sale in the ordinary course of business, which is evidenced by the inception of an operating lease to another party. Any difference between the fair value of the property at the date of transfer and its previous carrying amount is recognised in profit or loss.

Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle that obligation, and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (where the effect of the time value of money is material).

Warranties

Provisions for the expected cost of assurance-type warranty obligations under the relevant contracts with customers for sales of goods legislation are recognised at the date of sale of the relevant products, at the directors' best estimate of the expenditure required to settle the Group's obligation.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments

Financial assets and financial liabilities are recognised when a group entity becomes a party to the contractual provisions of the instrument. All regular way purchases or sales of financial assets are recognised and derecognised on a trade date basis. Regular way purchases or sales are purchases or sales of financial assets that require delivery of assets within the time frame established by regulation or convention in the market place.

Financial assets and financial liabilities are initially measured at fair value except for trade receivables arising from contracts with customers which are initially measured in accordance with HKFRS 15 "Revenue from Contracts with Customers" ("HKFRS 15"). Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss ("FVTPL")) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at FVTPL are recognised immediately in profit or loss.

The effective interest method is a method of calculating the amortised cost of a financial asset or financial liability and of allocating interest income and interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts and payments (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the financial asset or financial liability, or, where appropriate, a shorter period, to the net carrying amount on initial recognition.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets

Classification and subsequent measurement of financial assets

Financial assets that meet the following conditions are subsequently measured at amortised cost:

- the financial asset is held within a business model whose objective is to collect contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets that meet the following conditions are subsequently measured at fair value through other comprehensive income ("FVTOCI"):

- the financial asset is held within a business model whose objective is achieved by both selling and collecting contractual cash flows; and
- the contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

All other financial assets are subsequently measured at FVTPL, except that at initial recognition of a financial asset the Group may irrevocably elect to present subsequent changes in fair value of an equity instrument in OCI if that equity instrument is neither held for trading nor contingent consideration recognised by an acquirer in a business combination to which HKFRS 3 applies.

In addition, the Group may irrecoverably designate a financial asset that are required to be measured at the amortised cost or FVTOCI as measured at FVTPL if doing so eliminates or significantly reduces an accounting mismatch.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Classification and subsequent measurement of financial assets (Cont'd)

(i) Amortised cost and interest income

Interest income is recognised using the effective interest method for financial assets measured subsequently at amortised cost. Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset, except for financial assets that have subsequently become credit-impaired (see below). For financial assets that have subsequently become credit-impaired, interest income is recognised by applying the effective interest rate to the amortised cost of the financial asset from the next reporting period. If the credit risk on the credit-impaired financial instrument improves so that the financial asset is no longer credit-impaired, interest income is recognised by applying the effective interest rate to the gross carrying amount of the financial asset from the beginning of the reporting period following the determination that the asset is no longer credit-impaired.

(ii) Equity instruments designated as at FVTOCI

Investments in equity instruments at FVTOCI are subsequently measured at fair value with gains and losses arising from changes in fair value recognised in OCI and accumulated in the equity instruments at FVTOCI reserve; and are not subject to impairment assessment. The cumulative gain or loss will not be reclassified to profit or loss on disposal of the equity instruments, and will be transferred to retained profits.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Classification and subsequent measurement of financial assets (Cont'd)

(ii) Equity instruments designated as at FVTOCI (Cont'd)

Dividends from these investments in equity instruments are recognised in profit or loss when the Group's right to receive the dividends is established, unless the dividends clearly represent a recovery of part of the cost of the investment. Dividends are included in the "other income and gains" line item in profit or loss.

(iii) Financial assets at FVTPL

Financial assets that do not meet the criteria for being measured at amortised cost or FVTOCI or designated as FVTOCI are measured at FVTPL.

Financial assets at FVTPL are measured at fair value at the end of each reporting period, with any fair value gains or losses recognised in profit or loss. The net gain or loss recognised in profit or loss excludes any dividend or interest earned on the financial asset and is included in the "other income and gains" line item.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9

The Group performs impairment assessment under expected credit loss ("ECL") model on financial assets (including loan receivables, trade receivables, other receivables, refundable rental deposits, amounts due from joint ventures, restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances), and other item (contract assets) which are subject to impairment assessment under HKFRS 9. The amount of ECL is updated at each reporting date to reflect changes in credit risk since initial recognition.

Lifetime ECL represents the ECL that will result from all possible default events over the expected life of the relevant instrument. In contrast, 12-month ECL ("12m ECL") represents the portion of lifetime ECL that is expected to result from default events that are possible within 12 months after the reporting date. Assessments are done based on the Group's historical credit loss experience, adjusted for factors that are specific to the debtors, general economic conditions and an assessment of both the current conditions at the reporting date as well as the forecast of future conditions.

The Group always recognises lifetime ECL for trade receivables and contract assets. The ECL on these assets are assessed individually for credit-impaired debtors and collectively for others using a provision matrix with appropriate groupings.

For all other instruments, the Group measures the loss allowance equal to 12m ECL, unless there has been a significant increase in credit risk since initial recognition, in which case the Group recognises lifetime ECL. The assessment of whether lifetime ECL should be recognised is based on significant increases in the likelihood or risk of a default occurring since initial recognition.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (Cont'd)

(i) Significant increase in credit risk

In assessing whether the credit risk has increased significantly since initial recognition, the Group compares the risk of a default occurring on the financial instrument as at the reporting date with the risk of a default occurring on the financial instrument as at the date of initial recognition. In making this assessment, the Group considers both quantitative and qualitative information that is reasonable and supportable, including historical experience and forward-looking information that is available without undue cost or effort.

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

- an actual or expected significant deterioration in the financial instrument's external (if available) or internal credit rating;
- significant deterioration in external market indicators of credit risk, e.g. a significant increase in the credit spread, the credit default swap prices for the debtor;
- existing or forecast adverse changes in business, financial or economic conditions that are expected to cause a significant decrease in the debtor's ability to meet its debt obligations;
- an actual or expected significant deterioration in the operating results of the debtor; or
- an actual or expected significant adverse change in the regulatory, economic, or technological environment of the debtor that results in a significant decrease in the debtor's ability to meet its debt obligations.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (Cont'd)

(i) Significant increase in credit risk (Cont'd)

Irrespective of the outcome of the above assessment, the Group presumes that the credit risk has increased significantly since initial recognition when contractual payments are more than 30 days past due, unless the Group has reasonable and supportable information that demonstrates otherwise.

Despite the aforegoing, the Group assumes that the credit risk on a debt instrument has not increased significantly since initial recognition if the debt instrument is determined to have low credit risk at the reporting date. A debt instrument is determined to have low credit risk if (i) it has a low risk of default, (ii) the borrower has a strong capacity to meet its contractual cash flow obligations in the near term and (iii) adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations. The Group considers a debt instrument to have low credit risk when it has an internal or external credit rating of "investment grade" as per globally understood definitions.

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (Cont'd)

(ii) Definition of default

For internal credit risk management, the Group considers an event of default occurs when information developed internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account any collaterals held by the Group).

Irrespective of the above, the Group considers that default has occurred when a financial asset is more than 90 days past due unless the Group has reasonable and supportable information to demonstrate that a more lagging default criterion is more appropriate.

(iii) Credit-impaired financial assets

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

- significant financial difficulty of the issuer or the borrower;
- a breach of contract, such as a default or past due event;
- the lender(s) of the borrower, for economic or contractual reasons relating to the borrower's financial difficulty, having granted to the borrower a concession(s) that the lender(s) would not otherwise consider; or
- it is becoming probable that the borrower will enter bankruptcy or other financial reorganisation.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (Cont'd)

(iv) Write-off policy

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

(v) Measurement and recognition of ECL

The measurement of ECL is a function of the probability of default, loss given default (i.e. the magnitude of the loss if there is a default) and the exposure at default. The assessment of the probability of default and loss given default is based on historical data and forward-looking information. Estimation of ECL reflects an unbiased and probability-weighted amount that is determined with respective risks of default occurring as the weights. The Group uses a practical expedient in estimating ECL on trade receivables using a provision matrix taking into consideration historical credit loss experience and forward looking information that is available without undue cost or effort.

Generally, the ECL is the difference between all contractual cash flows that are due to the Group in accordance with the contract and the cash flows that the Group expects to receive, discounted at the effective interest rate determined at initial recognition.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial assets (Cont'd)

Impairment of financial assets and other items subject to impairment assessment under HKFRS 9 (Cont'd)

(v) Measurement and recognition of ECL (Cont'd)

Where ECL is measured on a collective basis, the financial instruments are grouped on the basis of (i) nature of financial instruments and (ii) past-due status. The grouping is regularly reviewed by management to ensure the constituents of each group continue to share similar credit risk characteristics.

Interest income 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 amortised cost of the financial asset.

The Group recognises an impairment gain or loss in profit or loss for all financial instruments by adjusting their carrying amount, with the exception of trade receivables and contract assets where the corresponding adjustment is recognised through a loss allowance account.

Derecognition of financial assets

The Group derecognises a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

On derecognition of a financial asset measured at amortised cost, the difference between the asset's carrying amount and the sum of the consideration received and receivable is recognised in profit or loss.

On derecognition of an investment in equity instrument which the Group has elected on initial recognition to measure at FVTOCI, the cumulative gain or loss previously accumulated in the FVTOCI reserve is not reclassified to profit or loss, but is transferred to retained profits.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial liabilities and equity instruments

Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument.

Equity instruments

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

Repurchase of the Company's own equity instruments is recognised and deducted directly in equity. No gain or loss is recognised in profit or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

A derivative contract over an entity's own equity is accounted for as equity when it will be settled by the entity delivering (or receiving) a fixed number of its own equity instruments and receiving (or delivering) a fixed amount of cash or another financial asset. Any consideration received is added directly to equity.

Financial liabilities

All financial liabilities are subsequently measured at amortised cost using the effective interest method or at FVTPL.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial liabilities and equity instruments (Cont'd)

Financial liabilities at FVTPL

Financial liabilities are classified as at FVTPL when the financial liability is (i) contingent consideration of as acquirer in a business combination to which HKFRS 3 applies, (ii) held for trading or (iii) it is designated as at FVTPL.

A financial liability other than a financial liability held for trading or contingent consideration of an acquirer in a business combination may be designated as at FVTPL upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

- the financial liability forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

- it forms part of a contract containing one or more embedded derivatives, and HKFRS 9 permits the entire combined contract to be designated as at FVTPL.

For financial liabilities that are designated as at FVTPL, the amount of change in the fair value of the financial liability that is attributable to changes in the credit risk of that liability is recognised in OCI, unless the recognition of the effects of changes in the liability's credit risk in OCI would create or enlarge an accounting mismatch in profit or loss. For financial liabilities that contain embedded derivatives, such as convertible preferred shares and convertible and exchangeable bonds, the changes in fair value of the embedded derivatives are excluded in determining the amount to be presented in OCI. Changes in fair value attributable to a financial liability's credit risk that are recognised in OCI are not subsequently reclassified to profit or loss; instead, they are transferred to retained profits upon derecognition of the financial liability.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial liabilities and equity instruments (Cont'd)

Financial liabilities at amortised cost

Financial liabilities including trade and other payables and bank borrowings are subsequently measured at amortised cost using the effective interest method.

Convertible preferred shares

The convertible non-redeemable preferred shares of the Group comprise a financial liability component and an equity component. The financial liability component, representing the conversion feature, is classified as financial liabilities at FVTPL. It is initially recognised at fair value. Any directly attributable transaction costs are charged to profit or loss. Subsequent to initial recognition, the financial liability component is measured at fair value with changes in fair value recognised in the profit or loss. On initial recognition, the difference between the fair value of the convertible non-redeemable preferred shares in its entirety and the fair value of the financial liability component is assigned to equity component. The equity component reflects the issuer's discretion to pay dividends.

Convertible and exchangeable bonds

The convertible and exchangeable bonds are classified as financial liabilities in accordance with the substance of the contractual arrangements and the definition of a financial liability. A convertible and exchangeable option that can be settled other than by the exchange of a fixed amount of cash or another financial asset for a fixed number of the Group's own equity instruments does not meet the definition of equity and is therefore accounted for as a conversion option derivative.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial liabilities and equity instruments (Cont'd)

Convertible and exchangeable bonds (Cont'd)

At the date of issue, both the debt component and derivative components are recognised at fair value. In subsequent periods, the debt component of the convertible and exchangeable bonds is carried at amortised cost using the effective interest method. The derivative components are measured at fair value with changes in fair value recognised in profit or loss.

Transaction costs that relate to the issue of the convertible and exchangeable bonds are allocated to the debt and derivative components in proportion to their relative fair values. Transaction costs relating to the derivative components are charged to profit or loss immediately. Transaction costs relating to the debt component are included in the carrying amount of the debt portion and amortised over the period of the convertible and exchangeable bonds using the effective interest method.

Derecognition of financial liabilities

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

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Financial liabilities and equity instruments (Cont'd)

Changes in the basis for determining the contractual cash flows as a result of interest rate benchmark reform

For changes in the basis for determining the contractual cash flows of a financial asset or financial liability to which the amortised cost measurement applies as a result of interest rate benchmark reform, the Group applies the practical expedient to account for these changes by updating the effective interest rate, such change in effective interest rate normally has no significant effect on the carrying amount of the relevant financial asset or financial liability.

A change in the basis for determining the contractual cash flows is required by interest rate benchmark reform if and only if, both these conditions are met:

- the change is necessary as a direct consequence of interest rate benchmark reform; and
- the new basis for determining the contractual cash flows is economically equivalent to the previous basis (i.e. the basis immediately preceding the change).

Derivative financial instruments

Derivatives are initially recognised at fair value at the date when derivative contracts are entered into and are subsequently remeasured to their fair value at the end of the reporting period. The resulting gain or loss is recognised in profit or loss.

3. BASIS OF PREPARATION OF CONSOLIDATED FINANCIAL STATEMENTS AND SIGNIFICANT ACCOUNTING POLICIES (Cont'd)

3.2 Significant accounting policies (Cont'd)

Financial instruments (Cont'd)

Derivative financial instruments (Cont'd)

Embedded derivatives

Derivatives embedded in hybrid contracts that contain financial asset hosts within the scope of HKFRS 9 are not separated. The entire hybrid contract is classified and subsequently measured in its entirety as either amortised cost or fair value as appropriate.

Derivatives embedded in non-derivative host contracts that are not financial assets within the scope of HKFRS 9 are treated as separate derivatives when they meet the definition of a derivative, their risks and characteristics are not closely related to those of the host contracts and the host contracts are not measured at FVTPL. The early redemption option embedded in a host debt contract is closely related to the host contract if the option's redemption price is approximately equal on each redemption date to the amortised cost of the host debt instrument.

Generally, multiple embedded derivatives in a single instrument that are separated from the host contracts are treated as a single compound embedded derivative unless those derivatives relate to different risk exposures and are readily separable and independent of each other.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY

In the application of the Group's accounting policies, which are described in Note 3, the directors of the Company are required to make judgements, estimates and assumptions about the carrying amounts of assets and liabilities that are not readily apparent from other sources. The estimates and underlying assumptions are based on historical experience and other factors that are considered to be relevant. 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.

(a) Critical judgements in applying the accounting policies

The following are the critical judgements, apart from those involving estimations (see below), that the directors of the Company have made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the consolidated financial statements.

(i) Accounting for companies governed under contractual arrangements as subsidiaries

The Company and its subsidiaries do not hold any equity interests in NetDragon (Fujian), nor, in any of NetDragon (Fujian)'s subsidiaries, 福建省華漁教育科技有限公司 ("Fujian Huayu") and 福建省天晴互動娛樂有限公司 (collectively referred to as the "Structured Entities"). Nevertheless, under the contractual agreements entered into among the Group, NetDragon (Fujian) and the Ultimate Controlling Shareholders who are the registered owners of NetDragon (Fujian), the directors of the Company determine that the Group has the power to direct the relevant activities, which significantly affect the returns of the Structured Entities. As such, the Structured Entities are accounted for as subsidiaries of the Group for accounting purposes.

The Group's revenue generated from the above entities which are controlled by the Group through the contractual agreements described above amounted to RMB3,023 million (2021: RMB3,245 million) for the year ended 31 December 2022. At 31 December 2022, total assets and total liabilities of the Structured Entities amounted to RMB934 million (2021: RMB1,122 million) and RMB326 million (2021: RMB479 million), respectively.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Cont'd)

(b) Key sources of estimation uncertainty

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period that may have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

(i) Impairment of goodwill and intangible assets with indefinite useful lives

Determining whether goodwill and intangible assets with indefinite useful lives are impaired requires an estimation of the recoverable amount of the CGUs to which goodwill and intangible assets with indefinite useful lives have been allocated, which is the higher of the value in use or fair value less costs of disposal. The value in use calculation requires the Group to estimate growth rates in cash flow forecasts and a suitable discount rate applied to these forecasts in order to calculate the present value. Where the actual future cash flow forecasts are less than expected, or change in facts and circumstances which results in downward revision of future cash flow or upward revision of discount rate, a material impairment loss or further impairment loss may arise. As at 31 December 2022, the carrying amounts of goodwill and intangible assets with indefinite useful lives are set out in Notes 17 and 18 respectively. Details of the recoverable amount calculation of goodwill and intangible assets with indefinite useful lives are disclosed in Note 19.

(ii) Fair values of investment properties

The directors of the Company have performed internal assessment on the risks of change in macroeconomic environment through performing sensitivity analysis in relation to the Group's investment properties.

As at 31 December 2022, the carrying amount of the Group's investment properties is set out in Note 16.

4. CRITICAL ACCOUNTING JUDGEMENTS AND KEY SOURCES OF ESTIMATION UNCERTAINTY (Cont'd)

(b) Key sources of estimation uncertainty (Cont'd)

(iii) Fair value measurements and valuation processes

Some of the Group's assets and liabilities are measured at fair value for financial reporting purposes. In estimating the fair value of an asset or a liability, the Group uses market-observable data to the extent it is available. The Group uses valuation techniques that include inputs that are not based on observable market data to estimate the fair value of certain types of financial instruments. Notes 16 and 40 provide detailed information about the valuation techniques, inputs and key assumptions used in the determination of the fair value of various assets and liabilities.

(iv) Deferred tax asset

As at 31 December 2022, a deferred tax asset of RMB149 million (2021: nil) in relation to unused tax losses of a subsidiary incorporated in the United States has been recognised in the consolidated statement of financial position after an internal reorganisation. The realisability of the deferred tax asset arising from the above-mentioned tax losses incorporated in the United States is a key source of estimation uncertainty. In cases where the actual future taxable profits generated by the relevant entities are less or more than expected, or change in facts and circumstances which result in revision of future taxable profits estimation, a material reversal or further recognition of deferred tax assets may arise, which would be recognised in profit or loss for the period in which such a reversal or further recognition takes place. Further details of the internal reorganisation are set out in Note 9.

5. REVENUE AND SEGMENT INFORMATION

	2022 RMB million	2021 RMB million
Disaggregation of revenue from contracts with customers		
Online and mobile games revenue	3,430	3,642
Education revenue (including sales of education equipment and related goods and educational services)	4,336	3,231
Mobile solution, products and marketing revenue	84	87
Property project revenue	16	76
	7,866	7,036

Set out below is the reconciliation of the revenue from contracts with customers with the amounts disclosed in the segment information.

Types of goods and services

	For the year ended 31 December 2022				
	Online and mobile games revenue RMB million	Education revenue RMB million	Mobile solution, products and marketing revenue RMB million	Property project revenue RMB million	Total RMB million
Revenue from sales of pre-paid game cards for online and mobile games	3,430	—	—	—	3,430
Sales of education equipment and related goods	—	4,199	—	—	4,199
Revenue from educational services	—	137	—	—	137
Revenue from provision of mobile solution, products and marketing services	—	—	84	—	84
Revenue from property project	—	—	—	16	16
	3,430	4,336	84	16	7,866

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Disaggregation of revenue from contracts with customers (Cont'd)

Types of goods and services (Cont'd)

	For the year ended 31 December 2021				
	Online and mobile games revenue	Education revenue	Mobile solution, products and marketing revenue	Property project revenue	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
Revenue from sales of pre-paid game cards for online and mobile games	3,642	–	–	–	3,642
Sales of education equipment and related goods	–	3,096	–	–	3,096
Revenue from educational services	–	135	–	–	135
Revenue from provision of mobile solution, products and marketing services	–	–	87	–	87
Revenue from property project	–	–	–	76	76
	3,642	3,231	87	76	7,036

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Disaggregation of revenue from contracts with customers (Cont'd)

Timing of revenue recognition

	For the year ended 31 December 2022				
	Online and mobile games revenue	Education revenue	Mobile solution, products and marketing revenue	Property project revenue	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
A point in time	3,430	4,199	—	16	7,645
Over time	—	137	84	—	221
	3,430	4,336	84	16	7,866

	For the year ended 31 December 2021				
	Online and mobile games revenue	Education revenue	Mobile solution, products and marketing revenue	Property project revenue	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
A point in time	3,642	3,096	—	76	6,814
Over time	—	135	87	—	222
	3,642	3,231	87	76	7,036

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Disaggregation of revenue from contracts with customers (Cont'd)

Geographical information

	For the year ended 31 December 2022				
	Online and mobile games revenue	Education revenue	Mobile solution, products and marketing revenue	Property project revenue	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
PRC	2,890	370	—	16	3,276
United States of America ("USA")	508	2,778	—	—	3,286
Europe (Note)	—	1,018	—	—	1,018
Other regions	32	170	84	—	286
	3,430	4,336	84	16	7,866

	For the year ended 31 December 2021				
	Online and mobile games revenue	Education revenue	Mobile solution, products and marketing revenue	Property project revenue	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
PRC	3,135	294	—	76	3,505
USA	475	1,970	—	—	2,445
Europe (Note)	—	804	—	—	804
Other regions	32	163	87	—	282
	3,642	3,231	87	76	7,036

Note: Europe mainly includes Germany, United Kingdom ("UK"), France, Spain and others. Each of which individually contributed less than 10% of total revenue.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Performance obligation for contracts with customers

Revenue from online and mobile games

For revenue from online and mobile games, the Group operates self-developed games. The Group's games are free to play. Players can purchase game points which are virtual currency for acquisition of virtual products or premium features or purchase those virtual products or premium features directly for better game experience. The Group sells pre-paid game points and game products or premium features through its distribution and payment channels by (i) direct sales (both online payment systems and other direct sales channels/third party platforms) and (ii) game cards sales through distributors.

The performance obligation in relation to revenue for online and mobile games is satisfied at a point in time upon the utilisation of virtual products or premium features.

The virtual products or premium features purchased by the customers are mainly the consumable virtual products or premium features that are extinguished after consumption by a specific game player action in the online and mobile games. The game players will not continue to benefit from the virtual products or premium features thereafter.

The Group evaluates from time to time its roles and responsibilities in the delivery of virtual products or premium features in online and mobile games to the game players and concludes that the Group takes the primary responsibilities. The Group is determined to be the primary obligor and reports revenue in gross amounts. Due to the fact that the third party platforms may offer various marketing activities from time to time to game players, the actual prices paid by any individual game players may be different from the standard prices of virtual products or premium features purchased, the Group has to attempt to make a reasonable estimation for the gross revenue amount through tracking third party platforms' marketing activities.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Performance obligation for contracts with customers (Cont'd)

Revenue from online and mobile games (Cont'd)

However, for the Group's online and mobile games which are published through a large number of domestic third party platforms, since those platforms would offer various market discounts to game players, it is difficult for the Group to make a reasonable estimation for the gross revenue, as such, the Group reports revenue to the extent of the amounts received and receivable from those domestic third party platforms. However, revenue is recognised on a gross basis if the Group is able to make a reasonable estimate of the gross revenue.

The amount received from customers for pre-paid game points is deferred and recorded as contract liabilities and would be recognised as revenue at a point in time (i.e. online or mobile game revenue) after the actual usage of the game points for purchasing virtual products or premium features.

The normal credit term to its distribution and payment channels is 30 to 60 days upon the receipt of the money on game points collected from customers.

Revenue from sales of education equipment and related goods

For revenue from sales of education equipment and related goods, the performance obligation is satisfied at a point in time when the education equipment and related goods are delivered and titles have passed. The normal credit term is 30 to 60 days upon delivery.

Revenue from educational services

Revenue from educational services which mainly represents the tuition fee are recognised over time because the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs. It is recognised over time using input method, i.e. based on the Group's efforts or inputs to the satisfaction of a performance obligation relative to the total expected inputs to the satisfaction of that performance obligation contract that best depict the Group's performance in transferring control of goods or services. The Group collects the educational service fee once a year before the commencement on providing the educational services.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Performance obligation for contracts with customers (Cont'd)

Revenue from provision of mobile solution, products and marketing services

Revenue from provision of mobile solution, products and marketing services is recognised over time because the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs. It is recognised over time using output method, i.e. to recognise revenue on the basis of direct measurement of the value of goods or services promised under the contract that best depict the Group's performance in transferring control of goods or services. The contracts on provision of mobile solution, products and marketing services include payment schedules which require stage payments over the service period once certain specified milestones are reached and customers are offered 30 to 45 days credit term after the billing is issued.

Revenue from property project

Revenue from property project is recognised at a point in time. Under the transfer-of-control approach in HKFRS 15, revenue from property project is recognised when the respective properties have been completed and delivered to the customers, which is a point in time when customers have the ability to direct the use of the properties and obtain substantially all of the remaining benefits of the properties. Pre-sale deposits and advance payment received from customers for property project are included in contract liabilities.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

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

The transaction price allocated to the remaining performance obligations (unsatisfied or partially satisfied) as at 31 December 2022 and the expected timing of recognising revenue are as follows:

	Online and mobile games revenue RMB million (Note)	Education equipment and related goods revenue RMB million	Educational services revenue RMB million	Mobile solution, products and marketing revenue RMB million	Property project revenue RMB million
Within one year	41	302	79	14	11
More than one year but not more than two years	—	31	—	1	—
More than two years	—	91	—	—	—
	41	424	79	15	11

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Transaction price allocated to the remaining performance obligation for contracts with customers (Cont'd)

The transaction price allocated to the remaining performance obligations (unsatisfied or partially satisfied) as at 31 December 2021 and the expected timing of recognising revenue are as follows:

	Online and mobile games revenue RMB million (Note)	Education equipment and related goods revenue RMB million	Educational services revenue RMB million	Mobile solution, products and marketing revenue RMB million	Property project revenue RMB million
Within one year	45	409	108	7	27
More than one year but not more than two years	–	1	22	–	–
More than two years	–	2	30	–	–
	45	412	160	7	27

Note: The unused game points in online and mobile games revenue have no expiration period and can be used at anytime at customers' discretion. The amounts disclosed above represent the Group's expectation on the timing of utilisation made by customers.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Segment information

Information reported to the executive directors of the Company, being the chief operating decision makers ("CODM"), for the purposes of resource allocation and assessment of segment performance focuses on types of goods or services delivered or provided.

The following is an analysis of the Group's revenue and results by reportable segments:

For the year ended 31 December 2022

	Online and mobile games RMB million	Education RMB million	Mobile solution, products and marketing RMB million	Property project RMB million	Total RMB million
Segment revenue	3,430	4,336	84	16	7,866
Segment profit (loss)	1,963	(790)	(7)	(7)	1,159
Unallocated other income and gains					45
Unallocated corporate expenses and losses					(364)
Profit before taxation					840

For the year ended 31 December 2021

	Online and mobile games RMB million	Education RMB million	Mobile solution, products and marketing RMB million	Property project RMB million	Total RMB million
Segment revenue	3,642	3,231	87	76	7,036
Segment profit (loss)	2,240	(710)	(3)	12	1,539
Unallocated other income and gains					62
Unallocated corporate expenses and losses					(365)
Profit before taxation					1,236

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Segment information (Cont'd)

The accounting policies of the operating segments are the same as the Group's accounting policies.

Segment profit (loss) represents the profit earned by or loss incurred from each segment without allocation of unallocated income, gains, expenses and losses. This is the measure reported to the CODM for the purposes of resource allocation and performance assessment.

All of the segment revenue reported above is from external customers.

The following is an analysis of the Group's assets by reportable and operating segments:

	2022 RMB million	2021 RMB million
Online and mobile games	5,082	5,428
Education	4,517	4,296
Mobile solution, products and marketing	68	76
Property project	704	594
Total segment assets	10,371	10,394
Unallocated	660	491
	11,031	10,885

For the purposes of monitoring segment performance and allocating resources, all assets are allocated to operating segments other than those assets managed on group basis, such as investment properties, certain equity instruments at FVTOCI, certain financial assets at FVTPL, loan receivables, certain other receivables, prepayments and deposits and certain cash and cash equivalents. No analysis of the Group's liabilities by operating segments is disclosed as they are not regularly provided to the CODM for review.

5. REVENUE AND SEGMENT INFORMATION (Cont'd)

Geographical information

The details of the Group's revenue from external customers by geographical location of the operations are set out in this note.

The Group's non-current assets, excluding equity instruments at FVTOCI, financial assets at FVTPL, loan receivables and deferred tax assets, by geographical location of assets are detailed below:

	2022	2021
	RMB million	RMB million
PRC	**2,447**	2,588
UK	**743**	665
Hong Kong	**199**	245
USA	**73**	23
Others	**67**	6
	3,529	3,527

Information about major customers

Revenue from a customer of the education segment amounting to RMB941 million, contributed over 10% of the Group's revenue for the year ended 31 December 2022.

No single customer of the Group individually contributed over 10% of the Group's revenue for the year ended 31 December 2021.

6. OTHER INCOME AND GAINS, OTHER EXPENSES AND LOSSES

(a) Other income and gains

	2022 RMB million	2021 RMB million
Government grants (Note)	156	114
Interest income on bank balances, loan receivables and refundable rental deposits	33	54
Rental income, net of negligible outgoing expenses	1	—
Rental income arising from subleases	5	5
Gain on disposal of domain name	—	17
Others	28	34
	223	224

Note: Amounts being (i) granted by a government in the PRC mainly for subsidising the costs incurred by the Group in conducting and launching research and development projects in Fujian Province, the PRC, relating to compensation for research and development costs already incurred, which amounted to RMB113 million (2021: RMB100 million) for the year ended 31 December 2022 and is recognised in profit or loss; (ii) granted by a government in the PRC for the purchase of property, plant and equipment, which is recognised as deferred income and is recognised to profit or loss on a systematic basis over the estimated useful life of the property, plant and equipment related to the government grants on capital expenditure with an amount of RMB7 million (2021: RMB14 million); (iii) loan forgiveness which resulted from government subsidy that a government in the United States repaid bank borrowings of USD5 million (equivalent to RMB33 million) (2021: nil) on behalf of the Group during the period of Covid-19; and (iv) subsidy from the Employment Support Scheme provided by the Hong Kong Government for the period from May to July 2022 amounted to RMB3 million (2021: negligible amount) in respect of Covid-19-related subsidies, which are wholly recognised in profit or loss.

Further details of government grants are set out in Note 28 and Note 30.

6. OTHER INCOME AND GAINS, OTHER EXPENSES AND LOSSES (Cont'd)

(b) Other expenses and losses

	2022	2021
	RMB million	RMB million
Net foreign exchange loss	**38**	38
Other tax and charges	**36**	35
Impairment loss of:		
— Intangible assets	**77**	2
— Goodwill	**—**	19
— Interest in an associate	**—**	23
Redundancy payments	**40**	102
Others	**22**	47
	213	266

7. FINANCE COSTS

	2022	2021
	RMB million	RMB million
Interest on:		
— Bank borrowings	**18**	12
— Lease liabilities	**7**	9
— Convertible and exchangeable bonds	**194**	165
	219	186

8. IMPAIRMENT LOSS UNDER EXPECTED CREDIT LOSS MODEL, NET OF REVERSAL

	2022 RMB million	2021 RMB million
Impairment losses recognised on trade and other receivables	14	8

Details of impairment assessment of trade receivables are set out in Note 40.

9. TAXATION

	2022 RMB million	2021 RMB million
The tax charge (credit) comprises:		
Hong Kong Profits Tax (Note a)		
— Current year	55	57
— Over provision in prior years	—	(1)
	55	56
PRC Enterprise Income Tax ("EIT") (Note b)		
— Current year	225	224
— Under provision in prior years	3	38
	228	262
Taxation in other jurisdictions (Note c)		
— Current year	6	35
— Under provision in prior years	—	1
	6	36
Deferred taxation (Note 24)		
— Current year	(26)	9
— Net recognition of unused tax losses in prior years (Note d)	(187)	(110)
	(213)	(101)
	76	253

9. TAXATION (Cont'd)

Notes:

(a) Hong Kong Profits Tax is calculated at 16.5% on the estimated assessable profit for both years.

(b) PRC EIT is calculated at the applicable tax rates in accordance with the relevant laws and regulations in the PRC.

A number of subsidiaries of the Company were approved to be hi-tech enterprises and are entitled to a reduced tax rate of 15%. The qualification of hi-tech enterprise is subject to review once every three years. During the years ended 31 December 2022 and 2021, the following subsidiaries are subject to a reduced tax rate of 15%, including Fujian TQ Digital Inc. ("TQ Digital"), Fujian TQ Online Interactive Inc. ("TQ Online"), 福建省天奕網絡科技有限公司, 成都掌沃無限科技有限公司, Fujian Tianquan Education Technology Limited ("Fujian Tianquan"), 蘇州馳聲信息科技有限公司 and 福建省網龍普天教育科技有限公司.

Under the EIT Law and Implementation Regulation of the EIT Law, the tax rate of NetDragon (Fujian) is 25% for both years.

Upon the New Tax Law and Implementation Regulations, PRC withholding income tax is applicable to dividends payable to investors and interest payable to depositors that are "non-PRC tax resident enterprises", which do not have an establishment or place of business in the PRC, or which have such establishment or place of business but the relevant income is not effectively connected with the establishment or place of business, to the extent such dividends and interest have their sources within the PRC. Under such circumstances, dividends distributed from the PRC subsidiaries and interest payable by the PRC lenders to non-PRC tax resident group entities shall be subject to the withholding income tax at 10% or lower tax rate, as applicable.

(c) For the year ended 31 December 2022, the USA income tax rates applicable to subsidiaries incorporated in the USA is 21% (2021: 21%) for federal tax and 8.84% (2021: 8.84%) for state income tax.

The UK Corporation Tax Rate applicable to subsidiaries is 19% (2021: 19%) for the year ended 31 December 2022.

Taxation arising in other jurisdictions is calculated at the rate prevailing in the relevant jurisdiction.

(d) Pursuant to a reorganisation completed during the current year, a subsidiary of the Company incorporated in the United States ("Subsidiary A") became a subsidiary of another subsidiary of the Company incorporated in the United States ("Subsidiary B", together with Subsidiary A, collectively the "Group B"). On the completion date of the reorganisation, Subsidiary A was converted into a limited liability company and became disregarded as separate from its owner for the United States income tax purposes. According to the relevant applicable United States tax principles, members of Group B would file tax returns as one tax entity in the United States. The management of the Group assessed whether sufficient future profits or taxable temporary differences will be available in the future on a combined basis for Group B and concluded that certain amount of the unused tax losses of Subsidiary A can be utilised. Accordingly, a deferred tax asset of RMB149 million (2021: nil) has been recognised in respect of these losses in the current year.

9. TAXATION (Cont'd)

The tax charge for the year is reconciled to the profit before taxation per the consolidated statement of profit or loss and other comprehensive income as follows:

	2022 RMB million	2021 RMB million
Profit before taxation	**840**	1,236
Tax at the applicable tax rate of 25% (2021: 25%) (Note a)	**210**	309
Tax effect of share of results of associates and joint ventures	**4**	4
Tax effect of income not taxable for tax purpose	**(48)**	(53)
Tax effect of expenses not deductible for tax purpose	**144**	115
Utilisation of tax losses previously not recognised	**—**	(23)
Tax effect of tax losses not recognised	**195**	217
Effect of different tax rates of subsidiaries operating in other jurisdictions	**(24)**	(33)
Effect of previous not recognised deductible temporary differences and unused tax losses recognised as deferred tax assets in current year	**(183)**	(103)
Additional tax benefit on development expenses (Note b)	**(21)**	(19)
Other tax benefit granted to subsidiaries in the UK	**—**	(2)
Tax effect of exemption and income tax on concessionary rate granted to the PRC subsidiaries	**(201)**	(199)
Under provision in prior years	**3**	38
Others	**(3)**	2
Tax charge for the year	**76**	253

Notes:

(a) The applicable tax rate of 25% represents the applicable income tax rate of the subsidiaries in Fujian Province in the PRC which constitute the substantial part of the Group's operations for both years ended 31 December 2022 and 2021.

(b) Pursuant to the relevant tax rules and regulations, the Group is eligible for additional tax benefit, which is equivalent to 75% for the first three quarters and 100% for the fourth quarter (2021: 75% for the whole year) of the staff costs and depreciation under research and development costs incurred for the development of new games and advanced technology development.

Details of deferred taxation are set out in Note 24.

10. PROFIT FOR THE YEAR

	2022 RMB million	2021 RMB million
Profit for the year has been arrived at after charging (crediting):		
Staff costs:		
Directors' emoluments	34	28
Other staff costs		
Salaries and other benefits	1,930	1,903
Contributions to retirement benefits schemes	145	160
Share-based payments expense	1	—
Redundancy payments	40	102
	2,150	2,193
Auditor's remuneration		
— audit services	9	9
— non-audit services	2	1
	11	10
Depreciation of property, plant and equipment	190	197
Depreciation of right-of-use assets	76	79
Amortisation of intangible assets	126	131
Total depreciation and amortisation	392	407
Cost of goods sold for education equipment and related goods	3,075	1,980
Advertising and promotion expenses (included in selling and marketing expenses)	404	390
Impairment loss of:		
— Interest in an associate	—	23
— Intangible assets	77	2
Write-down of inventories	25	1
Net foreign exchange loss excluding exchange loss (gain) on financial assets at FVTPL, bank borrowings, convertible and exchangeable bonds and derivative financial instruments	38	38

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS

Directors' and the chief executive's emoluments

The emoluments paid or payable to each of the ten (2021: nine) directors of the Company were as follows:

	2022				
	Fees	Salaries and other benefits	Contributions to retirement benefits schemes	Share-based payments expense	Total
	RMB million	RMB million	RMB million (Note e)	RMB million	RMB million
Executive directors					
Mr. Liu Dejian	—	6	—	—	6
Dr. Leung Lim Kin, Simon (Note a)	—	17	—	5	22
Mr. Liu Luyuan (Note b)	—	1	—	—	1
Mr. Zheng Hui	—	1	—	—	1
Mr. Chen Hongzhan	—	1	—	—	1
Non-executive director					
Mr. Lin Dongliang	—	—	—	—	—
Independent non-executive directors					
Mr. Chao Guowei, Charles (Note c)	1	—	—	—	1
Mr. Lee Kwan Hung, Eddie	1	—	—	—	1
Mr. Liu Sai Keung, Thomas	1	—	—	—	1
Mr. Li Sing Chung, Matthias (Note d)	—	—	—	—	—
	3	26	—	5	34

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Cont'd)

Directors' and the chief executive's emoluments (Cont'd)

			2021		
			Contributions to		
		Salaries	retirement	Share-based	
		and other	benefits	payments	
	Fees	benefits	schemes	expense	Total
	RMB million	RMB million	RMB million	RMB million	RMB million
			(Note e)		
Executive directors					
Mr. Liu Dejian	–	1	–	–	1
Dr. Leung Lim Kin, Simon (Note a)	–	8	–	13	21
Mr. Liu Luyuan (Note b)	–	1	–	–	1
Mr. Zheng Hui	–	–	–	–	–
Mr. Chen Hongzhan	–	1	–	–	1
Non-executive director					
Mr. Lin Dongliang	–	–	–	–	–
Independent non-executive directors					
Mr. Chao Guowei, Charles	1	–	–	1	2
Mr. Lee Kwan Hung, Eddie	1	–	–	–	1
Mr. Liu Sai Keung, Thomas	1	–	–	–	1
	3	11	–	14	28

The executive directors' emoluments shown above were mainly for their services in connection with the management of the affairs of the Company and the Group.

The non-executive director's and independent non-executive directors' emoluments shown above were mainly for their services as directors of the Company.

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Cont'd)

Directors' and the chief executive's emoluments (Cont'd)

Notes:

(a) Included in the salaries and other benefits paid to Dr. Leung Lim Kin, Simon is an amount of RMB4 million (2021: RMB2 million) performance related bonus during the year ended 31 December 2022 which are determined based on the Group's performance for the year.

(b) Mr. Liu Luyuan is also the chief executive of the Company and his emoluments disclosed above include those for services rendered by him as the chief executive.

(c) Mr. Chao Guowei, Charles resigned as an independent non-executive director of the Company with effect from 30 December 2022.

(d) Mr. Li Sing Chung, Matthias was appointed as an independent non-executive director of the Company with effect from 30 December 2022.

(e) Contributions to retirement benefits schemes for each of the executive director of the Company for the year ended 31 December 2022 and 2021 were less than RMB1 million.

Five highest paid employees

Of the five highest emoluments in the Group, during both reporting periods, one (2021: one) was executive director of the Company, whose emoluments are set out above. The emoluments of the remaining four (2021: four) individuals who are neither a director nor chief executive of the Company were as follows:

	2022 RMB million	2021 RMB million
Salaries and other benefits	114	80
Contributions to retirement benefits schemes	1	1
Share-based payments expense	1	2
	116	83

11. DIRECTORS', CHIEF EXECUTIVE'S AND EMPLOYEES' EMOLUMENTS (Cont'd)

Five highest paid employees (Cont'd)

Their emoluments were within the following bands:

	2022 Number of employees	2021 Number of employees
Hong Kong dollar ("HKD") 8,500,001 to HKD9,000,000	1	1
HKD9,000,001 to HKD9,500,000	1	—
HKD10,500,001 to HKD11,000,000	—	1
HKD35,000,001 to HKD35,500,000	1	—
HKD38,000,001 to HKD38,500,000	—	1
HKD41,500,001 to HKD42,000,000	—	1
HKD81,000,001 to HKD81,500,000	1	—
	4	4

During the year ended 31 December 2022, no emoluments have been paid by the Group to any of the directors or the chief executive of the Company or the five highest paid individuals as an inducement to join or upon joining the Group or as compensation for loss of office. None of the directors or the chief executive of the Company waived any remuneration during the years ended 31 December 2022 and 2021.

12. DIVIDENDS

	2022 RMB million	2021 RMB million
Dividends recognised as distribution during the year:		
2021 Final — HKD0.40		
(2021: 2020 Final — HKD0.25) per share	177	117
2021 Special interim — HKD1.43 and 2022 special interim — HKD0.50		
(2021: 2020 Special interim — nil) per share	863	—
2022 Interim — HKD0.40		
(2021: 2021 Interim — HKD0.40) per share	185	185
	1,225	302

The 2022 final dividend of HKD0.40 (2021: HKD0.40) per share which has been proposed by the directors in the board meeting on 27 March 2023 and is subject to approval by the shareholders in the forthcoming annual general meeting, amounted to approximately RMB193 million (2021: RMB179 million).

13. EARNINGS PER SHARE

The calculation of the basic and diluted earnings per share attributable to the owners of the Company is based on the following data:

	2022 RMB million	2021 RMB million
Earnings for the purpose of basic and diluted earnings per share:		
— Profit for the year attributable to the owners of the Company	834	1,062

	Number of shares	
	2022 '000	2021 '000
Weighted average number of shares in issue during the year for the purpose of basic earnings per share (after adjusted for the effect of unvested and treasury shares held under share award scheme)	540,694	554,115
Effect of dilutive potential shares from the Company's share option scheme	27	259
Weighted average number of shares for the purpose of calculating diluted earnings per share (after adjusted for the effect of unvested and treasury shares held under share award scheme)	540,721	554,374

14. PROPERTY, PLANT AND EQUIPMENT

	Owned properties in the PRC other than in Hong Kong RMB million	Leasehold improvements RMB million	Plant and equipment RMB million	Motor vehicles RMB million	Construction in progress RMB million	Total RMB million
COST						
At 1 January 2021	1,643	525	790	56	138	3,152
Exchange adjustments	–	–	(4)	–	–	(4)
Additions	35	7	56	2	45	145
Reclassification	85	2	–	–	(87)	–
Disposals	–	(4)	(17)	(6)	–	(27)
At 31 December 2021	1,763	530	825	52	96	3,266
Exchange adjustments	1	1	2	–	–	4
Additions	33	16	64	7	71	191
Reclassification	57	13	6	–	(76)	–
Disposals	–	(4)	(28)	(4)	–	(36)
At 31 December 2022	1,854	556	869	55	91	3,425
DEPRECIATION						
At 1 January 2021	238	253	626	42	–	1,159
Exchange adjustments	–	–	(5)	–	–	(5)
Provided for the year	85	36	71	5	–	197
Eliminated on disposals	–	(4)	(15)	(6)	–	(25)
At 31 December 2021	323	285	677	41	–	1,326
Exchange adjustments	1	–	1	–	–	2
Provided for the year	90	32	64	4	–	190
Eliminated on disposals	–	(1)	(25)	(3)	–	(29)
At 31 December 2022	414	316	717	42	–	1,489
CARRYING VALUES						
At 31 December 2022	1,440	240	152	13	91	1,936
At 31 December 2021	1,440	245	148	11	96	1,940

14. PROPERTY, PLANT AND EQUIPMENT (Cont'd)

The above items of property, plant and equipment, except for construction in progress, after taking into account the residual values, are depreciated on a straight-line basis, at the following rates per annum:

Owned properties	Over the shorter of the terms of the leases of 20 years, or 4%
Leasehold improvements	Over the shorter of the terms of the leases, or 4.74% — 33.33%
Plant and equipment	19% — 31.67%
Motor vehicles	19% — 31.67%

15. RIGHT-OF-USE ASSETS

	Leasehold lands RMB million	Leased properties RMB million	Other assets RMB million	Total RMB million
As at 31 December 2022				
Carrying amount	**274**	**105**	**1**	**380**
As at 31 December 2021				
Carrying amount	280	147	1	428
For the year ended 31 December 2022				
Depreciation charge	**6**	**69**	**1**	**76**
For the year ended 31 December 2021				
Depreciation charge	6	72	1	79

	2022 RMB million	2021 RMB million
Expense relating to short-term leases	**5**	8
Total cash outflow for leases	**81**	82
Additions to right-of-use assets	**25**	54

15. RIGHT-OF-USE ASSETS (Cont'd)

The above items of right-of-use assets, are depreciated on a straight-line basis, at the following rates per annum:

Leasehold lands	2%
Leased properties	Over the terms of the leases, or 25%
Other assets	Over the terms of the leases, or 20% — 33.3%

For both years, the Group leases land and buildings and other assets for its operations. Lease contracts are entered into for fixed term of 1 year to 20 years, but may have extension options as described below. Lease terms are negotiated on an individual basis and contain a wide range of different terms and conditions. In determining the lease term and assessing the length of the non-cancellable period, the Group applies the definition of a contract and determines the period for which the contract is enforceable.

The Group has obtained the land use right certificates for all leasehold lands.

The Group regularly entered into short-term leases for leased properties and office equipment respectively. As at 31 December 2022, the portfolio of short-term leases are similar to the portfolio of short-term leases to which the short-term lease expenses disclosed above.

During the year ended 31 December 2022, the Group has extension options in five (2021: four) leases. These are used to maximise operational flexibility in terms of managing the assets used in the Group's operations. These five (2021: four) extension options held are exercisable only by the Group and not by the respective lessors.

The Group assesses at lease commencement date whether it is reasonably certain to exercise the extension options. In the opinion of the management of the Group, the potential exposures to the associated future lease payments for extension options in which the Group is not reasonably certain to exercise the extension options as at 31 December 2022 and 2021 are not material.

The additional lease liabilities to be recognised during the years ended 31 December 2022 and 2021 due to the exercise of extension option that the Group was not reasonably certain to exercise is not material. In addition, the Group reassesses whether it is reasonably certain to exercise an extension option, upon the occurrence of either a significant event or a significant change in circumstances that is within the control of the lessee. During the years ended 31 December 2022 and 2021, there is no such triggering event.

16. INVESTMENT PROPERTIES

The Group intends to lease out various offices under operating leases to earn rental income.

	2022 RMB million	2021 RMB million
Fair value		
At 31 December	59	77

The Group's investment properties consist of two units of office premises in Hong Kong.

The fair values of the office premises as at 31 December 2022 and 2021 have been arrived at on the basis of a valuation carried out on the respective dates by Asset Appraisal Limited, an independent qualified professional valuer not connected with the Group. The fair values of the office premises are determined based on the market approach which uses the prices and other relevant information generated by market transactions involving comparable properties. One of the key unobservable inputs used in valuing the investment properties is the market unit rate taking into account the recent transaction prices of similar properties nearby the Group's investment properties adjusted for location and conditions of the properties which ranged from HKD21,429 (equivalent to RMB19,142) per sq.ft to HKD28,791 (equivalent to RMB25,718) per sq.ft (2021: ranged from HKD21,429 (equivalent to RMB17,520) per sq.ft to HKD28,791 (equivalent to RMB23,540) per sq.ft), where sq.ft is a common unit of area used in Hong Kong. An increase in the market unit rate would result in an increase in fair value measurement of the investment properties, and vice versa. There has been no change in the valuation technique used from the prior year.

In estimating the fair value of the properties, the highest and best use of the properties is their current use. The investment properties were categorised into Level 3 of the fair value hierarchy as at 31 December 2022 and 2021. There were no transfers into or out of Level 3 during the year.

17. GOODWILL

	2022 RMB million	2021 RMB million
COST		
At 1 January	**451**	459
Acquisition of operation through business combination	**45**	—
Exchange adjustments	**37**	(8)
At 31 December	**533**	451
IMPAIRMENT		
At 1 January	**234**	218
Impairment loss recognised for the year (Note 19)	**—**	19
Exchange adjustments	**12**	(3)
At 31 December	**246**	234
CARRYING VALUES		
At 31 December	**287**	217

Particulars regarding impairment assessment of goodwill are disclosed in Note 19.

18. INTANGIBLE ASSETS

	Trademarks RMB million (Note a)	Licences RMB million	Non-competition agreement RMB million (Note b)	Customers relationship RMB million (Note b)	Patent and technology RMB million (Note c)	Development costs RMB million (Note d)	Crypto-currencies RMB million (Note e)	Others RMB million	Total RMB million
COST									
At 1 January 2021	393	42	61	144	307	321	–	106	1,374
Exchange adjustments	(9)	–	–	(2)	(6)	(7)	–	–	(24)
Additions	–	94	–	–	–	63	130	2	289
Write off for the year	–	(2)	–	–	–	–	–	–	(2)
At 31 December 2021	384	134	61	142	301	377	130	108	1,637
Exchange adjustments	36	–	–	6	23	38	1	2	106
Additions	–	–	–	–	–	87	23	19	129
Acquisition of operation through business combination	3	–	8	–	–	–	–	–	11
Disposals and write off for the year	–	(33)	–	–	–	–	(3)	–	(36)
At 31 December 2022	423	101	69	148	324	502	151	129	1,847
AMORTISATION/IMPAIRMENT									
At 1 January 2021	157	40	44	107	159	211	–	30	748
Exchange adjustments	(4)	–	–	(1)	(4)	(5)	–	–	(14)
Provided for the year	–	13	7	17	31	53	–	10	131
Write off for the year	–	(2)	–	–	–	–	–	–	(2)
Impairment loss for the year	–	–	–	–	–	–	2	–	2
At 31 December 2021	153	51	51	123	186	259	2	40	865
Exchange adjustments	14	–	–	6	15	37	–	2	74
Provided for the year	–	19	7	7	32	51	–	10	126
Disposals and write off for the year	–	(33)	–	–	–	–	(1)	–	(34)
Impairment loss for the year	–	30	–	–	–	–	47	–	77
At 31 December 2022	167	67	58	136	233	347	48	52	1,108
CARRYING VALUES									
At 31 December 2022	256	34	11	12	91	155	103	77	739
At 31 December 2021	231	83	10	19	115	118	128	68	772

18. INTANGIBLE ASSETS (Cont'd)

Notes:

(a) Included in the trademarks of RMB251 million (2021: RMB230 million) as at 31 December 2022 are those acquired on acquisition of Promethean World Limited ("Promethean", an indirect non-wholly owned subsidiary of the Company) and its subsidiaries (collectively referred to as "Promethean Group") having legal lives of 2 to 20 years and are renewable every 2 to 20 years at minimal cost. The directors of the Company are of the opinion that the Group would renew the trademark continuously and has the ability to do so. Various studies including product life cycle studies, market, competitive and environmental trends and brand extension opportunities have been performed by management of the Group, which supports that the trademark has no foreseeable limit to the period over which the trademarked products are expected to generate net cash flows for the Group. As a result, the trademark is considered by the management of the Group as having an indefinite useful life because it is expected to contribute to net cash inflows indefinitely. The trademark will not be amortised until its useful life is determined to be finite. Instead it will be tested for impairment annually and whenever there is an indication that it may be impaired. Particulars of the impairment testing are disclosed in Note 19.

(b) Non-competition agreement and customers relationship were mainly arising from the acquisition of Cherrypicks International Holdings Limited and its subsidiaries (collectively referred to as the "Cherrypicks Group"). Cherrypicks Group have long and close business relationship with the major customers and non-competition agreement was signed between Cherrypicks Group and its employee upon acquisition. The acquisition of Cherrypicks Group has allowed the Group to develop its long term growth from Cherrypicks Group's mobile solution, products and marketing business.

(c) Patent and technology represents the acquired technological know-how for producing interactive whiteboard, interactive flat panel, augmented reality ("AR") and various mobile application. The patent and technology were mainly acquired from the acquisition of Promethean Group.

(d) Development costs represent (i) the software for a cloud-based teaching and learning platform which connects students' tablets and laptops to interactive displays (interactive whiteboard and interactive flat panel) and such development costs were acquired from acquisition of the Promethean Group and (ii) the technological know-how internally generated for personalised location services, marketing and e-commerce, location intelligence and data analysis.

(e) During the year ended 31 December 2022 and 31 December 2021, the Group acquired cryptocurrencies which are measured at its cost less any accumulated impairment losses. The recoverable amounts of the cryptocurrencies have been determined based on their fair value less costs of disposal. The Group uses direct quoted prices in active market to estimate the fair value less costs of disposal of the assets. The relevant assets were impaired to their recoverable amount of RMB103 million (2021: RMB128 million), which is their carrying values at year end and the impairment of RMB47 million (2021: RMB2 million) has been recognised in "other expense and losses" for the year ended 31 December 2022.

18. INTANGIBLE ASSETS (Cont'd)

The intangible assets with finite useful lives are amortised on a straight-line basis at the following rates per annum:

Trademarks	10% — 57.14%
Licences	5% — 50%
Non-competition agreement	11.11% — 33.33%
Customers relationship	10% — 16.67%
Patent and technology	10%
Development costs	33.33%
Others	10% — 50%

19. IMPAIRMENT TESTING ON GOODWILL AND INTANGIBLE ASSETS WITH INDEFINITE USEFUL LIVES

For the purpose of impairment testing, goodwill and trademarks with indefinite useful lives set out in Notes 17 and 18 respectively have been allocated to one (2021: two) individual or groups of CGUs. The carrying amounts of goodwill and trademarks as at 31 December 2022 and 31 December 2021 allocated to these units are as follows:

	Goodwill		Trademarks	
	2022	2021	**2022**	2021
	RMB million	RMB million	**RMB million**	RMB million
Online and mobile games:				
CGU-1 (Note a)	**—**	—	**—**	—
Education:				
CGU-2 (Note b)	**287**	217	**251**	230
At 31 December	**287**	217	**251**	230

19. IMPAIRMENT TESTING ON GOODWILL AND INTANGIBLE ASSETS WITH INDEFINITE USEFUL LIVES (Cont'd)

The recoverable amount of each of the above CGUs arising from online and mobile games and education business was determined individually based on value in use calculations using the discounted cash flow method. Those value in use calculations use cash flow projections based on cash flow forecasts approved by management covering a five-year period and discount rates specific to the relevant CGUs (as further set out below). Cash flows beyond the five-year period is extrapolated using a steady growth rate specific to the CGUs. Cash flow projections during the forecast period for the CGUs are based on the estimated growth rates for the relevant CGUs during the forecast period. Estimated growth rates were determined based on past performance and the management's expectations for the market developments. These value in use calculations as at 31 December 2022 and 2021 have been assessed carefully by management of the Group taking into consideration the higher degrees of estimation uncertainties due to how the covid-19 pandemic may progress and evolve.

During the year ended 31 December 2021, the Group estimated the value in use of CGU-1 and concluded that carrying amount of the relevant assets of CGU-1 was impaired to its recoverable amount as at 31 December 2021. Except for this, the management of the Group determines that there is no impairment of any other CGUs containing goodwill and intangible assets with indefinite useful lives during the years ended 31 December 2022 and 2021.

There were no significant changes in the valuation method adopted from those adopted in the previous years for all of the above CGUs.

Notes:

(a) During the year ended 31 December 2021, the directors of the Company had determined impairment of goodwill directly related to CGU-1 amounting to RMB19 million. The impairment loss had been included in profit or loss in "other expenses and losses" for the year then ended. The discount rate applied by management of the Group in the value in use calculation for the year ended 31 December 2021 was 25.13% and cash flows beyond the five-year period was extrapolated using a steady growth rate of 2.0%.

(b) This represents the Promethean Group. The discount rate applied by management of the Group in the value in use calculation is 23.59% (2021: 29.34%) and cash flows beyond the five-year period is extrapolated using a steady growth rate of 2.0% (2021: 2.0%). Management believes that any reasonably possible change in any of these assumptions would not cause the carrying amount of this CGU to exceed its recoverable amount resulting in impairment as at 31 December 2022 or 2021.

20. INTERESTS IN ASSOCIATES AND JOINT VENTURES

	2022 RMB million	2021 RMB million
Unlisted investments:		
Cost of investments	83	112
Share of post-acquisition losses	(49)	(39)
Impairment loss recognised	—	(23)
	34	50

The Group's associates and joint ventures are accounted for using the equity method in these consolidated financial statements. The Group considers none of its associates nor joint ventures is individually material nor principally affected the results or net assets of the Group.

21. EQUITY INSTRUMENTS AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME

	2022 RMB million	2021 RMB million
Equity securities listed in Canada (Note a)	6	8
Unlisted equity securities in the PRC (Note b)	50	—
	56	8

Notes:

a. The above listed equity investment represents ordinary shares of an entity listed in Toronto Stock Exchange. The investment is not held for trading, instead, it is held for long-term strategic purpose. The directors of the Company have elected to designate this investment in equity instruments at FVTOCI as they believe that recognising short-term fluctuations in these investments' fair value in profit or loss would not be consistent with the Group's strategy of holding these investments for long-term purposes and realising their performance potential in the long run.

b. The above unlisted equity investments represent the Group's equity interests in private entities established in the PRC. The directors of the Company have elected to designate these investment in equity instruments at FVTOCI as they believe that the investments are not held for trading and not expected to be sold in the foreseeable future.

22. FINANCIAL ASSETS AT FAIR VALUE THROUGH PROFIT OR LOSS/ DERIVATIVE FINANCIAL INSTRUMENTS

	2022 RMB million	2021 RMB million
Financial assets at FVTPL:		
— Unlisted funds (Note a)	252	266
— Unlisted equity investments (Note b)	152	—
— Convertible promissory notes (Note c)	84	—
— Equity-linked warrants	—	2
	488	268
Analysed for financial reporting purpose:		
Current	84	2
Non-current	404	266
	488	268
Derivative financial instruments (under current liabilities):		
— Unlisted warrants (Note d)	31	43
— Convertible and exchangeable option (Note 35)	—	—
	31	43

Notes:

(a) The unlisted funds represent a portfolio of investments managed by fund managers, most of the portfolio assets are invested in the listed securities in Hong Kong and the PRC. These investments are not held for trading, instead, they are held for long-term purposes. The Group is not expected to realise the funds within twelve months from the end of the reporting period, therefore, the unlisted funds are classified as non-current assets.

(b) The unlisted equity investments as at 31 December 2022 represent the Group's investments in equity interests in six private entities, which engaged in investment in cryptocurrencies, tokens, blockchain-based assets and other digital assets.

(c) The convertible promissory notes as at 31 December 2022 were issued by a private entity incorporated in the United States, bearing an interest of 6.0% per annum, maturing in 2023 and convertible at the discretion of the Group, in whole or in part, from time to time, into ordinary shares of the issuing entity.

(d) The unlisted warrants are simultaneously issued with the convertible and exchangeable bonds as detailed in Note 35.

23. LOAN RECEIVABLES

	2022 RMB million	2021 RMB million
Fixed-rate loan receivables	—	2
Variable-rate loan receivables	12	28
	12	30
Analysed as:		
Current	4	22
Non-current	8	8
	12	30

The effective interest rates (which are equal to contractual interest rates) on the Group's loan receivables are as follows:

	2022	2021
Effective interest rates:		
Fixed-rate loan receivables (per annum)	N/A	4.15%
Variable-rate loan receivables (per annum)	2.78% — 5.63%	2.15% — 5.00%

Included in loan receivables, RMB7 million (2021: RMB9 million) represents loans to certain key management and staff. Loan receivables are not past due or credit-impaired at the end of the reporting period. The loans are either repayable by instalments until 2023 (2021: by instalments until 2022, 2023 or 2035) or repayable in whole in 2023 or 2025. All amounts are unsecured.

Details of impairment assessment are set out in Note 40.

24. DEFERRED TAXATION

The deferred tax assets and liabilities are presented in the consolidated statement of financial position as below:

	2022 RMB million	2021 RMB million
Deferred tax assets	347	135
Deferred tax liabilities	(80)	(80)
	267	55

The following are the major deferred tax assets (liabilities) recognised and movements thereon during the current and prior year:

	Intangible assets RMB million	Tax losses RMB million	Others RMB million	Total RMB million
At 1 January 2021	(88)	4	37	(47)
(Charged) credited to profit or loss	(7)	104	4	101
Exchange adjustments	1	–	–	1
At 31 December 2021	(94)	108	41	55
(Charged) credited to profit or loss	(9)	197	25	213
Exchange adjustments	(6)	3	2	(1)
At 31 December 2022	(109)	308	68	267

At the end of the reporting period, the Group has taxable temporary differences associated with undistributed earnings of PRC subsidiaries of RMB8,444 million (2021: RMB7,576 million). No deferred tax liability has been recognised for these undistributed earnings because the Group is in a position to control the timing of the reversal of the temporary differences and it is probable that such differences will not reverse in the foreseeable future.

24. DEFERRED TAXATION (Cont'd)

A deferred tax asset has been recognised in respect of RMB1,422 million (2021: RMB567 million) of the unused tax losses of the Group during the year ended 31 December 2022. The Group has not recognised deferred tax assets arising from tax losses amounting to RMB3,334 million (2021: RMB3,069 million) due to the unpredictability of the future profit streams and tax losses to be agreed with the PRC tax authority. The unrecognised tax losses will be expired as follows, which are five years or ten years from the year in which the loss was originated, to offset against future taxable profits.

	2022 RMB million	2021 RMB million
Expire in:		
— 2022	—	271
— 2023	278	288
— 2024	371	380
— 2025	402	416
— 2026	461	527
— 2027	488	151
— 2028	226	226
— 2029	220	220
— 2030	313	311
— 2031	322	279
— 2032	253	—
	3,334	3,069

At the end of the reporting period, the Group has deductible temporary differences of RMB96 million (2021: RMB101 million). The deferred tax asset has been recognised in respect of all such differences of the Group during the year ended 31 December 2022.

Others mainly represented deferred tax assets related to inventories, deferred revenue, accelerated tax depreciation, accrued expenses and other miscellaneous items.

25. PROPERTIES UNDER DEVELOPMENT/PROPERTIES FOR SALE

	2022 RMB million	2021 RMB million
Properties under development	343	317
Properties for sale	303	205
	646	522

The Group's properties under development are situated in the PRC. All of the properties under development are stated at the lower of cost and net realisable value.

The Group classifies properties under development as current because the Group expects to realise them in its normal operating cycle. At 31 December 2022, properties under development includes an amount of approximately RMB251 million (2021: 153 million) which is expected to be realised after more than twelve months from the end of the reporting period. Sales deposits received from purchasers at the end of the reporting period are included in contract liabilities as disclosed in Note 31.

Analysis of leasehold lands:

	2022 RMB million	2021 RMB million
Carrying amount	202	205

The carrying amount of leasehold lands is measured under HKFRS 16 at cost less any accumulated depreciation and any impairment losses. The residual values are determined as the estimated disposal value of the leasehold land component. No depreciation charge is made on the leasehold lands taking into account the estimated residual values as at 31 December 2022 and 2021.

26. INVENTORIES

	2022 RMB million	2021 RMB million
Raw materials	5	5
Finished goods	802	680
	807	685

27. TRADE RECEIVABLES

	2022 RMB million	2021 RMB million
Trade receivables	690	858
Less: Allowance of credit losses	(36)	(26)
	654	832

As at 1 January 2021, trade receivables from contracts with customers amounted to RMB525 million.

Details of credit period allowed by the Group are set out in Note 5.

27. TRADE RECEIVABLES (Cont'd)

The following is an aged analysis of trade receivables net of allowance for credit losses presented based on the date of delivery of goods/date of rendering of services which approximated the respective revenue recognition dates.

	2022 RMB million	2021 RMB million
Trade debtors		
0 — 30 days	334	375
31 — 60 days	183	264
61 — 90 days	66	107
Over 90 days	71	86
	654	832

As at 31 December 2022, included in the Group's trade receivables balance are debtors with aggregate carrying amount of RMB151 million (2021: RMB241 million) which are past due as at the reporting date. Out of the past due balances, RMB51 million (2021: RMB70 million) has been past due 90 days or more but are not considered as credit-impaired having regard to the historical repayment from the trade debtors, as well as forward-looking information that is available without undue cost or effort. Accordingly, the corresponding expected credit loss is insignificant. The Group does not hold any collateral over these balances.

Before accepting any new distributor/customer, the Group uses an internal credit assessment policy to assess the potential distributor/customer's credit quality and define credit limits by distributor/customer. Management closely monitors the credit quality of trade receivables and considers the trade receivables that are neither past due nor impaired to be of a good credit quality.

Details of impairment assessment of trade receivables are set out in Note 40.

28. OTHER RECEIVABLES, PREPAYMENTS AND DEPOSITS

	2022 RMB million	2021 RMB million
Prepayments to suppliers	110	86
Prepayments for rented premises, utilities and server	50	57
Refundable rental and guarantee deposits (Note a)	91	77
Other receivables from agents for purchasing cryptocurrencies	80	—
Other receivables from an agent for repurchasing the shares of the Company	—	20
Contract assets (Note b)	20	12
Prepayment for convertible and exchangeable bonds interest	52	48
Other tax recoverable	65	68
Government grant receivables	82	63
Others	88	101
	638	532
Analysed for financial reporting purpose:		
Non-current	89	38
Current	549	494
	638	532

Details of the impairment assessment of other receivables are set out in Note 40.

Notes:

(a) Included in refundable rental and guarantee deposits as at 31 December 2022 are balances of (i) RMB32 million (2021: RMB32 million) which represents deposits for existing and potential lease contracts paid to a related company, 福州楊振華851生物工程技術研究開發有限公司 (Fuzhou Yangzhenhua 851 Bio-Engineering Research Inc.) ("Fuzhou 851") and (ii) RMB25 million (2021: RMB25 million) which represents deposit for technical support service paid to 福州天亮網絡技術有限公司 (Fuzhou Tianliang Network Technology Co., Limited).

(b) The contract assets primarily relate to the Group's right to consideration for work completed and not billed because the rights are conditional on the Group's future performance in achieving specified milestones at the reporting date on the provision of mobile solution, products and marketing services and retention receivables on education equipment and related goods. The contract assets are transferred to trade receivables when the rights become unconditional.

29. RESTRICTED BANK BALANCE AND PLEDGED BANK DEPOSITS/BANK DEPOSITS WITH ORIGINAL MATURITY OVER THREE MONTHS/CASH AND CASH EQUIVALENTS

Restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances carry interest at prevailing banking deposit rates which ranges from 0.001% to 4.490% (2021: 0.001% to 2.550%) per annum.

Details of the impairment assessment of restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances are set out in Note 40.

30. TRADE AND OTHER PAYABLES

	2022 RMB million	2021 RMB million
Trade payables (Note a)	680	681
Accrued staff costs	358	332
Government grants (Note b)	20	25
Other tax payables	34	28
Payables for purchase of property, plant and equipment	128	105
Consideration payables	29	6
Accrued expenses	65	156
Others (Note c)	218	133
	1,532	1,466
Analysed for financial reporting purpose:		
Current	1,513	1,455
Non-current	19	11
	1,532	1,466

30. TRADE AND OTHER PAYABLES (Cont'd)

Notes:

(a) The following is an aged analysis of trade payables presented based on the invoice date at the end of the reporting period.

	2022 RMB million	2021 RMB million
0 — 90 days	301	614
91 — 180 days	300	7
181 — 365 days	24	5
Over 365 days	55	55
	680	681

(b) The amount represents government grants which are (i) the costs incurred by the Group in conducting and launching research and development projects in Fujian Province, the PRC, relating to compensation for research and development costs already incurred and (ii) the costs incurred by the Group for purchasing property, plant and equipment, which will recognise in profit or loss on a systematic basis over the estimated useful life of the property, plant and equipment related to the government grants on capital expenditure.

(c) Others mainly represent advertising payable, office and server service expenses payables and other miscellaneous items for operating activities.

31. CONTRACT LIABILITIES

	2022 RMB million	2021 RMB million
Online and mobile games (Note a)	41	45
Education equipment and related goods (Note a)	271	223
Educational services (Note a)	79	61
Mobile solution, products and marketing services (Note a)	6	3
Property project (Note b)	9	25
	406	357
Revenue recognised that was included in the contract liabilities at the beginning of the year	215	280

As at 1 January 2021, contract liabilities amounted to RMB405 million. There was no revenue recognised during the year that related to performance obligations that were satisfied in prior periods.

Notes:

(a) The contract liabilities include unutilised game points on online and mobile games, advance payments from customers for contracted education equipment and related goods, advance payments from customers for educational services and advance payments from customers for mobile solution, products and marketing services. The contract liabilities are transferred to revenue when customers control and receive the goods, services and benefits.

(b) The amount represents the pre-sale deposits and advance payment received from customers for property project prior to the respective properties have been completed and delivered to the customers which is a point in time when customers have the ability to direct the use of the properties and obtain substantially all the remaining benefits of the properties. The Group receives a fixed amount of RMB50,000 for each property unit as deposits from customers when they sign the sale and purchase agreement. The deposits and advance payment schemes result in contract liabilities being recognised throughout the property construction period until the customer obtains control of the completed property.

32. LEASE LIABILITIES

	2022 RMB million	2021 RMB million
Within one year	67	64
Within a period of more than one year but not more than two years	38	58
Within a period of more than two years but not more than five years	12	36
Within a period of more than five years	—	1
	117	159
Less: Amount due for settlement with 12 months shown under current liabilities	(67)	(64)
Amount due for settlement after 12 months shown under non-current liabilities	50	95

The effective interest rate on the Group's lease liabilities was 5.15% (2021: 5.20%) during the year ended 31 December 2022.

33. PROVISIONS

	Warranty RMB million
At 1 January 2021	72
Additional provisions	47
Utilisation of provisions	(28)
Exchange adjustments	(2)
At 31 December 2021	**89**
Additional provisions	**54**
Utilisation of provisions	**(53)**
Exchange adjustments	**4**
At 31 December 2022	**94**

The Group provided warranty on its education equipment sold to its customers. The warranty provision is calculated by estimating the possible failure rates of the Promethean Group's hardware, with the exception of projectors which are covered by a third party warranty. The length of warranty period ranges from one to seven years and varies depending on both the product and the country the product is sold to.

The timing and frequency of product failures are inherently uncertain and for this reason the warranty provision has been disclosed as current.

34. BANK BORROWINGS

The carrying amounts of the bank borrowings are repayable*:

	2022 RMB million	2021 RMB million
Within one year	696	365
Within a period of more than one year but not exceeding two years	1	—
Within a period of more than two years but within five years	1	—
	698	365
The carrying amounts of bank borrowings that contain a repayable on demand clause (shown under current liabilities) but repayable within one year	41	38
	739	403
Less: Amounts due within one year shown under current liabilities	(737)	(403)
Amounts shown under non-current liabilities	2	—

* The amounts due are based on scheduled repayment dates.

The exposure of the Group's bank borrowings is as follows:

	2022 RMB million	2021 RMB million
Variable-rate borrowings	376	192
Fixed-rate borrowings	363	211
	739	403
Secured	736	369
Unsecured	3	34
	739	403

34. BANK BORROWINGS (Cont'd)

The Group's variable-rate borrowings for the year ended 31 December 2022 carry interest at (i) one-month Hong Kong Interbank Offered Rate ("HIBOR") plus 2.20% to 2.35% per annum, (ii) three-month Bloomberg Short-Term Bank Yield ("BSBY") Rate two business days prior to date of borrowing plus 1.35%, (iii) the United States Prime Rate plus 0.35% or 0.50%, (iv) interest rate of 1.00% per annum or (v) one-year Loan Prime Rate of China less 0.20% to 0.65% per annum.

The Group's variable-rate borrowings for the year ended 31 December 2021 carry interest at (i) one-month HIBOR plus 2.20% to 2.35% per annum, (ii) three-month BSBY Rate two business days prior to date of borrowing plus 1.50%, (iii) the United States Prime Rate plus 0.50% or (iv) interest rate of 1.00% or 3.85% per annum.

The range of effective interest rates on the Group's bank borrowings are as follows:

	2022	2021
Variable-rate borrowings	2.78% — 7.85%	2.26% — 3.75%
Fixed-rate borrowings	1.00% — 3.50%	1.00% — 3.85%

As at 31 December 2022, the borrowings were secured by pledge of certain properties and right-of-use assets of the Group as set out in Note 41, personal guarantee provided by a director of the Company, corporate guarantee provided by the Company and corporate guarantee provided by its subsidiaries (2021: pledge of certain properties and right-of-use assets of the Group, corporate guarantee provided by the Company and corporate guarantee provided by its subsidiaries).

35. CONVERTIBLE AND EXCHANGEABLE BONDS

On 9 March 2020, Best Assistant Education Online Limited ("Best Assistant"), an indirect non-wholly owned subsidiary of the Company, issued convertible and exchangeable bonds with an aggregate principal amount of USD150 million (equivalent to RMB1,039 million) to Nurture Education (Cayman) Limited (the "CEB Investor"). Simultaneously, the Company issued unlisted warrants to the CEB Investor in March 2020. The warrants shall entitle the CEB Investor to subscribe for ordinary shares of the Company. The convertible and exchangeable bonds bear interest accruing at a rate of 5% per annum on the aggregate principal amount of the convertible and exchangeable bonds and will be due on the fifth anniversary from the bond issue date ("Maturity Date"). The convertible and exchangeable bonds are denominated in USD.

Convertible and exchangeable option

The convertible and exchangeable bonds are exercisable at the option of bondholders, in whole or in part and can either be (i) convertible into ordinary shares of Best Assistant at an initial conversion price of USD0.5367 per conversion share at any time and from time to time during the period from the conversion period; or (ii) exchangeable for ordinary shares of Promethean, a wholly-owned subsidiary of Best Assistant and an indirect non-wholly owned subsidiary of the Company, at an initial exchange price of USD2.2146 per exchange share at any time and from time to time during the exchange period, in the event that Promethean pursues a qualified initial public offering which refers to a firmly underwritten initial public offering of ordinary shares of Promethean on an internationally recognised exchange with a minimum net proceeds and market capitalisation as set out in the terms and conditions of the convertible and exchangeable bonds. At initial recognition, the convertible and exchangeable option was classified as derivative financial instrument. The fair value of the convertible and exchangeable option was insignificant and the carrying amount is recognised as nil at initial recognition and at 31 December 2022 and 31 December 2021.

Warrants

Simultaneously with the issue of the convertible and exchangeable bonds, the Company issued to the CEB Investor the warrants with a subscription price of HKD18.8698 per share. The warrants are allotted to subscribe at any time and from time to time during the issue date to Maturity Date for up to 11,502,220 shares. At initial recognition, the warrants were classified as derivative financial instrument at a fair value of RMB87 million.

35. CONVERTIBLE AND EXCHANGEABLE BONDS (Cont'd)

Redemption

Best Assistant shall redeem the convertible and exchangeable bonds, upon the request of the CEB Investor at any time on or after the occurrence of an early redemption event, or if not early redeemed, converted, exchanged or purchased and cancelled, on the Maturity Date, at an amount that would provide the bondholders with an amount equal to the redemption amount (i.e. an amount that would provide the bondholders an internal rate of return on the principal amount of the convertible and exchangeable bonds of 15% per annum, inclusive of all interest received on the principal amount of the convertible and exchangeable bonds). The early redemption event is contingent upon the occurrence of any of (i) the third anniversary from the bond issue date; or (ii) change of control of Best Assistant or Promethean; or (iii) a liquidity event. The early redemption option is considered as closely related to the host debt and is therefore accounted for as part of the amortised cost accounting of the host debt contract.

The effective interest rate of the debt host component is 16.62%. The movement of the debt host component of the convertible and exchangeable bonds for the year is set out as below:

	2022 RMB million	2021 RMB million
At 1 January	1,085	992
Interest accrued	194	165
Settlement of interest	(50)	(48)
Exchange adjustments	104	(24)
	1,333	1,085
Less: Interest payable within one year (shown under current liabilities)	(16)	(15)
Amount shown under non-current liabilities	1,317	1,070

36. CONVERTIBLE PREFERRED SHARES

On 13 February 2015, Best Assistant issued 180,914,513 Series A convertible preferred shares of par value of USD0.001 each at an aggregate issue price of USD53 million (equivalent to RMB322 million) to IDG-Accel China Growth Fund-L.P., IDG-Accel China Growth Fund-A L.P., IDG-Accel China Investors L.P. (which collectively own approximately 7.89% of the issued share capital of the Company, the "IDG Investors"), Vertex Legacy Continuation Fund Pte Ltd. ("Vertex Legacy"), Hong Kong Alpha Group Limited ("Hong Kong Alpha"), Catchy Holdings Limited, DJM (in which Mr. Liu Dejian and Mr. Zheng Hui, executive directors and beneficial owners of the Company, together own 100% equity interest therein), Creative Sky International Limited and NetDragon Websoft Inc. ("NetDragon BVI"), a direct wholly owned subsidiary of the Company. The Series A convertible preferred shares are denominated in USD.

On 2 May 2018, Best Assistant issued 112,560,245 Series B convertible preferred shares of par value of USD0.001 each at an aggregate issue price of USD123 million (equivalent to RMB781 million) to Fortis Advisors LLC as a consideration to acquire Edmodo, LLC (formerly known as "Edmodo Inc."), an indirect non-wholly owned subsidiary of the Company. The Series B convertible preferred shares are denominated in USD.

Conversion

The Series A and Series B convertible preferred shares shall be converted, at the option of the holder thereof, at any time after the issue date of the convertible preferred shares, into ordinary shares of Best Assistant at the applicable conversion ratio which was initially one ordinary share for each convertible preferred share. The initial conversion ratio of 1:1 is subject to certain adjustments (such as proportional adjustment and anti-dilution adjustment).

The Series A and Series B convertible preferred shares shall be automatically converted into ordinary shares upon occurrence of an underwritten public offering of ordinary shares of Best Assistant wherein the pre-offering market capitalisation of Best Assistant is no less than USD1,000 million and net proceeds to Best Assistant are in excess of USD100 million.

Dividends

The holders of the outstanding Series A and Series B convertible preferred shares shall be entitled to receive dividends, when, as and if declared by the board of Best Assistant, out of the funds lawfully available therefor, in preference and priority to any declaration or payment of any distribution on ordinary shares or other equity securities. The right to receive dividends on the Series A and Series B convertible preferred shares shall not be cumulative, and no rights to such dividends shall accrue to holders of convertible preferred shares.

36. CONVERTIBLE PREFERRED SHARES (Cont'd)

Liquidation

The holders of the Series A convertible preferred shares have preference over holders of ordinary shares and other equity securities with respect to payment of dividends and distribution of assets and funds upon liquidation of Best Assistant. The holders of the Series A convertible preferred shares shall be entitled to receive an amount equivalent to 300% of the issue price of the Series A convertible preferred shares, plus all declared but unpaid dividends (the "Series A" preference amount).

The holders of the Series B convertible preferred shares shall be entitled to receive for each of the outstanding Series B convertible preferred shares held, an amount equal to the Series B adjusted price, plus all declared but unpaid dividends (the "Series B" preference amount). The Series B adjusted price means, at any given time, the Series B issue price by a fraction, (i) the numerator of which is equal to the original Series B value minus the aggregate indemnification claim amount, and (ii) the denominator of which is the original Series B value; provided that the Series B adjusted price will not be reduced below USD0.001 per share.

If the assets and funds thus distributed amount the preferred shareholders shall be insufficient for the full payment of the Series A and Series B preference amount to all the preferred shareholders, then the entire assets and funds of Best Assistant legally available for distribution shall be distributed rateably among the preferred shareholders in proportion to the aggregate preference amount each such preferred shareholder is otherwise entitled to receive.

The financial liability component of the Series A and Series B convertible preferred shares is classified as financial liabilities at FVTPL and is measured at fair value on initial recognition. At the end of each reporting period subsequent to initial recognition, the financial liability component of Series A and Series B convertible preferred shares is measured at fair value, with changes in fair value recognised directly in profit or loss in the period in which they arise.

As at 31 December 2022 and 2021, the fair value of the convertible preferred shares is nil.

37. SHARE CAPITAL OF THE COMPANY

	Number of shares	Nominal value	
		USD	RMB million
Authorised:			
Ordinary shares of USD0.01 each			
At 1 January 2021, 31 December 2021 and 31 December 2022	1,000,000,000	10,000,000	76
Issued and fully paid:			
Ordinary shares of USD0.01 each			
At 1 January 2021	561,020,516	5,610,205	41
Shares issued upon exercise of share options (Note a)	456,792	4,568	— #
Repurchase and cancellation of shares (Note b)	(16,232,000)	(162,320)	(1)
At 31 December 2021	545,245,308	5,452,453	40
Shares issued upon exercise of share options (Note a)	19,825	198	— #
Repurchase and cancellation of shares (Note b)	(4,521,500)	(45,215)	— #
At 31 December 2022	540,743,633	5,407,436	40

less than RMB1 million

Notes:

(a) During the year ended 31 December 2022, 19,825 (2021: 456,792) share options were exercised and as a result the same number of ordinary shares of the Company were issued. Nil (2021: nil) and nil (2021: RMB7 million) were recorded as share capital and share premium, respectively.

(b) During the year ended 31 December 2022 and 2021, the Company repurchased its own shares through purchases on the Stock Exchange. The shares had been subsequently cancelled.

38. SHARE-BASED PAYMENT TRANSACTIONS

(a) Equity-settled share option scheme

The Company's share option scheme (the "Old Scheme") was adopted pursuant to a resolution passed on 12 June 2008. The Old Scheme has expired on 12 June 2018 and a new share option scheme (the "New Scheme") was approved and adopted by the shareholders at the annual general meeting of the Company held on 24 May 2018. Subject to early termination, the Old Scheme and the New Scheme shall be valid and effective for a period of 10 years from 12 June 2008 and 24 May 2018, respectively. The purpose of the Old Scheme and the New Scheme is to provide the eligible participants ("Eligible Participants") as defined in the Old Scheme and the New Scheme with the opportunity to acquire interests in the Company and to encourage the Eligible Participants to work towards enhancing the value of the Company and its shares for the benefit of the Company and its shareholders as a whole. Eligible Participants of the Old Scheme and the New Scheme include employees, executives and officers of the members of the Group (including executive and non-executive directors of the members of the Group) and business consultants, agents and legal and financial advisers to the members of the Group whom the board of directors considers, in its sole discretion, will contribute or have contributed to the members of the Group.

At 31 December 2022, the number of shares in respect of which options had been granted and remained outstanding under the Old Scheme and the New Scheme were 1,223,000 and 5,300,000 respectively (31 December 2021: 1,358,917 and 5,300,000 respectively), representing 0.23% and 0.98% respectively (31 December 2021: 0.25% and 0.97% respectively) of the shares of the Company in issue at that date. As at 31 December 2022, the number of securities of the Company available for issue under the New Scheme was 47,041,969 (31 December 2021: 47,041,969), representing approximately 8.70% (31 December 2021: 8.63%) of the issued share capital of the Company as at 31 December 2022. The total number of shares in respect of which options may be granted under the Scheme is not permitted to exceed 10% of the shares of the Company in issue at any point in time, without prior approval from the Company's shareholders. However, the total maximum number of the shares which may be issued upon exercise of all outstanding share options must not exceed 30% of the issued share capital of the Company from time to time. The total number of shares issued and to be issued upon exercise of the options granted to each Eligible Participant (including both exercised and outstanding options) in any 12-month period shall not exceed 1% of the total number of shares in issue as at the date of grant. Where any further grant of options to an Eligible Participant would result in the total number of shares issued and to be issued upon exercise of all the options granted and to be granted to such person (including exercised, cancelled and outstanding options) in the 12-month period up to and including the date of such further grant representing in aggregate over 1% of the total number of shares in issue, such further grant must be separately approved by the shareholders in general meeting with such Eligible Participant and his close associates (or his associates if the Eligible Participant is a connected person) abstaining from voting. Options granted to a substantial shareholder or an independent non-executive director of the Company, or to any of their respective associates, in excess of 0.1% of the shares of the Company in issue at any time and with an aggregate value (based on the closing price of the Company's shares as stated in the daily quotations sheet issued by the Stock Exchange at the date of the grant) in excess of HKD5 million, within any 12-month period, are subject to shareholders' approval in advance in a general meeting.

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Options granted must be taken up within 28 days from the date of the offer, upon payment of a nominal consideration of HKD1 in total by the grantee. Options may be exercised at any time for a period determined by its directors which shall not be later than the day immediately preceding the tenth anniversary of the date of grant. There is no general requirement that an option must be held for any minimum period before it can be exercised but the board of directors of the Company is empowered to impose at its discretion any such minimum period at the time of grant of any particular option. The exercise price of the share options must be at least the highest of (i) the nominal value of an ordinary share on the date of grant; (ii) the closing price of the Company's shares as stated in the daily quotations sheet of the Stock Exchange on the date of the offer of the share options; and (iii) the average closing price of the Company's shares as stated in the daily quotations sheet of the Stock Exchange for the five trading days immediately preceding the date of the offer.

Details of specific categories of options are as follows:

Batch 1:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
28 April 2011	28 April 2011 — 27 April 2012	28 April 2012 — 27 April 2021	—	—
28 April 2011	28 April 2011 — 27 April 2013	28 April 2013 — 27 April 2021	—	—
28 April 2011	28 April 2011 — 27 April 2014	28 April 2014 — 27 April 2021	—	—
28 April 2011	28 April 2011 — 27 April 2015	28 April 2015 — 27 April 2021	—	—
28 April 2011	28 April 2011 — 27 April 2016	28 April 2016 — 27 April 2021	—	—
			—	—

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Batch 2:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
22 July 2011	22 July 2011 — 21 July 2013	22 July 2013 — 21 July 2021	—	—
22 July 2011	22 July 2011 — 21 July 2014	22 July 2014 — 21 July 2021	—	—
22 July 2011	22 July 2011 — 21 July 2015	22 July 2015 — 21 July 2021	—	—
			—	—

Batch 3:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
23 April 2012	23 April 2012 — 22 April 2013	23 April 2013 — 22 April 2022	—	5,167
23 April 2012	23 April 2012 — 22 April 2014	23 April 2014 — 22 April 2022	—	9,225
23 April 2012	23 April 2012 — 22 April 2015	23 April 2015 — 22 April 2022	—	12,300
23 April 2012	23 April 2012 — 22 April 2016	23 April 2016 — 22 April 2022	—	24,625
23 April 2012	23 April 2012 — 22 April 2017	23 April 2017 — 22 April 2022	—	34,350
			—	85,667

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Batch 4:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
12 September 2012	12 September 2012 — 11 September 2013	12 September 2013 — 11 September 2022	–	4,200
12 September 2012	12 September 2012 — 11 September 2014	12 September 2014 — 11 September 2022	–	6,300
12 September 2012	12 September 2012 — 11 September 2015	12 September 2015 — 11 September 2022	–	8,400
12 September 2012	12 September 2012 — 11 September 2016	12 September 2016 — 11 September 2022	–	14,250
12 September 2012	12 September 2012 — 11 September 2017	12 September 2017 — 11 September 2022	–	17,100
			–	50,250

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Batch 5:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
16 January 2013	16 January 2013 — 15 January 2014	16 January 2014 — 15 January 2023	3,350	3,350
16 January 2013	16 January 2013 — 15 January 2015	16 January 2015 — 15 January 2023	5,025	5,025
16 January 2013	16 January 2013 — 15 January 2016	16 January 2016 — 15 January 2023	6,700	6,700
16 January 2013	16 January 2013 — 15 January 2017	16 January 2017 — 15 January 2023	8,875	8,875
16 January 2013	16 January 2013 — 15 January 2018	16 January 2018 — 15 January 2023	24,550	24,550
			48,500	48,500

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Batch 6:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
4 December 2013	4 December 2013 — 3 December 2014	4 December 2014 — 3 December 2023	159,000	159,000
4 December 2013	4 December 2013 — 3 December 2015	4 December 2015 — 3 December 2023	238,500	238,500
4 December 2013	4 December 2013 — 3 December 2016	4 December 2016 — 3 December 2023	477,000	477,000
			874,500	874,500

Batch 7:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
25 April 2014	25 April 2014 — 31 December 2016	1 January 2017 — 24 April 2024	—	—
25 April 2014	25 April 2014 — 31 December 2017	1 January 2018 — 24 April 2024	—	—
			—	—

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

Batch 8:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
31 March 2017	31 March 2017 — 30 March 2018	31 March 2018 — 30 March 2027	75,000	75,000
31 March 2017	31 March 2017 — 30 March 2019	31 March 2019 — 30 March 2027	75,000	75,000
31 March 2017	31 March 2017 — 30 March 2020	31 March 2020 — 30 March 2027	150,000	150,000
			300,000	300,000

Batch 9:

Date of grant	Vesting period	Exercisable period	Outstanding at 31 December 2022	Outstanding at 31 December 2021
24 January 2020	24 January 2020 — 23 January 2021	24 January 2021 — 23 January 2030	1,349,000	1,349,000
24 January 2020	24 January 2020 — 23 January 2022	24 January 2022 — 23 January 2030	1,349,000	1,349,000
24 January 2020	24 January 2020 — 23 January 2023	24 January 2023 — 23 January 2030	1,352,000	1,352,000
24 January 2020	24 January 2020 — 23 January 2024	24 January 2024 — 23 January 2030	1,250,000	1,250,000
			5,300,000	5,300,000

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

The following table discloses the movement of the share options during the year ended 31 December 2022:

Option batch	Exercise price HKD	Outstanding at 1 January 2022	Exercised during year	Forfeited during year	Outstanding at 31 December 2022
Batch 1	4.80	—	—	—	—
Batch 2	4.60	—	—	—	—
Batch 3	5.74	85,667	(19,825)	(65,842)	—
Batch 4	7.20	50,250	—	(50,250)	—
Batch 5	11.16	48,500	—	—	48,500
Batch 6	15.72	874,500	—	—	874,500
Batch 7	14.66	—	—	—	—
Batch 8	23.65	300,000	—	—	300,000
Batch 9	21.07	5,300,000	—	—	5,300,000
		6,658,917	(19,825)	(116,092)	6,523,000
Exercisable at the end of the year 2022					3,921,000
Weighted average exercise price		HKD20.11			HKD20.40

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

The following table discloses the movement of the share options during the year ended 31 December 2021:

Option batch	Exercise price HKD	Outstanding at 1 January 2021	Exercised during year	Forfeited during year	Outstanding at 31 December 2021
Batch 1	4.80	341,867	(46,192)	(295,675)	–
Batch 2	4.60	8,000	(8,000)	–	–
Batch 3	5.74	127,517	(41,850)	–	85,667
Batch 4	7.20	50,250	–	–	50,250
Batch 5	11.16	131,250	(82,750)	–	48,500
Batch 6	15.72	874,500	–	–	874,500
Batch 7	14.66	278,000	(278,000)	–	–
Batch 8	23.65	300,000	–	–	300,000
Batch 9	21.07	6,300,000	–	(1,000,000)	5,300,000
		8,411,384	(456,792)	(1,295,675)	6,658,917
Exercisable at the end of the year 2021					2,707,917
Weighted average exercise price		HKD19.25			HKD20.11

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(a) Equity-settled share option scheme (Cont'd)

The weighted average remaining contractual lives of the Company's share options as at 31 December 2022 is 6.06 years (2021: 6.93 years). The exercise prices of the Company's share options outstanding as at 31 December 2022 range from HKD11.16 to HKD23.65 (2021: HKD5.74 to HKD23.65).

The Group recognised the total expense of RMB7 million for the year ended 31 December 2022 (2021: RMB12 million) in relation to share options granted by the Company.

(b) Share award scheme by the Company

Pursuant to a circular to shareholders of the Company dated 3 September 2008, the Company introduced a share award scheme (the "Share Award Scheme"), whereby eligible participants are conferred rights by the Company to be issued or transferred fully-paid ordinary shares in the capital of the Company (hereinafter referred to as the "Award").

The rationale of the Share Award Scheme is to recognise the contributions by certain employees and to provide incentives in order to retain them for the continual operation and development of the Group, and to attract suitable personnel for further development of the Group. The selected employee are not required to pay for the grant of the Award or for the shares allotted or allocated pursuant to the Award.

The aggregate number of the Award is not permitted to exceed 10% of the issued share capital of the Company from time to time. The maximum number of shares which may be awarded to a selected employee under the Share Award Scheme shall not exceed 1% of the issued share capital of the Company from time to time.

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(b) Share award scheme by the Company (Cont'd)

The eligibility of employees to participate in the Share Award Scheme and number of shares which are the subject of each Award at each date of grant to a selected employee in accordance with the Share Award Scheme shall be determined at the absolute discretion of the committee, which comprised the directors of the Company duly appointed by the board of directors to administer the Share Award Scheme (the "Committee"), which shall take into consideration various factors including the general financial condition of the Group, the rank and performance of the relevant employee and such other general criteria as the Committee may consider appropriate as well as other limitations set forth under the Listing Rules and those rules of the Share Award Scheme.

In determining the number of shares to be awarded each year, the Committee shall have reference to the financial performance of the Group as reflected in the profit before taxation of the financial year.

The grant of the Award to the selected employee shall be accepted by the selected employee within 28 days from the date of offer. The selected employee may accept or refuse the whole but not part of a grant of the Award. If the grant of the Award is not accepted by the selected employee within 28 days from the date of offer, the offer shall upon the expiry of the 28 days period automatically lapse and shall be null and void.

Performance conditions (the "Performance Conditions") refers to the condition or conditions imposed by the Company on the selected employee's employment with the Company which must be fulfilled or satisfied by the selected employee prior to his eligibility for the Award. Performance period refers to the period of a participant employment with the Group which is used to assess the selected employee's work performance for the purpose of determining the grant of the selected employee's award.

The current Performance Conditions proposed by the Committee is that shares will only be vested to the employees after rendering services for certain period. Each employee needs to render the agreed period of service in order to be entitled to the shares granted.

Fair value of the Award at the grant date is determined by reference to the market price immediately available upon the grant date. The Group recognised reversal of expenses of RMB1 million for the year ended 31 December 2022 (2021: expenses of RMB2 million) in relation to share awards.

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(b) Share award scheme by the Company (Cont'd)

Movements in the share awards granted during the years ended 31 December 2022 and 2021 are as follows:

Year ended 31 December 2022

Name of category of participant	Date of grant	Outstanding at 1 January 2022	Granted during year	Awards vested during year	Forfeited during year	Outstanding at 31 December 2022
Other employees	19 April 2018	148,080	–	(87,420)	(60,660)	–
Director	19 April 2018	218,160	–	(190,890)	(27,270)	–
		366,240	–	(278,310)	(87,930)	–

Year ended 31 December 2021

Name of category of participant	Date of grant	Outstanding at 1 January 2021	Granted during year	Awards vested during year	Forfeited during year	Outstanding at 31 December 2021
Other employees	19 April 2018	340,320	–	(112,790)	(79,450)	148,080
Director	19 April 2018	436,320	–	(190,890)	(27,270)	218,160
Director	26 March 2021	–	120,000	(120,000)	–	–
		776,640	120,000	(423,680)	(106,720)	366,240

Among the Award granted on 19 April 2018, 278,310 and 87,930 share awards (2021: 303,680 and 106,720 share awards) were vested and forfeited, respectively, during the year ended 31 December 2022.

Among the Award granted on 26 March 2021, 120,000 share awards were granted and vested during the year ended 31 December 2021.

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(c) Share awarded by a subsidiary of the Company

On 7 August 2012, Best Assistant adopted a share award scheme as amended on 13 February 2015 and 5 August 2022 (the "Best Assistant Share Award Scheme") in which selected participants include senior management employees of Best Assistant Group, consultants to Best Assistant Group employed by any member of the Company, its associated companies or their subsidiaries (excluding Best Assistant Group) and any person who contributes to the development of Best Assistant Group which has been certified and determined by the board of directors of Best Assistant with the affirmative vote of one director appointed by IDG Investors, Vertex Legacy or Hong Kong Alpha.

Subject to early termination, the Best Assistant Share Award Scheme shall be valid and effective for a term of ten years commencing on 7 August 2012 initially, and has been extended to twenty years commencing on 7 August 2012 during the current year. Best Assistant may also transfer shares awarded under the Best Assistant Share Award Scheme whether vested or unvested to other trusts and if there is a change in control of Best Assistant, all awarded shares shall immediately be vested. The board of directors of Best Assistant may also waive any vesting conditions with the affirmative vote of one director appointed by IDG Investors, Vertex Legacy or Hong Kong Alpha. The maximum number of shares which may be granted to the participants under the Best Assistant Share Award Scheme shall not exceed ten percent (10%) of the total issued share capital of Best Assistant from time to time or such number of shares as determined by the board of directors of Best Assistant with the affirmative vote of one director appointed by IDG Investors, Vertex Legacy or Hong Kong Alpha.

Pursuant to the rules of the Best Assistant Share Award Scheme, Best Assistant has signed an agreement with the trustee, for the purpose of administering the Best Assistant Share Award Scheme and holding the awarded shares before they are vested.

Subject to, inter alia, the receipt by the trustee of (i) the prescribed transfer documents duly signed by the selected participants within the period stipulated in the vesting notices; and (ii) confirmation from Best Assistant that all vesting conditions having been fulfilled, the awarded shares will be transferred to the selected participants at nil consideration upon vesting.

38. SHARE-BASED PAYMENT TRANSACTIONS (Cont'd)

(c) Share awarded by a subsidiary of the Company (Cont'd)

For the share awards granted by Best Assistant on 1 July 2018, 600,000 share awards were granted and 120,000, 120,000, 120,000, 120,000 and 120,000 share awards were vested on 1 July 2018, 1 July 2019, 1 July 2020, 1 July 2021 and 1 July 2022 respectively.

For the share awards granted by Best Assistant on 1 July 2019, 400,000 share awards were granted and 80,000, 80,000, 80,000 and 80,000 share awards were vested on 1 July 2019, 1 July 2020, 1 July 2021 and 1 July 2022, respectively. 80,000 share awards will be vested on 1 July 2023.

Fair value of the share award at the grant date is estimated using a discounted cash flow model, which included some assumptions that are not supportable by observable market prices or rates upon the grant date. The Group recognised the total expenses of less than RMB1 million for each of the year ended 31 December 2022 and 2021 in relation to the Best Assistant Share Award Scheme.

39. CAPITAL RISK MANAGEMENT

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximising the return to owners through the optimisation of the debt and equity balance.

The capital structure of the Group consists of net debt, which includes bank borrowings (Note 34), net of cash and cash equivalents, and equity attributable to owners of the Company, comprising issued share capital, reserves and retained profits.

The directors of the Company review the capital structure on a regular basis. As a part of this review, the directors consider the cost of capital and the risks associated with the issued share capital. The Group will balance its overall capital structure through the payment of dividends as well as issue new shares or return capital to owners.

40. FINANCIAL INSTRUMENTS

(a) Categories of financial instruments

	2022 RMB million	2021 RMB million
Financial assets		
Financial assets at amortised cost	4,882	5,426
Equity instruments at FVTOCI	56	8
Financial assets at FVTPL	488	268
	5,426	5,702
Financial liabilities		
Amortised cost	3,125	2,413
Convertible preferred shares at FVTPL	—	—
Derivative financial instruments	31	43
	3,156	2,456
Lease liabilities	117	159

(b) Financial risk management objectives and policies

The Group's major financial instruments include equity instruments at FVTOCI, financial assets at FVTPL, amounts due from joint ventures, loan receivables, trade receivables, other receivables, refundable rental deposits, restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months, cash and cash equivalents, trade and other payables, bank borrowings, lease liabilities, convertible preferred shares, derivative financial instruments and convertible and exchangeable bonds. Details of these financial instruments are disclosed in respective notes. The risks associated with these financial instruments and the policies on how to mitigate these risks are set out below. The management manages and monitors these exposures to ensure appropriate measures are implemented on a timely and effective manner. There has been no significant change to the Group's exposure to market risks or the manner in which it manages and measures the risk.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(I) Market risk

(i) Currency risk

The Group operates mainly in the PRC, the USA and the UK. Most of its monetary assets, liabilities and transactions are principally denominated in the functional currency of respective group entities, which is RMB, USD and Great Britain Pound ("GBP"). However, the Group also has operations in Hong Kong, Canada, Australia, Europe and Poland and the business transactions conducted in these areas during the year were mainly denominated and settled in HKD, Canadian dollar ("CAD"), Australian dollar ("AUD"), European dollar ("EURO") and Polish Zloty ("PLN") respectively. The Group currently does not have hedging policy in respect of the foreign currency risk. However, the management closely monitors foreign exchange exposure to ensure appropriate measures are implemented on a timely and effective manner.

The carrying amounts of the Group's major foreign currency denominated monetary assets and liabilities (including loan receivables, trade receivables, other receivables, restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months, cash and cash equivalents, trade and other payables, lease liabilities and bank borrowings) at the end of the reporting period are as follows:

	Assets		Liabilities	
	2022	2021	2022	2021
	RMB million	RMB million	RMB million	RMB million
HKD	52	92	45	62
USD	1,169	760	1,334	1,086
CAD	6	10	—	—
AUD	3	2	—	—
EURO	60	83	1	1
PLN	1	—	23	—

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(I) Market risk (Cont'd)

(i) Currency risk (Cont'd)

Sensitivity analysis

The following table details the Group's sensitivity analysis to a 5% increase and decrease in RMB against HKD, USD, CAD, AUD, EURO or PLN. 5% is the sensitivity rate used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonably possible change in foreign exchange rates. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the year end for a 5% change in foreign currency rates. A positive (negative) number below indicates an increase (a decrease) in post-tax profit where RMB strengthen 5% against relevant foreign currencies. For a 5% weakening of RMB against the relevant foreign currencies, there would be an equal and opposite impact on the post-tax profit.

	2022 RMB million	2021 RMB million
Post-tax profit		
HKD	—	(1)
USD	6	12
CAD	—	—
AUD	—	—
EURO	(2)	(3)
PLN	1	—

(ii) Interest rate risk

The interest income is derived from the Group's restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances that carry interest at the respective banking deposit rate of the banks and loan receivables.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(I) Market risk (Cont'd)

(ii) Interest rate risk (Cont'd)

The Group is exposed to fair value interest rate risk in relation to fixed-rate loan receivables (Note 23), lease liabilities (Note 32), bank borrowings (Note 34) and convertible and exchangeable bonds (Note 35).

The Group is exposed to cash flow interest rate risk in relation to variable-rate restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances (Note 29), variable-rate loan receivables (Note 23) and variable-rate bank borrowings (Note 34) carried at prevailing banking deposit rate. The cash flow interest rate risk is in relation to the fluctuation of HIBOR, BSBY Rate, United States Prime Rate and Loan Prime Rate of China (collectively as "Variable Borrowing Rates") arising from the Group's bank borrowings. The Group manages its interest rate exposures by assessing the potential impact arising from any interest rate movements based on interest rate level and outlook. The management will review the proportion of borrowings in fixed and floating rates and ensure they are within reasonable range.

Sensitivity analysis

The sensitivity analysis below has been determined based on the exposure to interest rates for variable-rate borrowings at the end of the reporting period. The analysis is prepared assuming the variable-rate borrowings outstanding at the end of the reporting period were outstanding for the whole year. A 50 basis points (2021: 50 basis points) increase or decrease in Variable Borrowing Rates is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

If interest rates had been 50 basis points (2021: 50 basis points) higher/lower and all other variables were held constant, the Group's post-tax profit for the year ended 31 December 2022 would decrease/increase by RMB1 million (2021: RMB1 million).

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment

As at 31 December 2022, the Group's maximum exposure to credit risk which will cause a financial loss to the Group due to failure to discharge an obligation by the counterparties is arising from the carrying amount of the respective recognised financial assets as stated in the consolidated statement of financial position.

In order to minimise the credit risk of trade receivables, contract assets, other receivables, refundable rental deposits and loan receivables, the management of the Group has delegated a team responsible for determination of credit limits, credit approvals and other monitoring procedures to ensure that follow-up action is taken to recover overdue debts. In this regard, the directors of the Company consider that the Group's credit risk is significantly reduced. In addition, the Group always recognises lifetime ECL for trade receivables and contract assets. The ECL on these assets are assessed individually for credit-impaired debtors and collectively for others using a provision matrix with appropriate groupings.

The credit risk on restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months and bank balances are limited because the counterparties are banks with high credit ratings assigned by international credit-rating agencies or are state-owned banks located in the PRC. In this regard, the directors of the Company consider that the ECL on these balances is insignificant.

The Group regularly monitors the business performance of the joint ventures. The Group's credit risks in these balances are mitigated through the value of the assets held by these entities and the power to participate or jointly control the relevant activities of these entities. The directors of the Company believe that there are no significant increase in credit risk of these amounts since initial recognition and the Group provided impairment based on 12m ECL. For the years ended 31 December 2022 and 2021, the Group assessed the ECL for these balances were insignificant and thus loss allowance was negligible.

The credit risk on liquid funds is limited because the counterparties are banks with good credit ratings and there is no significant concentration of credit risk.

The Group has no significant concentration of credit risk on trade receivables, other receivables and contract assets with exposure spreading over a number of counterparties and customers.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

The Group's internal credit risk grading assessment comprises the following categories:

Internal credit rating	**Description**	**Trade receivables/ contract assets**	**Other financial assets/ other items**
Low risk	The counterparty has a low risk of default and does not have any past-due amounts	Lifetime ECL — not credit-impaired	12m ECL
Watch list	Debtor frequently repays after due dates but usually settle in full	Lifetime ECL — not credit-impaired	12m ECL
Doubtful	There have been significant increases in credit risk since initial recognition through information developed internally or external resources	Lifetime ECL — not credit-impaired	Lifetime ECL — not credit-impaired
Loss	There is evidence indicating the asset is credit-impaired	Lifetime ECL — credit-impaired	Lifetime ECL — credit-impaired
Write-off	There is evidence indicating that the debtor is in severe financial difficulty and the Group has no realistic prospect of recovery	Amount is written off	Amount is written off

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

The tables below detail the credit risk exposures of the Group's trade receivables, other receivables, loan receivables, amounts due from joint ventures, restricted bank balance and pledged bank deposits, bank deposits with original maturity over three months, bank balances and contract assets which are subject to ECL assessment:

Financial assets at amortised cost

	Notes	External credit rating	Internal credit rating	12m or lifetime ECL	2022 Gross carrying amount		2021 Gross carrying amount	
					RMB million	RMB million	RMB million	RMB million
Loan receivables	23	N/A	(Note 1)	12m ECL		12		30
Trade receivables	27	N/A	(Note 2)	Lifetime ECL (provision matrix)	668		845	
			Loss	Lifetime ECL (credit-impaired)	22	690	13	858
Contract assets	28	N/A	(Note 2)	Lifetime ECL (provision matrix)		20		12
Other receivables	28	N/A	(Note 1)	12m ECL		301		204
Amounts due from joint ventures		N/A	(Note 1)	12m ECL		5		3
Restricted bank balance and pledged bank deposits	29	IG*	N/A	12m ECL		1		9
Bank deposits with original maturity over three months	29	IG*	N/A	12m ECL		207		630
Bank balances	29	IG*	N/A	12m ECL		3,701		3,717

* Investment Grade — The Standard & Poor's rating of the Group's significant bank accounts.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

Financial assets at amortised cost (Cont'd)

Notes:

1. In determining the ECL for loan receivables, other receivables and amounts due from joint ventures, the management of the Group has taken into account the historical default experience and forward-looking information, as appropriate. The Group has considered the consistently low historical default rate in connection with payments, and concluded that credit risk inherent in these Group's outstanding balances is insignificant. Accordingly, no loss allowance on ECL was provided for these assets.

2. For trade receivables and contract assets, the Group has applied the simplified approach in HKFRS 9 to measure the loss allowance at lifetime ECL. Except for credit-impaired debtors, the Group determines the ECL on these items by using a provision matrix, grouped by internal credit rating in the classes of low risk, watch list or doubtful.

Provision matrix for trade receivables and contract assets — internal credit rating

As part of the Group's credit risk management, the Group applies internal credit rating for its customers on trade receivables and contract assets which are assessed based on provision matrix as at 31 December 2022 within lifetime ECL. The following table provides information about the exposure to credit risk for trade receivables and contract assets which are assessed based on provision matrix as at 31 December 2022 within lifetime ECL. Trade receivables with credit-impaired with gross carrying amount of RMB22 million (2021: RMB13 million) as at 31 December 2022 were assessed individually. As disclosed in Note 27, out of the past due balances, RMB51 million (2021: RMB70 million) has been past due 90 days or more and is not considered as credit-impaired and considered as recoverable due to long term and on-going relationship with good repayment record from these customers based on historical experience.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

Financial assets at amortised cost (Cont'd)

Provision matrix for trade receivables and contract assets — internal credit rating (Cont'd)

	2022		2021	
	Average loss rate	Trade receivables	Average loss rate	Trade receivables
		RMB million		RMB million
Low risk	0.25%	517	0.17%	604
Watch list	0.38%	101	0.29%	200
Doubtful	24.04%	50	28.68%	41
		668		845

	2022		2021	
	Average loss rate	Contract assets	Average loss rate	Contract assets
		RMB million		RMB million
Low risk	1.11%	20	1.15%	12

The estimated loss rates are estimated based on historical observed default rates over the expected life of the debtors and are adjusted for forward-looking information that is available without undue cost or effort.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

Financial assets at amortised cost (Cont'd)

Provision matrix for trade receivables and contract assets — internal credit rating (Cont'd)

The management of the Group assessed the expected loss on trade receivables by estimation based on historical credit loss experience, general economic conditions of the industry in which the debtors operate and an assessment both the current as well as the forecast direction of conditions at the reporting date. The directors of the Company are of the opinion that trade receivables with gross carrying amount of RMB668 million (2021: RMB845 million) are not credit-impaired, as for they are still considered fully recoverable due to long term/on-going relationship and good repayment record from these customers. Accordingly, RMB14 million (2021: RMB13 million) loss allowance on ECL for trade receivables based on provision matrix is recognised as at 31 December 2022. However, gross carrying amount amounted of RMB22 million (2021: RMB13 million) of the balance of trade receivables are considered as credit-impaired as for there is evidence indicating the asset is credit-impaired as at 31 December 2022.

No loss allowance on ECL for contract assets based on provision matrix is recognised during the years ended 31 December 2022 and 2021 as the amount is considered as insignificant.

During the year ended 31 December 2022, the Group does not provide for (2021: RMB6 million) impairment allowance for trade receivables, based on the provision matrix. Impairment allowance of RMB11 million (2021: RMB2 million) were made on credit-impaired debtors.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(II) Credit risk and impairment assessment (Cont'd)

Financial assets at amortised cost (Cont'd)

Provision matrix for trade receivables and contract assets — internal credit rating (Cont'd)

The following table shows the movement in lifetime ECL that has been recognised for trade receivables.

	Lifetime ECL (not credit-impaired)	Lifetime ECL (credit-impaired)	Total
	RMB million	RMB million	RMB million
As at 1 January 2021	11	18	29
Impairment losses recognised, net of reversal	6	2	8
Impairment written off	—	(11)	(11)
Transfer to credit-impaired	(4)	4	—
As at 31 December 2021	13	13	26
Impairment losses recognised, net of reversal	—	11	11
Impairment written off	—	(3)	(3)
Exchange adjustments	1	1	2
As at 31 December 2022	14	22	36

The Group writes off a trade receivable when there is information indicating that the debtor is in severe financial difficulty and there is no realistic prospect of recovery, or when the trade receivables are over two years past due, whichever occurs earlier.

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(III) Liquidity risk

In the management of the liquidity risk, the Group monitors and maintains a level of cash and cash equivalents deemed adequate by the management to finance the Group's operations and mitigate the effects of fluctuations in cash flows. The Group's policy is to regularly monitor current and expected liquidity requirements and its compliance with lending covenants, 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.

The following table details the Group's remaining contractual maturity for its non-derivative financial liabilities. The table has been drawn up based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The maturity dates for other non-derivative financial liabilities are based on the agreed repayment dates.

The table includes both interest and principal cash flows. To the extent that interest flows are floating-rate, the undiscounted amount is derived from interest rate at the end of the reporting period.

Liquidity tables

	Weighted average interest rate %	On demand or less than 1 year RMB million	Over 1 year RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
2022					
Trade and other payables	—	1,046	7	1,053	1,053
Bank borrowings					
— Variable rate	6.62	389	—	389	376
— Fixed rate	3.15	368	2	370	363
Convertible and exchangeable bonds — debt component	16.62	—	1,737	1,737	1,333
Lease liabilities	5.15	71	53	124	117
		1,874	1,799	3,673	3,242

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(III) Liquidity risk (Cont'd)

Liquidity tables (Cont'd)

	Weighted average interest rate	On demand or less than 1 year	Over 1 year	Total undiscounted cash flows	Carrying amount
	%	RMB million	RMB million	RMB million	RMB million
2021					
Trade and other payables	—	925	—	925	925
Bank borrowings					
— Variable rate	3.48	193	—	193	192
— Fixed rate	2.74	212	—	212	211
Convertible and exchangeable bonds — debt component	16.62	15	1,590	1,605	1,085
Lease liabilities	5.20	70	100	170	159
		1,415	1,690	3,105	2,572

Bank borrowings with a repayable on demand clause are included in the "on demand or less than 1 year" band in the above maturity analysis. As at 31 December 2022, the aggregate carrying amounts of these bank borrowings amounted to RMB41 million (2021: RMB38 million). Taking into account the Group's financial position, the directors of the Company do not believe that it is probable that the banks will exercise their discretionary rights to demand immediate payment. The directors of the Company believe that such bank borrowings will be repaid within one year after the end of the reporting period in accordance with the scheduled repayment dates set out in the loan agreements, details of which are set out in the table below:

40. FINANCIAL INSTRUMENTS (Cont'd)

(b) Financial risk management objectives and policies (Cont'd)

(III) Liquidity risk (Cont'd)

Liquidity tables (Cont'd)

Maturity Analysis — Bank borrowings with a repayable on demand clause based on scheduled repayments.

	Less than 1 year RMB million	Total undiscounted cash flows RMB million	Carrying amount RMB million
31 December 2022	41	41	41
31 December 2021	38	38	38

(c) Fair value measurements of financial instruments

(I) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis

Some of the Group's financial assets and financial liabilities are measured at fair value at the end of each reporting period. The following table gives information about how the fair values of these financial assets and financial liabilities are determined (in particular, the valuation technique(s) and inputs used), as well as the level of the fair value hierarchy into which the fair value measurements are categorised (levels 1 to 3) based on the degree to which the inputs to the fair value measurements is observable.

- Level 1 fair value measurements are those derived from quoted prices (unadjusted) in active market for identical assets or liabilities.
- Level 2 fair value measurements are those derived from inputs other than quoted prices included within Level 1 that are observable for the assets or liabilities, either directly (i.e. as prices) or indirectly (i.e. derived from prices).
- Level 3 fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs).

40. FINANCIAL INSTRUMENTS (Cont'd)

(c) Fair value measurements of financial instruments (Cont'd)

(I) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Cont'd)

Financial assets/ financial liabilities	Fair value as at 31 December 2022 RMB million	Fair value as at 31 December 2021 RMB million	Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Relationship of unobservable inputs to fair value
Financial assets						
Equity instrument at FVTOCI – Listed equity securities	6	8	Level 1	Quoted bid prices in an active market.	N/A	N/A
Equity instrument at FVTOCI – Unlisted equity securities	50	–	Level 3	Income approach – in this approach, the discounted cash flow method was used to capture the present value of the expected future economic benefits to be derived from the ownership of this investee, based on an appropriate discount rate.	Discount rate of 12.84% (2021: N/A).	The higher the discount rate, the lower the fair value.
Financial assets at FVTPL – Unlisted funds	252	266	Level 2	Price provided by the financial institution with reference to underlying investment portfolios which have observable quoted price in active markets.	N/A	N/A
Financial assets at FVTPL – Unlisted equity investments	152	–	Level 3	Price provided by the general partner with reference to underlying investment portfolios.	Discount for lack of marketability used in valuation.	The higher the discount for lack of marketability used in valuation, the lower the fair value.
Financial assets at FVTPL – Convertible promissory notes	84	–	Level 3	Discounted cash flow method – cash flows discounted at unobservable yield curve reflecting credit risk of counterparties.	Discount rate of 18.88% (2021: N/A).	The lower the discount rate, the higher the fair value.
Financial assets at FVTPL – Equity-linked warrants	–	2	Level 3	Valuation of financial assets at FVTPL: Binomial valuation model using key input: expected volatility.	Volatility 90.20% for 2021 is estimated based on the historical volatilities of the comparable companies.	The higher the expected volatility, the higher the fair value.

40. FINANCIAL INSTRUMENTS (Cont'd)

(c) Fair value measurements of financial instruments (Cont'd)

(I) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Cont'd)

Financial assets/ financial liabilities	Fair value as at 31 December 2022 RMB million	Fair value as at 31 December 2021 RMB million	Fair value hierarchy	Valuation technique(s) and key input(s)	Significant unobservable input(s)	Relationship of unobservable inputs to fair value
Financial liabilities						
Derivative financial instruments – Convertible and exchangeable option	–	–	Level 3	Binomial valuation model using key input: expected volatility.	Volatility 53.64% (2021: 59.31%) is estimated based on the historical volatilities of the comparable companies.	The higher the expected volatility, the higher the fair value.
Derivative financial instruments – Unlisted warrants	31	43	Level 3	Binomial valuation model using key input: expected volatility.	Volatility 41.33% (2021: 48.95%) is estimated based on the historical volatilities of the comparable companies.	The higher the expected volatility, the higher the fair value.
Convertible preferred shares	–	–	Level 3	Black-Scholes pricing model using key input: expected volatility.	Volatility 53.26% (2021: 59.45%) is estimated based on the historical volatilities of the comparable companies.	The higher the expected volatility, the higher the fair value.

There is no transfer between Level 1, Level 2 and Level 3 during both years.

The directors of the Company consider that the carrying amounts of financial assets and financial liabilities at amortised cost recognised in the consolidated financial statements approximate their fair values at the end of each reporting period.

40. FINANCIAL INSTRUMENTS (Cont'd)

(c) Fair value measurements of financial instruments (Cont'd)

(I) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Cont'd)

Reconciliation of Level 3 fair value measurements

Reconciliation of Level 3 fair value measurements of financial assets

	Equity instruments at FVTOCI	Financial assets at FVTPL
	RMB million	RMB million
At 1 January 2021	—	4
Fair value changes	—	(2)
At 31 December 2021	—	2
Additions	50	256
Fair value changes	—	(32)
Exchange adjustment	—	10
At 31 December 2022	50	236

Of the total gains or losses for the year included in profit or loss, fair value loss of RMB31 million (2021: RMB2 million) relates to financial assets at FVTPL held at the end of the current reporting period. Fair value gains or losses on financial assets at FVTPL are included in "fair value change on financial assets at fair value through profit or loss".

40. FINANCIAL INSTRUMENTS (Cont'd)

(c) Fair value measurements of financial instruments (Cont'd)

(I) Fair value of the Group's financial assets and financial liabilities that are measured at fair value on a recurring basis (Cont'd)

Reconciliation of Level 3 fair value measurements (Cont'd)

Reconciliation of Level 3 fair value measurements of financial liabilities

	Derivative financial instruments RMB million
At 1 January 2021	41
Fair value changes	3
Exchange adjustments	(1)
At 31 December 2021	**43**
Fair value changes	**(15)**
Exchange adjustments	**3**
At 31 December 2022	**31**

Of the total gains or losses for the year included in profit or loss, RMB15 million (2021: RMB3 million) relates to derivative financial instruments held at the end of the current reporting period. Fair value gains or losses on derivative financial instruments are included in "fair value change on derivative financial instruments".

(II) Fair value of financial instruments that are recorded at amortised cost

The management of the Group considers that the carrying amounts of financial assets and financial liabilities recorded at amortised cost in the consolidated financial statements approximate their fair values at the end of the reporting period.

40. FINANCIAL INSTRUMENTS (Cont'd)

(d) Interest rate benchmark reform

A fundamental reform of major interest rate benchmarks is being undertaken globally, including the replacement of some interbank offered rates ("IBORs") with alternative nearly risk-free rates. Several of the Group's HIBOR bank loans may be subject to the interest rate benchmark reform. While the Hong Kong Dollar Overnight Index Average ("HONIA") has been identified as an alternative to HIBOR, there is no plan to discontinue HIBOR. The multi-rate approach has been adopted in Hong Kong, whereby HIBOR and HONIA will co-exist. The Group is still assessing the impact of the interest rate benchmark reform and has not yet determined whether to retain the bank loans under HIBOR until the maturity date. The Group will closely monitor the market and managing the transition to new benchmark interest rates, including announcements made by the relevant IBOR regulators.

The following are the key risks for the Group arising from the transition:

Interest rate related risks

For contracts which have not been transitioned to the relevant alternative benchmark rates and without detailed fallback clauses, if the bilateral negotiations with the Group's counterparties are not successfully concluded before the cessation of some IBORs, there are significant uncertainties with regard to the interest rate that would apply. This gives rise to additional interest rate risk that was not anticipated when the contracts were entered into.

There are fundamental differences between IBORs and the various alternative benchmark rates. IBORs are forward looking term rates published for a period (e.g. 3 months) at the beginning of that period and include an inter-bank credit spread, whereas alternative benchmark rates are typically risk-free overnight rates published at the end of the overnight period with no embedded credit spread. These differences will result in additional uncertainty regarding floating rate interest payments.

40. FINANCIAL INSTRUMENTS (Cont'd)

(d) Interest rate benchmark reform (Cont'd)

Liquidity risk

The additional uncertainty on various alternative rates which are typically published on overnight basis will require additional liquidity management. The Group's liquidity risk management policy has been updated to ensure sufficient liquid resources to accommodate unexpected increases in overnight rates.

Litigation risk

If no agreement is reached to implement the interest rate benchmark reform on contracts which have not been transitioned to the relevant alternative benchmark rates (e.g. arising from differing interpretation of existing fallback terms), there is a risk of prolonged disputes with counterparties which could give rise to additional legal and other costs. The Group is working closely with all counterparties to avoid this from occurring.

Interest rate basis risk

Interest rate basis risk may arise if a non-derivative instrument and the derivative instrument held to manage the interest risk on the non-derivative instrument transition to alternative benchmark rates at different times. This risk may also arise where back-to-back derivatives transition at different times.

As part of the Group's risk management for transition, new contracts entered into by the Group are linked to the relevant alternative benchmark rates or interest rates which are not subject to reform to the extent feasible.

The Group is planning to transition the majority of its remaining IBOR-linked contracts through introduction of, or amendments to, fallback clauses into the contracts which will change the basis for determining the interest cash flows from IBOR to alternative reference rate at an agreed point in time.

41. PLEDGE OF OR RESTRICTIONS ON ASSETS

At the end of the reporting period, the carrying amounts of the assets pledged by the Group to secure the bank borrowings and credit card facilities granted to the Group and litigation as set out in Notes 29 and 34 are as follows:

	2022 RMB million	2021 RMB million
Property, plant and equipment	476	330
Right-of-use assets	31	43
Restricted bank balance and pledged bank deposits	1	9
	508	382

In addition, restrictions on assets of the Group are as follows:

Lease liabilities of RMB117 million (2021: RMB159 million) are recognised with related right-of-use assets of RMB348 million (2021: RMB385 million) as at 31 December 2022. The lease agreements do not impose any covenants other than the security interests in the leased assets that are held by the lessor and the relevant leased assets may not be used as security for borrowing purposes.

42. RETIREMENT BENEFITS PLANS

Defined contribution plan

The employees of the Group in the PRC are members of a state-managed retirement benefit scheme operated by the PRC government. The Company's PRC subsidiaries are required to contribute certain percentage of payroll costs to the retirement benefit scheme to fund the benefits. The only obligation of the Group with respect to the retirement benefit scheme is to make the specified contributions under the scheme.

The Group operates a Mandatory Provident Fund Scheme for all qualifying employees in Hong Kong. The assets of the scheme are held separately from those of the Group, in funds under control of a trustee. The Group contributes 5% of relevant payroll costs or HKD1,500 per person per month to the scheme, whichever is lower, which is matched by employees.

Contributions to the above schemes for the year ended 31 December 2022 made by the Group amounted to RMB145 million (2021: RMB160 million).

43. RELATED PARTY DISCLOSURES

The Group is ultimately controlled by the Ultimate Controlling Shareholders, Messrs. Liu Dejian, Liu Luyuan and Zheng Hui, who have entered into agreement to collectively govern the financial and operating policies of the Company and various subsidiaries.

(a) Related party transactions and balances

The Group had the following significant related party transactions during the year with certain companies in which some directors and shareholders of the Company can exercise significant influence or control:

Name of related parties	Relationship
Fuzhou 851	DJM, the immediate holding company of the Company, and Mr. Liu Dejian, executive director and beneficial owner of the Company, has 100% equity interest in this entity.
雲啟智慧科技有限公司 ("iCloud Wisdom")	iCloud Wisdom is an associate of the Group which the Group holds 40% of the issued share capital in this entity.
福建省國騰信息科技有限公司 ("Guoteng")	Guoteng is a joint venture of the Group which the Group holds 60% of the issued share capital in this entity.
昆明網龍華漁科技發展有限公司 ("Kunming Elernity")	Kunming Elernity is a joint venture of the Group which the Group holds 60% of the issued share capital in this entity.

43. RELATED PARTY DISCLOSURES (Cont'd)

(a) Related party transactions and balances (Cont'd)

Other than as disclosed elsewhere in these consolidated financial statements, the Group had the following significant related party transactions during the year with certain companies in which some directors and shareholders of the Company can exercise significant influence or control.

Nature of transactions	2022 RMB million	2021 RMB million
Goods sold to iCloud Wisdom	3	4
Service revenue from iCloud Wisdom	2	2
Service revenue from Guoteng	3	3
Goods sold to Guoteng	—	1
Goods sold to Kunming Elernity	—	1
Amounts due from joint ventures (Note)	5	3

Saved as disclosed above, the Group had continuing connected transactions during the year, including (i) service fee paid to Fuzhou 851 of RMB11 million (2021: RMB10 million) and (ii) a lease agreement entered with Fuzhou 851 with the lease term till 2024 for the use of office premise located in the PRC. During the year, the Group have made repayment of the lease liability of RMB7 million (2021: RMB6 million). As at 31 December 2022, the corresponding carrying amount of the lease liability is RMB7 million (2021: RMB13 million).

In addition, certain of the Group's borrowings are also secured by guarantees provided by a director of the Company as at 31 December 2022 as set out in Note 34.

Note: As at 31 December 2022 and 2021, the amounts due from joint ventures are not trade in nature, unsecured, non-interest bearing and repayable on demand. Details of the impairment assessment of amounts due from joint ventures are set out in Note 40.

43. RELATED PARTY DISCLOSURES (Cont'd)

(b) Compensation of key management personnel

The remuneration of directors and other members of key management during the year was as follows:

	2022 RMB million	2021 RMB million
Salaries, allowances and other short-term employee benefits	141	90
Contribution to retirement benefits schemes	1	1
Share-based payments expense	6	16
	148	107

The remuneration of directors and key executives is determined by the remuneration committee having regard to the performance of individuals and market trends.

44. CAPITAL COMMITMENTS

At the end of the reporting period, the Group had the following capital commitments contracted for but not provided in the consolidated financial statements:

	2022 RMB million	2021 RMB million
Capital expenditure in respect of:		
— Capital injection in a joint venture	606	606
— Acquisition of property, plant and equipment	252	278
— Properties under development projects	460	545
— Purchase of convertible promissory note	14	—
	1,332	1,429

45. OPERATING LEASE

The Group as lessor

Property rental income earned during the year was RMB6 million (2021: RMB5 million). The property is expected to generate rental yields of 9.3% (2021: 6.2%) per annum on an ongoing basis. The property held has committed tenants for the 0.92 to 2.25 years (2021: 1.92 to 3.25 years).

The Group had contracted with tenants for the following future minimum lease payments:

	2022 RMB million	2021 RMB million
Within one year	3	2
In the second year	3	2
In the third year	—	1
	6	5

46. RECONCILIATION OF LIABILITIES ARISING FROM FINANCING ACTIVITIES

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

	Convertible and exchangeable bonds RMB million	Bank borrowings RMB million	Dividend payables RMB million	Lease liabilities RMB million	Total RMB million
At 1 January 2022	1,085	403	—	159	1,647
Financing cash flows	—	341	(1,225)	(69)	(953)
New leases	—	—	—	24	24
Interest paid	(50)	—	—	(7)	(57)
Non-cash changes:					
Exchange adjustments	104	28	—	3	135
Finance costs recognised	194	—	—	7	201
Dividends declared	—	—	1,225	—	1,225
Forgiveness of partial bank borrowings	—	(33)	—	—	(33)
At 31 December 2022	1,333	739	—	117	2,189
At 1 January 2021	992	346	—	173	1,511
Financing cash flows	—	67	(302)	(65)	(300)
New leases	—	—	—	53	53
Interest paid	(48)	—	—	(9)	(57)
Non-cash changes:					
Exchange adjustments	(24)	(10)	—	(2)	(36)
Finance costs recognised	165	—	—	9	174
Dividends declared	—	—	302	—	302
At 31 December 2021	1,085	403	—	159	1,647

47. SUBSIDIARIES OF THE COMPANY

(a) Particulars of the Company's principal subsidiaries

Particulars of the Company's principal subsidiaries at 31 December 2022 and 2021 are as follows:

Name of subsidiaries	Place of incorporation/ establishment/ operations	Issued and fully paid up ordinary share/ registered capital	Proportion of registered capital /issued share capital/equity interests and voting power held by the Company directly		indirectly		Principal activities
			2022 %	2021 %	2022 %	2021 %	
NetDragon BVI	BVI	USD222,203.93	100	100	–	–	Investment holding
Best Assistant	Cayman Islands	USD2 million	–	–	90.50	90.28	Investment holding
Cherrypicks Limited (創奇思有限公司)	Hong Kong	HKD150,000.00	–	–	92.20	92.20	Mobile solution, products and marketing business
Fujian Huayu*	PRC	RMB200 million	–	–	–	–	Operation and development of online education business
Fujian Tianquan	PRC	RMB500 million	–	–	90.50	90.28	Operation and development of online education business
NetDragon (Fujian)*	PRC	RMB10 million	–	–	–	–	Operation of online games
NetDragon Websoft (Hong Kong) Limited (網龍香港有限公司)	Hong Kong	HKD1.00	–	–	100	100	Licensing and servicing of the developed games
Promethean	UK	GBP20 million	–	–	90.50	90.28	Sale of education hardware and software products
Promethean Inc.	USA	USD1.01	–	–	90.50	90.28	Distribution of electronic equipments
TQ Digital #	PRC	RMB946 million	–	–	100	100	Development of online games and licensing and servicing of the developed games
TQ Online #	PRC	RMB620 million	–	–	100	100	Development of online games and licensing and servicing of developed games
福建天景房地產開發有限公司	PRC	RMB10 million	–	–	100	100	Property development

47. SUBSIDIARIES OF THE COMPANY (Cont'd)

(a) Particulars of the Company's principal subsidiaries (Cont'd)

Notes:

* The Group's control over, and beneficial interest in the equity of, these entities exist by virtue of certain contractual arrangements entered into with the Ultimate Controlling Shareholders involving these entities, which are established as limited liability companies under PRC law. The Group does not hold ownership interest in the registered capital of these subsidiaries. However, under the contractual agreements entered into among the entities, the Ultimate Controlling Shareholders who are the owners of the registered capital of these entities and the Group, the Group controls these entities by way of controlling all voting rights in owners' meetings of these entities and governing their financial and operating policies. Under the contractual arrangements, management committees are established to oversee the businesses and operations of these entities in order to ensure and facilitate the implementation of the contractual arrangements. The management committees shall comprise members, all of whom have to be directors of TQ Digital and Fujian Tianquan, subsidiaries of the Company, in order that the decision-making rights and the operating and financing activities of these entities are ultimately controlled by the Company. The Company is also entitled to substantially all of the operating profits and residual benefits by charging service fee equal to net profit generated by these entities under the contractual arrangements. In addition, the owners of the registered capital of these entities have irrecoverably authorised TQ Digital and Fujian Tianquan to exercise all their voting rights in NetDragon (Fujian) and Fujian Huayu, including the appointment and removal of the directors of these entities. As a result, these entities are regarded as subsidiaries under the control of the Group. Accordingly, the results of these entities, if any, and their assets and liabilities are included in the consolidated financial statements.

Wholly foreign owned enterprise.

The above table lists the subsidiaries of the Group which, in the opinion of the directors of the Company, principally affected the result or assets of the Group. To give details of other subsidiaries would, in the opinion of the directors, result in particulars of excessive length.

None of the subsidiaries had issued any debt securities outstanding at 31 December 2022 and 2021 or at any time during the year, except for the issuance of convertible and exchangeable bonds and convertible preferred shares by Best Assistant as disclosed in Notes 35 and 36 respectively in which the Company has no interest.

At the end of the reporting period, the Company has other subsidiaries that are not material to the Group. A majority of these subsidiaries operate in Hong Kong, the UK, the USA and the PRC. The principal activities of these other subsidiaries are similar to those of the principal subsidiaries of the Company as set out above.

47. SUBSIDIARIES OF THE COMPANY (Cont'd)

(b) Non-wholly owned subsidiaries that have material non-controlling interests

The table below shows details of non-wholly-owned subsidiaries of the Group that have material non-controlling interests.

Name of subsidiary	Place of incorporation	Proportion of ownership and voting rights held for non-controlling interests		Loss allocated to non-controlling interests		Accumulated non-controlling interests	
		2022	2021	2022 RMB million	2021 RMB million	2022 RMB million	2021 RMB million
Best Assistant and its subsidiaries (collectively "Best Assistant Group")	Cayman Island	9.50%	9.72%	(61)	(61)	(288)	(243)
Individually immaterial subsidiaries with non-controlling interests				(9)	(18)	(12)	3
				(70)	(79)	(300)	(240)

47. SUBSIDIARIES OF THE COMPANY (Cont'd)

(b) Non-wholly owned subsidiaries that have material non-controlling interests (Cont'd)

Summarised financial information in respect of the Group's subsidiaries that have material non-controlling interests is set out below. The summarised financial information below represents amounts before intragroup eliminations.

	Best Assistant Group	
	2022	2021
	RMB million	RMB million
Current assets	**2,203**	2,400
Non-current assets	**1,303**	922
Current liabilities	**(5,128)**	(4,591)
Non-current liabilities	**(1,424)**	(1,178)
	(3,046)	(2,447)
Equity attributable to owners of Best Assistant	**(3,065)**	(2,459)
Non-controlling interests of subsidiaries of Best Assistant Group	**19**	12
	(3,046)	(2,447)

47. SUBSIDIARIES OF THE COMPANY (Cont'd)

(b) Non-wholly owned subsidiaries that have material non-controlling interests (Cont'd)

	Best Assistant Group	
	2022	2021
	RMB million	RMB million
Revenue	**4,247**	3,197
Expenses	**(4,874)**	(3,860)
Loss for the year	**(627)**	(663)
Loss attributable to owners of Best Assistant	**(627)**	(668)
Profit attributable to the non-controlling interests of subsidiaries of Best Assistant Group	**—**	5
Loss for the year	**(627)**	(663)
Other comprehensive income (expense) for the year attributable to owners of Best Assistant	**22**	(11)
Total comprehensive expense attributable to owners of Best Assistant	**(605)**	(679)
Total comprehensive income attributable to the non-controlling interests of subsidiaries of Best Assistant Group	**—**	5
Total comprehensive expense for the year	**(605)**	(674)
Net cash outflow from operating activities	**(3)**	(267)
Net cash outflow from investing activities	**(227)**	(105)
Net cash (outflow) inflow from financing activities	**(36)**	171
Net cash outflow	**(266)**	(201)

48. SUMMARY OF STATEMENT OF FINANCIAL POSITION OF THE COMPANY

	2022 RMB million	2021 RMB million
Non-current assets		
Investments in subsidiaries	168	168
Amounts due from subsidiaries	1,510	2,162
	1,678	2,330
Current assets		
Other receivables and prepayment	1	21
Amounts due from subsidiaries	2,223	1,085
Bank balances	42	77
	2,266	1,183
Current liabilities		
Other payables	39	40
Amounts due to subsidiaries	1,628	308
Derivative financial instruments	31	43
	1,698	391
Net current assets	568	792
Net assets	2,246	3,122
Capital and reserves		
Share capital	40	40
Share premium and reserves	2,206	3,082
	2,246	3,122

48. SUMMARY OF STATEMENT OF FINANCIAL POSITION OF THE COMPANY (Cont'd)

Movement in the Company's reserves:

	Share premium RMB million	Capital redemption reserve RMB million	Other reserve RMB million	Dividend reserve RMB million	Treasury share reserve RMB million	Employee share-based compensation reserve RMB million	Retained profits RMB million	Total RMB million
At 1 January 2021	2,220	7	(2)	118	(19)	53	287	2,664
Profit and total comprehensive income for the year	–	–	–	–	–	–	942	942
Repurchase and cancellation of shares	(241)	1	–	–	–	–	(1)	(241)
Shares issued upon exercise of share options	7	–	–	–	–	(2)	–	5
Recognition of equity-settled share-based payments, net of awarded shares and share options forfeited	–	–	–	–	–	7	7	14
Awarded shares vested to employees	–	–	–	–	6	(7)	1	–
Final dividend for 2020 paid	–	–	–	(118)	–	–	1	(117)
Interim dividend for 2021 declared and paid	–	–	–	–	–	–	(185)	(185)
Special interim dividend for 2021 proposed	–	–	–	632	–	–	(632)	–
Final dividend for 2021 proposed	–	–	–	179	–	–	(179)	–
At 31 December 2021	1,986	8	(2)	811	(13)	51	241	3,082
Profit and total comprehensive income for the year	–	–	–	–	–	–	411	411
Repurchase and cancellation of shares	(68)	–	–	–	–	–	–	(68)
Recognition of equity-settled share-based payments, net of awarded shares and share options forfeited	–	–	–	–	–	6	–	6
Awarded shares vested to employees	–	–	–	–	4	(4)	–	–
Final dividend for 2021 paid	–	–	–	(179)	–	–	2	(177)
Interim dividend for 2022 declared and paid	–	–	–	–	–	–	(185)	(185)
Special interim dividend for 2022 and 2021 declared and paid	–	–	–	(632)	–	–	(231)	(863)
Final dividend for 2022 proposed	–	–	–	193	–	–	(193)	–
At 31 December 2022	1,918	8	(2)	193	(9)	53	45	2,206