# Hangzhou Hikvision Digital Technology Co., Ltd.

2021 Annual Report



April 16th 2022



## **To Shareholders**

The year 2021 marks the 20<sup>th</sup> anniversary of Hikvision's establishment and the 12<sup>th</sup> anniversary of its listing. Through 20 years of efforts, the Company has accumulated a wealth of successful experience in a number of technological segments, and is now positioning its field of business as the Artificial Intelligence of Things (AIoT). We believe that the company will continue to grow rapidly in the next 10 years with the development of AIoT.

Over the past few years, the company has been bearing pressures from reverse globalization and has been making great efforts to offset some of the negative effects, in order to enable its products to serve more customers in the global market. At present, the company has established 66 sales branches and service offices, as well as 3 manufacturing plants and 11 logistics centers in the overseas market, operating business in 155 countries and regions where we have sales and service partners. Dedicated to build ourselves into a global company, Hikvision will continue progressing persistently despite all the difficulties we may encounter. We believe that global economic integration is the best option for all people in the world.

Technological innovation is the driving force behind Hikvision's development, and only through continuous technological innovation can we realize sustainable development. Thanks to the consistent pursuit of technological innovation, Hikvision has achieved impressive results in the past 20 years. The company went public and raised RMB 3.4 billion in May 2010. In the past 12 years since, it has invested a total of RMB 35.4 billion in research and development, accumulated RMB 89.1 billion in net profits attributable to shareholders, and (will have) paid an accumulated dividend of RMB 43.2 billion to shareholders. From 2017 to 2021, Hikvision's R&D investment accounted for 7.62%, 8.99%, 9.51%, 10.04% and 10.13% out of the total revenue respectively, with the proportion increasing year by year. In the next 10 years, the company will continue to increase its R&D investment. We believe that technological innovation is the only way to better create value for our customers and reward our shareholders.

Since 2015, Hikvision has been encouraging internal innovation and intrapreneurship through establishing a co-investment scheme, establishing eight innovative businesses over the

years. In 2021, there were five innovative businesses with revenue exceeding RMB one billion, realizing a positive net profit. Among them, EZVIZ Network has submitted the IPO application, and the suggestive announcement on the spin-off of HikRobot for an independent listing has also been disclosed with relevant preparatory work currently underway. We believe that only when we share the profits with our employees can we unite the whole team working towards the same direction, and only by motivating the vitality of employees' innovation and entrepreneurship can the company continue to thrive.

Hikvision has built up a strong customer base and technology accumulation in the field of AIoT. As an effort to better create value for customers and enhance customer satisfaction, we are constantly striving to improve the company's operational capabilities and efficiency, while persevering in technological innovation. With the improvement of our operational capabilities and efficiency as a long-term goal, we will keep up with the changing times and continue to build, optimize and refine our systems. We believe that there are no gains without pains.

In the future, we will pace ourselves to encounter the challenges ahead and accept them as part of the evolution of the company. Being open, transparent, and honest as always, we will make best efforts to resolve uncertainties brought by these challenges. We believe that adversity will make us stronger.

Finally, we'd like to extend our sincere thanks to all shareholders for your trust and support to the Company's management team! And express our special thanks to the public shareholders for their trust and support for the management team over the past 12 years!

See far, go further!

Board of Directors of Hangzhou Hikvision Digital Technology Co., Ltd. April, 2022



## Section I Important Notes, Contents and Definitions

The Board of Directors, Board of Supervisors, directors, supervisors and senior management guarantee that the information presented in this report is true, accurate and complete without false records, misleading statements or material omissions, and will undertake individual and joint legal liabilities.

Chen Zongnian, the Company's legal representative, Jin Yan, the person in charge of the accounting work, and Zhan Junhua, the person in charge of accounting department (accounting supervisor) hereby declare and warrant that the financial statements in this annual report are true, accurate and complete.

All directors of the Company have attended the board meeting to review this report.

The profit distribution proposal passed upon deliberation at the meeting of the Board of Directors is set out as follows: Board of Directors based on the Company's current total share capital of 9,433,208,719 shares, the Company proposed to distribute cash dividend of RMB 9 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil.

#### Note:

This document is a translated version of the Chinese version 2021 Annual Report ("2021 年年度报 告"), and the published announcements in the Chinese version shall prevail. The complete published Chinese 2021 Annual Report may be obtained at <u>www.cninfo.com.cn</u>.

#### Please read the full annual report and pay particular attention to the following risk factors:

- Global COVID-19 epidemic risk: The global threat of COVID-19 epidemic is difficult to subside, and epidemic prevention has a direct impact on the economic development. The Company will pay close attention to the changes in the epidemic and respond in a timely manner. If the epidemic causes the domestic and foreign economic or business environment to deteriorate, the adverse impact on the Company's business will increase accordingly.
- 2) Economic downside risk: The current domestic and foreign economic environment is complex and volatile. The domestic macroeconomic growth has entered a new stage of medium-low growth. If demand recovers slowly and investment growth is sluggish, it will bring adverse impacts on the Company's business development.
- 3) Geopolitical environment risk: The current global geopolitical uncertainty has greatly increased, and the economic and social impact caused by local wars and confrontations is huge. The Company's operations in the countries and regions where the conflict is located may be adversely affected.
- 4) Global business risks: The Company operates in more than 150 countries and regions around the world. The potential risks such as the trend of deglobalization, economic fluctuation and debt default around the world are difficult to eliminate, so the Company's overseas business operations may be adversely affected.
- 5) Supply chain risks: The global supply system is suffering from a variety of adverse impacts, such as rising commodity prices, restrictions on global production and logistic, and technological competition among major powers. The Company has been making efforts to enhance management for our supply chain and optimize inventory adjustment and control. However, if systemic risks arise in the global supply chain, the Company's operating capabilities may be affected.
- 6) Legal and compliance risk: The world's multilateral trading system is facing adverse impacts. The laws and regulations of various regions that need to be complied with for business activities are very complicated. China and overseas countries have stricter data supervision and business compliance requirements. If the Company's legal compliance capabilities cannot keep up with the situation, it will bring adverse impacts on the Company's operations.
- 7) **Risk of exchange rate fluctuation:** The Company carries out operations in various countries and regions with different currencies, mainly settled in non-RMB currency (mainly in USD). Exchange rate

fluctuations could have impact on foreign exchange exposures arising out of sales, procurement and financing, which could likely affect the profitability level of the Company.

- 8) Risk of technology upgrade: Technologies such as artificial intelligence (AI), big data, cloud computing, and edge computing are developing rapidly. The speed of technology diffusion is accelerating. If the Company is unable to closely track and adapt to the changes in cutting-edge technologies, or fails to quickly realize business innovation, the risk of uncertainty in the Company's future development will increase.
- 9) Financial risk caused by the decline of customers' ability to pay: The enterprises' financial liquidity is negatively impacted by the macroeconomic downturn. The Company has accumulated a certain amount of cash reserves due to the stable operation in history, and the financing cost is low. If the liquidity risk increases, it will adversely affect the Company's account receivables.
- 10) Risk of internal management: The continual expansion of business scale, the continuous increase of new products and new businesses, and the continuous growth in total number of employees lead to a significant rise of internal management complexity, which brings challenges to the Company's management and higher requirements on the Company management system. The Company's sustainable development will face certain risks if the management level fails to proportionally address the Company's business expansion.
- 11) **Risk of cybersecurity:** The Company has always attached great importance and taken active measures to enhance cybersecurity performance of our products and systems. However, in the context of Internet applications, there is still a possibility of deliberate attempts, including computer viruses, malicious software, hacker and others to intentionally attack our systems or products, causing cybersecurity issues.
- 12) **Risk of intellectual property (IP) rights:** The Company continues to maintain a relatively large scale of R&D investment, and produces considerable technical milestones. At the same time, the Company implements well-organized intellectual property right (IPR) protection measures. However, the risk of intellectual property disputes and the risk of intellectual property rights violations still exist.

The above notices might not be all-inclusive of all other potential risks. Please pay attention to potential investment risks.



## CONTENTS

To Shareholders 1
Section I Important Notes, Contents and Definitions
Section II Corporate Profile & Key Financial Data
Section III Management Discussion and Analysis15
Section IV Corporate Governance
Section V Environmental and Social Responsibility182
Section VI Significant Events
Section VII Changes in Shares and Information about Shareholders
Section VIII Information of Preferred Shares 224
Section IX Bonds 225
Section X Financial Report
Section XI Documents Available for Reference



# Definitions

Term	Definition
Reporting Period	From January 1 <sup>st</sup> 2021 to December 31 <sup>st</sup> 2021
Articles of Associations	Articles of Associations for Hangzhou Hikvision Digital Technology Co., Ltd
Hikvision, the Company, our Company	Hangzhou Hikvision Digital Technology Co., Ltd.
CETC	China Electronics Technology Group Ltd., the actual controller of the Company
СЕТНІК	CETHIK Group Co., Ltd. Controlling Shareholder of the Company
EZVIZ, EZVIZ Network	Hangzhou EZVIZ Network Co., Ltd.(According to the context, also refers to the corresponding business)
HikRobot, Robotic business	Hangzhou Hikrobot Technology Co., Ltd. (According to the context, also refers to the corresponding business)
HikAuto, Auto electronics business	Hangzhou Hikauto Technology Co., Ltd. (According to the context, also refers to the corresponding business)
HikMicro, Micro Sensing, Thermal imaging business	Hangzhou Hikmicro Sensing Technology Co., Ltd. (According to the context, also refers to the corresponding business)
HikSemi, HikStorage, Storage business	Wuhan Hikstorage Technology Co., Ltd. (According to the context, also refers to the corresponding business)
HikImaging	Hangzhou Hikimaging Technology Co., Ltd. (According to the context, also refers to the corresponding business)
HikFire	Hangzhou Hikfire Technology Co., Ltd. (According to the context, also refers to the corresponding business)
Rayin, HikSecurityCheck	Hangzhou Rayin Technology Co., Ltd. (According to the context, also refers to the corresponding business)
Hangzhou Innovation Industry Park	Located in Hangzhou, Binjiang District, Zhejiang Province, the planned use is for R&D, office space and supporting facilities.
Chengdu Science and Technology Park	Located in Chengdu, Sichuan Province, the planned use is for R&D, office space and supporting facilities.
Chongqing Science and Technology Park	Located in Chongqing, the planned use is for production plants, warehouses and supporting facilities.
Xi'an Science and Technology Park	Located in Xi'an, Shaanxi Province, the planned use is for R&D, office space and supporting facilities.
Shijiazhuang Science and Technology Park	Located in Shijiazhuang City, Hebei Province, the planned use is R&D, office space and supporting facilities.
Security Industrial Base (Tonglu)	Located in Hangzhou, Zhejiang Province, the planned use is for production plants, logistics warehousing center and supporting facilities.
Wuhan Intelligence Industry	Located in Wuhan, Hubei Province, the planned use is for production plants,



Term	Definition
Park	warehouses and supporting facilities.
Zhengzhou Science and Technology Park	Located in Zhengzhou, Henan Province, the planned use is R&D, office space and supporting facilities, etc.
EZVIZ Industrial Base	EZVIZ Smart Home Products' Industrial Base, located in Hangzhou, Zhejiang Province, is planned to be used for R&D, office space and supporting facilities of Hangzhou EZVIZ Network Co., Ltd.
Innovative Business	A long investment cycle, business prospects uncertain, has the high risk and uncertainty, in need for direct or indirect investment in exploration, in order for the Company to timely enter into new areas of business. Initially disclosed in Announcement about Management Measures for Core Staff Investment in Innovative Business (《核心员工跟投创新业务管理办法》) (www.cninfo.com.cn). In this report, innovative business also refers to EZVIZ, HikRobot, HikAuto, HikMicro, HikSemi, HikImaging, HikFire, Rayin and their related business or products.



# Section II Corporate Profile & Key Financial Data

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## I. Corporate Information

Stock abbreviation	HIKVISION	Stock code	002415
Stock exchange where the shares of the Company are listed	Shenzhen Stock Exchange		
Name of the Company in Chinese	杭州海康威视数字技术股份有限公司		
Abbr. of the Company name in Chinese		海康威视	
Name of the Company in English (if any)	HANGZHOU	HIKVISION DIGITAL TECH	NOLOGY CO., LTD
Abbr. of the Company name in English (if any)	HIKVISION		
Legal representative	Chen Zongnian		
Registered address	No. 555 Qianmo Road, Binjiang District, Hangzhou		
Postal code of Registered address	310051		
Changes in the Company's registered address	original registered add Zhejiang Province. In 2	ed on the Shenzhen Stock Exc dress was No. 36 MachengRoa 2016, the Company's registered ad, Binjiang District, Hangzho	ad, Xihu District, Hangzhou, d address was changed to No.
Business address	No. 518 W	uLianWang Street, Binjiang D	istrict, Hangzhou
Postal code of Business address	310051		
Company website	www.hikvision.com		
E-mail	market@hikvision.com; ir@hikvision.com		

#### **II.** Contacts and Contact Information

	Board Secretary	Securities Affairs Representative
Name	Huang Fanghong	Zhou Xinyi
Address	No. 518 WuLianWang Street, Binjiang District, Hangzhou	No. 518 WuLianWang Street, Binjiang District, Hangzhou
Tel.	0571-88075998; 0571-89710492	0571-89710492
Fax	0571-89986895	0571-89986895
E-mail	hikvision@hikvision.com	hikvision@hikvision.com

### III. Information Disclosure and Place of the Report

Media designated by the Company for information disclosure	Securities Times, China Securities Journal
Website specified by CSRC for release of the Annual Report	www.cninfo.com.cn
Place where the Annual Report is available for inspection	Office of the Board of Directors of the Company



## **IV. Company Registration and Alteration**

	software development; information system integration services; computer
	system services; research and development of IoT technologies; IoT technology
	services; IoT application services; big data services; data processing and storage
	support services; security system monitoring services; security technology
	defense system's design and construction services; electronic and mechanical
	equipment maintenance (excluding special equipment); parking lot services;
	digital cultural and creative content application services; environmental
	protection monitoring; for-profit private training institution engaged in science
	and technology training (excluding subjects and language cultural education
	and training for primary and secondary school students). (Except for items
	which by law are subject to approval, the Company can determine and carry out
	operational activities in accordance with the law by virtue of its business
	license).
Changes of controlling shareholders of the Company (if any)	No change during the reporting period

### V. Other Relevant Information

Accounting firm engaged by the Company

Name of the accounting firm	Deloitte Touche Tohmatsu Certified Public Accountants LLP		
Business address of the accounting firm	30F Bund Center 222 Yan An Road East Shanghai		
Name of accountants for writing signature	Tang Lianjiong, Gao Sunchao		

Sponsor institution engaged by the Company to continuously perform its supervisory function during the Reporting Period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

Financial advisor engaged by the Company to perform the duties of continuous supervision during the reporting period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### VI. Key Accounting Data and Financial Indicators

Whether the Company performed a retrospective adjustment or restatement of previous accounting data  $_{\Box}Yes\;\sqrt{No}$ 

Unit: RMB

	2021	2020	YoY Change (%)	2019
Operating income (RMB)	81,420,053,539.27	63,503,450,891.78	28.21%	57,658,110,065.22
Net profit attributable to shareholders of the Company	16,800,411,032.05	13,385,526,714.15	25.51%	12,414,587,690.45
Net profit attributable to shareholders of the Company excluding non-recurring gains and losses (RMB)	16,444,723,630.97	12,805,839,276.44	28.42%	12,037,518,321.42
Net cash flows from operating activities (RMB)	12,708,524,686.99	16,088,156,566.67	-21.01%	7,767,720,171.14



Basic earnings per share (RMB/share)	1.810	1.445	25.26%	1.343
Diluted earnings per share (RMB/share)	1.806	1.444	25.07%	1.343
Weighted average ROE	28.99%	27.72%	1.27%	30.53%
	At December 31 <sup>st</sup> 2021	At December 31 <sup>st</sup> 2020	YoY Change (%)	At December 31 <sup>st</sup> 2019
Total assets (RMB)	103,864,543,195.18	88,701,682,384.20	17.09%	75,358,000,240.29
Net assets attributable to shareholders of the Company (RMB)	63,460,886,665.26	53,794,311,162.05	17.97%	44,904,033,876.83

The total share capital of the Company as of the previous trading day of the annual report disclosure:

The total share capital of the Company as of the previous trading day of the annual report disclosure (share)	9,433,208,719
Fully diluted earnings per share calculated with the latest share capital	
Fully diluted earnings per share (RMB/share) calculated with the latest share capital	1.781

### VII. Differences in Accounting Data between Domestic and Overseas Accounting Standards

**1.** Difference in the Financial Report of Net Profits and Net Assets According to the Disclosure of International Financial Reporting Standards and China Accounting Standards

 $\Box$  Applicable  $\sqrt{$  Inapplicable

There is no difference in the financial report of net profits and net assets according to the disclosure of International Financial Reporting Standards (IFRS) and China Accounting Standards in the reporting period.

# 2. Difference in the Financial Report of Net Profits and Net Assets According to the Disclosure of Overseas Accounting Standards and China Accounting Standards

#### $\Box$ Applicable $\sqrt{$ Inapplicable

There is no difference in the financial report of net profits and net assets according to the disclosure of Overseas Accounting Standards and China Accounting Standards in the reporting period.

#### 3. Explanation of the Differences in Accounting Data under Domestic and Overseas Accounting Standards

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### **VIII. Key Quarterly Financial Indicators**

Unit: RMB



	1 <sup>st</sup> Quarter 2 <sup>nd</sup> Quarter		3 <sup>rd</sup> Quarter	4 <sup>th</sup> Quarter	
Operating income	13,988,385,531.58	19,913,712,836.52	21,727,169,122.78	25,790,786,048.39	
Net profit attributable to shareholders of the Company	2,169,440,312.25	4,311,984,341.14	4,484,216,504.72	5,834,769,873.94	
Net profit attributable to shareholders of the Company excluding non-recurring gains and losses	2,022,056,316.46	4,199,420,311.52	4,472,421,937.46	5,750,825,065.53	
Net cash flows from operating activities	-2,018,107,114.23	3,980,960,886.38	1,969,077,130.08	8,776,593,784.76	

Whether there is significant difference between the above individual or aggregate financial indicators and that of what disclosed in the quarterly report, half-year report

 $\Box$  Yes  $\sqrt{No}$ 

### IX. Items and Amounts of Non-recurring Gains and Losses

### $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

			Unit: RMB
Item	2021	2020	2019
Profits or losses from disposal of non-current assets (including the write-off for the impairment provision of assets)	26,069,469.18	-5,836,675.36	-2,053,875.22
The government subsidies included in the current profits and losses (excluding the government subsidy closely related to regular course of business of the Company and government subsidy based on standard quota or quantitative continuous application according to the state industrial policy)	576,619,421.07	571,403,657.30	413,790,429.84
The investment cost of the Company to obtain subsidiaries, associates and joint ventures is less than the income generated by the fair value of the investee's identifiable net assets when the investment is obtained	1,163,932.96	281,193.50	-
Net gains and losses from beginning of the reporting period to the merge date for the subsidiary merged involving enterprises under common control	-	-	-885,138.65
Profits and losses attributed to change in fair value for held-for- trading financial assets and held-for-trading financial liabilities; and investment income from disposal of held-for-trading financial assets, held-for-trading financial liabilities, and other available- for-sale financial assets, excluding the effective hedging business related to the regular business operation of the Company.	75,408,081.63	98,373,869.75	26,872,639.66
Investment losses on disposal of subsidiaries and other business units	-169,184,641.43	-	-
Other non-operating income and expenditures except the items mentioned above	-1,471,007.77	74,007,631.14	52,155,026.79

Unit: RMB



#### Hikvision 2021 Annual Report

Less: Impact of income tax	29,930,824.64	109,931,807.07	86,193,406.35
Impact of the minority interests (after tax)	122,987,029.92	48,610,431.55	26,616,307.04
Total	355,687,401.08	579,687,437.71	377,069,369.03

Details of other gain/loss items that meet the definition of non-recurring gains and losses:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

The Company did not have other gain/ loss items that meet the definition of non-recurring gains and losses.

Explain the reasons if the Company classifies any non-recurring gain/loss item mentioned in the <Explanatory Announcement No. 1 on Information Disclosure for Companies Offering Their Securities to the Public—Non-recurring Gains and Losses> as a recurrent gain/loss item

 $\Box$  Applicable  $\sqrt{$  Inapplicable

The Company did not classify an item as a non-recurring gain/loss according to the <Explanatory Announcement No. 1 on Information Disclosure for Companies Offering Their Securities to the Public—Non-recurring Gains and Losses> into a recurrent gain/loss item.



## Section III Management Discussion and Analysis

#### I. The Industry Situation and Main Business of the Company during the Reporting Period

#### 1. Business Overview

After more than 20 years of development, the Internet of Things (IoT<sup>1</sup>) is integrated with AI (Artificial Intelligence) to form the AIoT. When devices are able to perceive changes, connect with each other, and interact with people and things, they could bring about changes like never before. And those changes are happening right now.

AIoT is a fundamental capability that provides the possibility of connection and interaction between people and things as well as between things. This possibility is not exclusive to any industry, but there are pioneer, typical industrial scenarios in AIoT, such as intelligent security, industrial IoT, smart home, etc. We believe that AIoT will set off a wave of technological innovation that will sweep across many industries. And armed with technology accumulations in multiple fields and years of deep engagement in the industrial market, we are confident that Hikvision will be able to seize the opportunities brought by the rapid development of AIoT. Through constant expansion and iteration of the industrial AIoT application, Hikvision continues to improve the business organization for public services, enterprises, and SMEs, and has successively developed innovative businesses such as EZVIZ Network, HikRobot, HikMicro, HikAuto, HikSemi, HikFire, Rayin and HikImaging, with a focus on the implementation of businesses for large-scale scenarios.

Generally speaking, the Internet of Things is divided into three layers, namely the perception layer, the network transmission layer and the application layer. Starting with video technology and driven by technological innovation, Hikvision continues to expand and deploy in such fields as visible light, millimeter wave, infrared rays and X-rays etc., while integrating sound, temperature, humidity, pressure, magnetic and other perception means to create a comprehensive, multi-dimensional perception technology platform to provide technical support for AIoT on the perception layer. The Company focuses on the external conditions of network transmission as it is not a major area of business for Hikvision. In terms of the application layer, the three business groups (3 BGs) and innovative businesses of Hikvision are working together with industrial partners to explore and promote the AIoT applications.

<sup>&</sup>lt;sup>1</sup> IoT: Internet of Things.

As the application scenarios of AIoT are highly fragmented, products and solutions will continue to be defined by scenarios as we work to meet user demands for a long time in the future. A rich and comprehensive set of hardware and software products are needed to support the scenario-based demands of AIoT. In the future, Hikvision will stick to its product R&D approach combining generic baselines with customizations, identify the common demands of various segments and fields in the process of expanding the market, and pushes further the modularization of products and the optimized combination of modules, thereby providing personalized, customized and highly converged IoT solutions in an efficient and cost-effective manner.

In the past two decades, Hikvision has witnessed and participated in the development and expansion of the security industry. Intelligent security is a major battleground for the implementation of AIoT. In the future, Hikvision is committed to serving various industries through its cutting-edge technologies of machine perception, artificial intelligence, and big data, leading the future of AIoT: Through comprehensive machine perception technologies, we aim to help people better connect with the world around them; With a wealth of intelligent products, we strive to identify and satisfy diverse demands by delivering intelligence at your fingertips; Through innovative AIoT applications, we are dedicated to empowering every individual to enjoy a better future by building an intelligent world that is more convenient, efficient and secure.

#### 2. Core Business Capabilities

Hikvision, focusing on technological innovation in IoT perception, AI and big data, offers serialized AIoT products integrating software and hardware, cloud and edges, IoT and information network, and big data and AI, with the whole-process service capability for building complex large-scale AIoT systems. Over the past 20 years, Hikvision has expanded its coverage of perceptive technology from visible light to millimeter wave, infrared rays, X-rays and sound wave etc., widened its product range from IoT perceptive devices to AIoT products, IT infrastructure products, platform service products, data service products and application service products which are fully integrated with AI and big data technologies. As a result, the Company has extended beyond comprehensive security to such fields as smart home, digital enterprises, intelligent industries and smart cities. As a product company equipped with system capabilities, Hikvision builds an open and cooperative ecosystem with business covering more than 150 countries and regions around the world.

Hikvision's business can be summarized into three types of supporting technologies, five categories of software and hardware products, four system capabilities, two types of business organizations and two marketing systems.

Among them, the three supporting technologies include IoT perception technologies, AI technologies and big data technologies; the five categories of software and hardware include IoT perception products, IT infrastructure products, platform service products, data service products and application service products; the four system capabilities include system design and development, system engineering implementation, system operation and maintenance management and system operation services; the two types of business organizations cover three business groups (public business groups-PBG, enterprise business groups-EBG and SME business groups-SMBG) and eight innovative businesses (smart home, mobile robots and machine vision, infrared thermal imaging, auto electronics, intelligent storage, intelligent fire protection and control, intelligent security check, and intelligent medical services) ; the two major marketing systems refer to the domestic business marketing system and the international business marketing system.

In the field of AIoT, Hikvision has been focusing on technological innovation, enriching product systems and building system capability for many years, with its technological capabilities, product capabilities and system capabilities complementing each other and growing together.

## 2.1 Integration of Software and Hardware: Constant Mutual Promotion between Software and Hardware Product Systems

In recent years, Hikvision has unified the software development system, standardized the hardware development process, provided a unified embedded software platform for various equipment, and unified interface specifications for networking accessing and operation and maintenance management of various equipment, ushering the development of software and hardware products into a benign iterative cycle.

#### 2.1.1 Unified Equipment Software Platform

Various hardware product types, diversified product operating environments, and different product operation and maintenance management ways have posed major challenges to the development of the IoT business. In this context, Hikvision has launched HEOP (Hikvision Embedded Open Platform) to support containerized independent deployment and flexible scheduling of algorithms or components for the sustainable development of AIoT.

Hikvision's new products are all developed based on this platform. On this unified embedded software platform, all AIoT equipment of Hikvision will feature the same software foundation to avoid the differences between various hardware development and operating environments, and support function changes of hardware products through software upgrades to improve development efficiency significantly.

In addition, partners can realize iterative development of intelligent application functions of AIoT equipment based on HEOP efficiently, and work with Hikvision to create value for customers.

#### 2.1.2 Unified Software Support for Equipment

Hikvision provides various AIoT equipment with unified access, networking, operation and maintenance support capabilities through a unified intelligent perception networking platform, making the large-scale AIoT a reality.

The unified device access framework supports the connection of various video equipment, multi-dimensional sensing equipment, and intelligent equipment. With open interfaces and protocols, various AIoT equipment can access Hikvision's software platforms. And the development of equipment network access drivers is relatively separated from application software, that is, we can set up the platform first and then develop device drivers.

Networking is possible in a large scale to support a variety of IoT perception equipment in line with national standards and multi-industry standard specifications. And the integrated operation and maintenance service platform is applicable to a variety of IoT devices and IT equipment.

Moreover, partners, through the interface provided by the intelligent perception networking platform, can connect other manufacturers' IoT equipment to the same software platform.

#### 2.1.3 R&D Synergy between Software and Hardware

At Hikvision, the R&D of software or hardware meeting customer requirements, application scenarios, industry characteristics and other demands is not carried out separately in most cases. Offering the best solutions to meet users' demands is our top priority. So, you will find that the hardware development demands may be completed by the software R&D team, while the software development demands may be undertaken by the hardware R&D team. We have formed a synergy between these two R&D types with the two teams supporting each other. When communicating with users on business needs, software personnel will advise them on the hardware equipment they need; and for the newly developed intelligentequipment, the software team will develop application software that maximizes their value.

Software demand drives hardware R&D. When understanding the demands of relevant industries and designing software functions, the business team will analyze the demands for hardware products at the same time,

and timely feedback to the hardware products and AI algorithm team.

Hardware capabilities drives software development. Leveraging Hikvision's strong hardware research and development capabilities, the hardware team is committed to introduce new hardware devices. The software team, through in-depth communication with the hardware team, keeps abreast of the latest developments in hardware products, and rolls out new application software R&D in a timely manner to maximize the functions of hardware equipment and reflect the application value of the equipment.

## 2.2 Cloud-Edge Fusion: the Promotion of Perception Fusion Empowering Platform has Achieved Remarkable Progress

## 2.2.1 Perception Fusion Empowering Platform: Realizes Intelligent Fusion and Utilization of Front and Back Ends

Aiming at "co-construction of locations, resource sharing, algorithm co-management, computing power integration, and service sharing", Hikvision's perception fusion empowering platform is geared towards the fusion and utilization of industrial or urban IoT perception resources. As for perception resource construction, it supports access networking, lean management and planning and deployment of front-end devices to realize "co-construction of locations". For perception resource utilization, the label association, fast retrieval, and on-demand access of perception data are readily available for "resource sharing". In terms of algorithm management, the open training, unified management, and flexible programming of intelligent algorithms together make "algorithm co-management, load monitoring and reasonable scheduling of computing power resources to achieve "computing power integration". Lastly, in terms of intelligent analysis service, there are directory publishing, business application and service configuration of intelligent services for "service sharing".

Hikvision's perception fusion empowering platform provides competence center, application center, programming center, investigation and judgment center, operation center, and management center. The competence center provides the classification and search services of perception resources, and releases intelligent service capabilities; the application center serves for the application and review management of perception resources and intelligent analysis services; the programming center is for scene tag management, scene configuration, and intelligent analysis algorithm programming for the perception resources of the IoT; the investigation and judgment center features functions such as automatic push of intelligent analysis events, manual investigation and judgment,



event statistics and retrieval; the operation center offers intelligent service applications, intelligent service task monitoring, execution statistics, regular operation reports and other functions to business managing personnel; the management center is characterized by management functions covering background resource management scheduling platform, IoT resources and algorithm resources for technical operation and maintenance personnel.



#### 2.2.2 AI Open Platform: Makes Front-End Intelligent and Definable

In the process of industrial upgrading, there are a lot of intelligent application demands, which are closely related to users' business scenarios. Hikvision's AI open platform, as a one-stop algorithm training platform for fragmented industrial application scenarios, is capable of training high-accuracy algorithms based on small sample data. Easy to operate, the AI open platform can generate targeted intelligent algorithms through sample data collection, online data labeling and online algorithm training, which can then be deployed to Hikvision's various hardware devices.

In 2021, the AI open platform has been enhanced with a number of core capabilities: the launch of voice classification, text recognition and data intelligence marks the expansion of its open platform capabilities from visual capabilities to multi-modal capabilities; the launch of self-learning enables users to continuously improve algorithm accuracy by using data generated in actual use without calibration; the launch of programming platform has further lowered the barrier to entry by equipping the platform with low-code development capability for complex intelligent applications.

By the end of 2021, the AI open platform has served more than 8,000 enterprise users, generated 50,000 models and implemented 4,000 projects in total.





#### 2.2.3 The Self-Learning System: Support the Autonomous Improvement of Algorithm Accuracy

Currently, most AI algorithms are based on supervised learning and require a lot of manpower to annotate data. Labeled training data is finite and incomplete, but real-world scenarios for algorithm deployment are characterized by infinite possibilities.

Hikvision has built a self-learning system that can autonomously screen, annotate and train real data in application scenarios without human intervention, continuously improving the accuracy of algorithms and evolving on its own. The system supports both cloud and edge deployment and co-evolves on the two ends. At the edge, in particular, Hikvision launched the first self-learning device with ultra-low power consumption—less than 15 watts—based on domestically made chips in the industry. In the perimeter prevention application of a steel mill, the false alarm rate was reduced by 97% within 10 months after the self-learning algorithm was deployed. The related technology has won two championships in the autonomous learning/continual learning competition of the International Conference on Computer Vision (ICCV).

Self-learning products applicable to perimeter prevention, urban management (roadside stalls, illegal construction projects, manhole cover anomalies and etc.) and other scenarios have been released. Hikvision believes that through self-learning technology, machines can be endowed with the ability to evolve on their own, so that the more the system is used, the smarter and more user-friendly it gets.





#### 2.2.4 Algorithm Database: Provides a Basis for Algorithm Reuse

Hikvision's algorithm database manages algorithms of different vendors, different functions, and different forms in a unified way, providing a basis for the reuse of intelligent algorithms.

Formulating a complete algorithm description specification, Hikvision's algorithm database can describe and manage the name, type, function, technical parameters, application scenarios, operating environment and other characteristics of the algorithm, so as to provide the appropriate technical environment or scheduling parameters to deploy, arrange, and manage algorithms, and work together with the resource management scheduling platform to realize the unified management of intelligent algorithms and on-demand scheduling.

## 2.3 Fusion of IoT and Information Network: Data Resource Platform Continues to Play an Important Role in Multiple Industries

Hikvision's iDatafusion platform has been applied and promoted in various fields such as public safety, traffic management, bus scheduling, water conservancy and water affairs, natural resources, financial anti-fraud, and campus management. Through the fusion, management, mining and service of perception data and business data, it provides users with data models and applications, and meets users' business application needs.

#### 2.3.1 iDatafusion Platform: Brings Out a Complete Product System

Hikvision's iDatafusion platform provides users with data integration, data processing, data analysis, data sharing, data services, and model repository capabilities.



loT elements comprehensive management & application	data analysis data in	ackage	Multidimensional int service add-on pa Multi- mensional integrated osta service	ickage	Full-info file	Gener	al applicati	on data servic		kage	Data	Industry applicatio data servi add-on package
_					1 iDatafusi	on platform						
	Shared service layer	Data catalogue	Interface catalogue	loT catalogue	Computi resourc	ng es	Storage resources	Data de	velopment lools	Data subs	cription	Data exchange
Equipment management	÷	Data integ	ration tools	Data d	levelopment 1	iools		Data analysis	tools		haring ols	Model database
Space calibration	Open capability layer	tion data explo	ra Data Data ration definition simulation	Data developmen workbench	Data t desensitization	Quality audit	Bi visual anatysis	Data Knowledg mining graph ongino	e Data Space-Li cube engine		Data cascades	Model integration and deployment
_	Bas capabi		ata management	Data standard (	center	Label def	inition	Data ope	rstions center	K	D. nowledge dat	abese
Transportation unit	Basic service layer	Tenant maragement		plication nagement	Cepartment management	Account	role cer	Unified tification conter	Unified configuration cont	Reso. ar control		Approval process configuration

The data resource platform provides data integration tools such as data integration workbench, general data collector, data exploration, data definition and data simulation, etc., data processing tools such as data development workbench, data desensitization and quality inspection, etc., data analysis tools such as BI<sup>2</sup> visual analysis, data mining engines, knowledge graphs, data cubes, and space-time engines, etc., data sharing tools such as API (Application Programming Interface) gateways, data cascades, etc., and data service capabilities such as data catalogs, IoT catalogs, API catalogs, data subscriptions, data exchanges, etc. Among them, data mining engines and knowledge graphs together constitute the intelligent cognitive open capabilities based on the AI open platform, and the data analysis operators and data models formed thereby can be further utilized by other analysis tools such as the data cubes.

To effectively improve the quality of IoT data, Hikvision advocates IoT data management from the source, and provides comprehensive management applications for IoT elements, offering a series of management tools such as equipment management, space calibration, and transportation unit management; to better serve industries, we also provide a series of optional data service product add-ons packages such as perception data service, multidimensional data fusion service, general application data service, industry application data service, etc., to elevate the efficiency of application development based on the data resource platform.

#### 2.3.2 Model Repository: Provides a Basis for Model Reuse

With models as the granularity, Hikvision's model repository provides unified data model deliverables

<sup>&</sup>lt;sup>2</sup> BI: Business Intelligence.

description specifications to manage the process or task of data tools such as data integration workbench, data development workbench, data mining engines, data cubes, BI visualization analysis, and API gateways associated with models. Possessing such capabilities as model release, version management, information inquiry, statistical analysis, and integrated deployment to serve all 3<sup>rd</sup> parties developing models based on tools of the iDatafsion platform, this repository can facilitate model reuse between various projects.

The final deliverable of the data model can be the dataset, API service, or BI visualization chart that supports the application. A data model can be used for multiple applications, and an application can rely on the support of multiple data models.

The model repository functions as a foundation for the reuse of data models in multiple application sites.



#### 2.4 Big Data-Intelligence Fusion: Intelligent Application Open Platform Empowers More Industries

#### 2.4.1 Intelligent Application Open Platform: Support Universal Intelligent Application Scenarios

Hikvision has set up the intelligent application open platform for edge node applications, edge domain applications, cloud center applications, and Internet operation applications respectively, to support universal intelligent application scenarios.

Edge Node Hikvision Embedded Open Platform (HEOP): HEOP has been connected with the Hikvision Infocloud application market in 2021, complete with processes for partner admission, APP development, APP transaction and APP deployment. By developing, listing and trading APPs online, our developer partners provide value-added services for device users. Once the device is added to the Infocloud Platform, users will be able to manage and control the device for the ordering, deployment and use of APPs on a mobile terminal. Under the HEOP architecture, all kinds of hardware will be containerized and various algorithms generated on demand and switched freely. Developers can also use IDE tools with built-in APP code templates to deploy the development environment with just one click and complete model tuning and packaging. Hikvision continues to host HEOP developer training



camps to help ecological partners reach thousands of industries with products and applications by virtue of the Company's platform capabilities.



Edge Domain Intelligent Application Platform (Hikvision iSee): Provides a development framework for edge domain intelligent applications, and general service capabilities that can be integrated into this framework, including video live view and playback, access control, video intercom, elevator control and other connected perception capabilities and video intelligent analysis functions, in addition to a number of optional common functional components. Developers can further develop dedicated components that meet specific application requirements on this basis.

**Cloud Center Intelligent Application Platform (Hikvision iFar)**: Provides a development framework for cloud center intelligent applications, and general service capabilities that can be integrated into this framework, including comprehensive data intelligence application support capabilities such as IoT perception, intelligent analysis, and big data analysis. Developers can further develop dedicated components that meet specific application requirements on this basis.

Internet operation application open platform (Hikvision Infocloud): Based on EZVIZ cloud, provides business operation service support capabilities for cities and industries, and a public Internet underlying platform (supporting the access and management of hundreds of millions of devices) and Internet-based high-concurrency business services for industry users. The tenant platform integrates shared service units such as resource services and user services for the rapid up integration by business platform; the operating platform mainly delivers product services, project services, etc., for operators to manage products and projects; intelligent services support peoplevehicle identification, OCR text recognition, intelligent voice recognition, AI training service, data annotation,

intelligent application engine, etc. So far, we have provided cloud-based platforms for online business operation for more than ten fields, including parking operation, smart community operation, body temperature screening operation, fire protection operation, intelligent waste classification management, vehicle safety management and online cloud-based court trials etc.

#### 2.4.2 Component Database: Provides a Basis for Software Reuse

Hikvision's unified software technology system supports the "architecture + component" development model. And our component database has gathered over 4,800 components of various types for four development architectures.

Hikvision's component database manages the component development of internal software development teams around the world in a unified manner to avoid repeated component development plans, and combine and divide components with repeated functions, thereby reducing development and maintenance costs.

The Hikvision component database, as an alternative source for software function reuse, offers a large number of common functional components which support multiple development frameworks at the same time. Developers can further develop dedicated components that meet specific application requirements on this basis, and use the tools provided by Hikvision's unified technology system to package, deploy and manage components. The software development process based on Hikvision's unified software technology system can be boiled down to "selecting architecture + selecting components + configuring components + developing new components + integration", thereby improving the consistency and compatibility of the software released by us while ensuring high software quality.

#### 2.5 Systems Engineering: Undertake the Engineering Implementation of Large-Scale Complex IoT System

Compared with regular IT systems, AIoT systems are characterized by high fragmentation, difficulties in frontend survey and design, difficulties in construction process management, multiple system-integrated elements, and difficulties in operation and maintenance, etc. As a result, problems such as uncontrollable project duration and construction quality have been found in the implementation of small-scale AIoT systems, let alone the engineering complementation of large-scale complex AIoT systems.

Looking at the construction of intelligent industries and smart cities in recent years, the scale of AIoT systems have been constantly expanding. Provincial-level forest fire prevention, water conservancy supervision, border

control and other industrial construction projects, as well as city-level construction projects such as smart cities, safe cities and Xueliang projects, continue to emerge. Engineering projects like these require a construction team of hundreds or even thousands of people, with a wide range of construction operations, multiple types of front-end perception devices and complex intelligent application functions. In other words, we have to upgrade the Company's AIoT system engineering implementation capabilities to the next level.

For this reason, Hikvision has been explicitly and constantly required by users to directly undertake the total integration task of ultra-large-scale complex AIoT system projects in recent years. And in response to such requirements, Hikvision makes full use of its advantages in AIoT products and unified software technology systems as well as its technical service teams distributed all over the country, and provides whole-process services from system design and development, system project implementation to system operation and maintenance management for the implementation of some large-scale complex AIoT systems engineering projects based on project scale, system complexity and the degree of urgency of users' demands.

Hikvision is capable of undertaking the total integration of large-scale projects thanks to the Company's unified software technology system that has been fully built. Based on the component-based development model, the software of large-scale projects can be developed through distributed collaboration and integrated efficiently by the headquarters and regional teams; based on the unified device access framework, the Company's own products can be quickly integrated with third-party IoT perception products; based on Hikvision's iDatafusion platform, it can quickly integrate users' existing multi-source heterogeneous perception data and business data, and provide governance services of perception data and business data at the same time; based on the Intelligent Application Open Platform, intelligent application systems involving multiple algorithms, multiple roles and multi-terminal login can be quickly built; based on the Integrated Operation and Maintenance Service Platform, it can provide operation and maintenance service support capabilities integrating front and back ends, internal and external fields, and upper and lower levels.

In 2021, by taking on some large-scale complex AIoT systems engineering projects, Hikvision has further enhanced its platform support capacity and team collaboration in complex system design and development, IOT data governance, construction process management, system operation and maintenance etc., and optimized and reorganized the Company's system project implementation team, laying a solid foundation for undertaking more intelligent industry and smart city projects in the future.

Meanwhile, Hikvision has explored a mode of closer cooperation with ecological partners in practice. In addition to the integration of ultra-large-scale complex systems where users have specific requirements, Hikvision

will continue to play its role as a product provider, supporting more integrators and operation and maintenance service providers with products and technologies.

#### 2.6 Ecological Empowerment: Forms an All-round Open Ecological Cooperation and Empowerment System

#### 2.6.1 Open System: Open Equipment + Open Platform + Open Data + Open Application

Hikvision offers comprehensive open capabilities spanning equipment, platforms, data, and applications to industry application developers in all aspects.

Hikvision intelligent application open platform provides four development frameworks, more than 1,500 open interfaces, more than 1,100 common components, and totally 278 software platform products including basic software, general software, and industry software.

Our integrated operation and maintenance service platform offers equipment probes for the access of thirdparty sensing devices, operation and maintenance data interfaces for data output and report output of operation and maintenance data; and the partner operation and maintenance team management and cascading assessment function for various teams to deliver operation and maintenance services based on the same platform.

Hikvision's IoT-information integrated data resource platform supports the access of third-party data storage management systems or data formats in addition to mainstream data access; the IoT data management tools provided is capable of managing elements of various types of IoT devices from multiple vendors while evaluating location deployment; and data service interfaces support the development of business applications.

Hikvision provides more than 90 related standards and specifications including overall technical specifications, general technical specifications, software interface specifications, IoT perception technical specifications, intelligent algorithm technical specifications, big data management and service specifications, technical management specifications, etc., to ensure the seamless integration between ecological partners' technical achievements and Hikvision's software and hardware products.

## 2.6.2 Empowerment System: System Operation and Maintenance +Algorithm Training + Data Engineering + Application Development

To support more partners to deliver application values for users based on Hikvision's open system, Hikvision, based in Hangzhou has established a training and certification system, three software R&D centers in the northeast, northwest and southwest, the offline training empowerment mechanism of 19 provincial-level software R&D



departments, as well as an online training mechanism offering over 330 courses.

The training empowerment system, oriented to system operation and maintenance, algorithm training, data engineering and application development, issues certifications of associates, professionals and experts based on the Hikvision training and certification system and the training content and evaluation system.



#### 3. Software and Hardware Products

## 3.1 Hardware Product Family: Edge Node Comprehensive Perception + Edge Domain Scenario Intelligence+ Central Intelligent Storage and Computing

Hikvision has been putting together years of expertise around intelligent sensing to further facilitate technological capabilities and enrich the branded hardware lineup. Currently the hardware family is flourishing in edge nodes, edge domain, and cloud-center devices.

#### 3.1.1 Edge nodes: Comprehensive Intelligent Perception and Enriched Product Mix

#### 1) Front-end Cameras

With the rise of digital transformation and expansion of real-world scenarios, Hikvision is adhering to a "full field perception and intelligent integration" strategy based on its firm grasp of both the software and the hardware. All developments are based on real world demands, with five excellences, namely ultra-HDand full-color, panoramic details, multi-dimensional perception, scenario-based customization, universal intelligence.





#### Ultra-HD and full-color: Gorgeous Imaging All-time and All-weather

Hikvision has been pushing the boundaries of digital imaging technologies, particularly for scenarios with DarkfighterX and ColorVu, where color representation can be challenging. As of now, there are multiple series of Ultra-HD ColorVu products to address the issue at its root.

Hikvision cameras are enhanced with multispectral fusion technology, which works on both visible light and infrared to compensate the loss of color during nighttime. The AI-ISP image processing engine is introduced to reduce noise in night shots. To compensate for low ambient lighting while minimizing the visual impact on drivers and pedestrians at night, Hikvision has developed a patented real-time supplementary lighting matrix system, which is capable of zoned lighting, enhancing only portions of the picture that needs more light. The traced focusing technology excels in capturing multiple moving targets in varied speed in the same frame at night, dynamically combining multiple capturing parameters to make sure every target is clearly visible and in focus.





#### Panoramic Details: Everything Clearly in View

Hikvision solutions are known for impeccable details across the panorama, thanks to its comprehensiveness of static and dynamic imaging, and multi-camera videoing.

The 4<sup>th</sup> generation of PanoVu camera is designed with harsh weather in mind. The top of the device is sheltered with eaves and gutter to avoid flooding. The camera unit itself is fully enclosed, with self-heated glass and 7/24 working dehumidifier to avoid lens fogging. The enclosure itself is made with sapphire crystal to avoid wear and tear by grains of sand. Images captured by different lens inside the camera are stitched into a full panoramic view, with trimmed edges and warp correction to represent the actual scene as it is.



#### **Multi-Dimensional Perception: Profile the Targets**

Building upon visual perception, Hikvision is integrating multi-dimensional perceptive data through expending

into sound wave, radar, and other IoT technologies, in order to achieve spatial-temporal correlation, IoT perception, information fusion, and build a solid Data-AI Fusion Base.

In industry inspection and smart manufacturing, visual capturing alone is only capable of basic environment monitoring, as it only "sees" how every machine appears to be operating. With the addition of industrial grade microphones and bone-conduction audiology, the collection of precise audio data is possible. Given integrated encoders, voiceprint matching algorithm, and AI Open Platform, it takes merely one hour of training data collected in a normal working environment to generate an automated AI model that detects malfunctions. Therefore, by combining the audio with video, visualized inspection could be realized, so we can accelerate the digital transformation of manufacturing.



#### Scenario-Based Customization: Designed for Practical Scenario Application

Hikvision merge engineering thinking with technology, and develop cameras based on different scenarios, built for real-life usage, with optimized structure, imagine, intelligence, maintenance, and security.

One example is specialized cameras to detect act of high-rise littering, an event of danger. These cameras are installed facing the sky. Consequently, the cameras have the dust accumulating on the lens. Hikvision optimized the system with a self-cleaning module, which collects water, and cleans the lens unit with a sprinkle/brush combination. A shade is added to minimize over-exposure in daylight, and there's a heating unit thaws the lens in cold days to minimize human intervention.





Another example is elevator surveillance. Electronic mopeds are forbidden in most high-rise buildings because its unstable battery may cause fire, hence there is a need to monitor if the electronic moped goes into elevators, and trigger the alarm. Hikvision's AI algorithm can also identifies electronic moped from regular bikes and strollers. ToF detection is introduced in case of blocked vision. If the security camera is blocked, the elevator itself will be locked up to avoid risky entry. The camera also is aware of the floor it's currently on, and helps to locate the elevator in cases of emergency, which can secure the golden window for rescue.

#### Universal Intelligence: Designed Scenario-Based Product Solution with Better Suitability

Hikvision designs its hardware and algorithm for the specific needs of each scenario and industry, to ensure a smooth digital transformation.

The restaurant industry needs to regularly examine kitchens for the proper dressing of staff, and this process should be ideally human-free, for the efficiency of labor. Hikvision's solution is powered by an AI platform that specifically examines human objects for white gowns, white hats, and white face masks. Improper dressing, once identified, triggers the alarm, so that the kitchen is constantly monitored in real time.

In scenarios such as waste incineration, metallurgy, and power generation, the temperature of burners is usually extremely high, which need to be carefully monitored. Hikvision developed specialized cameras for such needs, protected with wind cooling and enhanced with telescope imaging, to capture real time images inside the burner. The camera also monitors blower nozzles and pipes, and trigger the alarm if the burner flame went out or if there is any leakage.. So that the operators are timely informed there be anything out of the ordinary within the burner.





Meteorological observation involves outdoor working. Hikvision sky imaging system captures the open sky in a 360° panorama, which expels birds with auditory alarms. Power source is a primary challenge of outdoor working. To address this issue, Hikvision equipped its products with low power 4G radio and solar panels to facilitate quick deployment in the field. Hikvision provide open visual sensing, smart computing, and software development kits to its partners via standard API. So that meteorological algorithms that can be quickly deployed on devices.

#### 2) Smart Traffic and Mobile Devices

Smart Traffic: Hikvision traffic management products adhere to the objectives of "improving traffic order, alleviating traffic congestion, preventing traffic accidents, improving traffic safety, and facilitating transportation and travel". All technological developments are based on actual needs, resulting in products and solutions customized for actual scenarios. The eco-friendly series, which is being rapidly deployed across the country, has minimized light pollution. The radar-assisted series cameras is being adopted for multiple scenarios to promote industry upgrading and business innovation. The Radar-Assisted Road Pre-alarm Series product line provides 24/7 roadways surveillance and accident alarm, with an emphasis in traffic regulation enforcement and rural surveillance in order to effectively reduce road safety risks. The Radar-Assisted Smart Monitoring Unit product line controls the



fill-in lighting module in a smart way to enhancing ambient lighting only when needed, to improve energy efficiency and high precision detection. The Radar-Assisted Vehicle Detector offers 24/7 precise, remote monitoring of roadways, together with proprietary smart signal systems and "weight balancing" adaptive algorithms, it constitutes a holistic self-contained signal control system that spans diagnostics, simulation, operation, evaluation and adjustment. With extensive research on the capabilities of radar systems, innovative application, combined with industrial synergy advantages, Hikvision is realizing business applications in many fields such as ultra-remote surveillance, radar imaging, and frequency measurement, formulating professional applications in digital traffic, ship inspection, vital examination, falling prevention, and etc., opening up new market segments.



**Stationary Traffic Systems:** Hikvision offers smart, automated stationary traffic solutions that cover entry/exit, parking lots, street parking, and charging piles to save man-power. The recently launched product series, such as "Guardian" series and "Roadside" series, has enriched the product matrix. Through construction of intensive system, capabilities in intelligence and informatization, we have continuously improved the competitiveness of the product system. By gathering experience of vertical scenarios and in-depth field research, we promoted the penetration of the vertical market. Through in-depth field research in urban parking management, the Company keep improving the urban parking efficiency and the parking experience of the citizens.

**Mobile Solutions:** Hikvision has been constantly optimizing the imaging quality and smart features of mobile devices. The Company launched anti-vibration cameras, 5G recorders, and protable cameras, ideal for law
enforcement and industry safety management. Pocketable AI-based recorders and helmet-mounted cameras augmented by the latest low-power technologies are widely used in railways, healthcare, financial, construction, and manufacturing sectors. The Company also launched handheld scanner PDA line that is primarily used for barcode and character scanning, which is helpful to open the data terminal market.

#### 3) Access Control and Intercom Systems

With years of excellence in visible light, infrared, sound wave, multi-dimensional perception, audio & video interaction, and electromechanical control, Hikvision continues to refine its access control and intercom products. The Company improve the access control product series' competitiveness rely on MinMoe, which emphasis in human and objects management in different scenarios ;enrich multi-modal technologies and build an HEOP hardware ecosystem that required only minimum software development, offering well-rounded intelligent solution to the customer. On a hot streak of innovation and quick delivery, the Company has released a new integrated turnstile line to expand its share in the access control sector. The video intercom product line is constantly refined to be widely adapted for all industries.

Hikvision access control, turnstile and intercom products combined with vertical applications, have formed a comprehensive, rapid-growing solution ecosystem covering access control and attendance, temperature screening, elevator control, financial checkout, inventory management, building intercom, industrial grade intercom, public address (PA), professional audio, turnstile, and advertising signage.





#### 4) Alarm Systems

Hikvision continues to serve clients with cloud-based alarm systems that benefit from its excellence in radio frequency, optical fiber sensing, detection optics, integrated perception, and intelligent analysis. The Company has released its 2nd generation wireless and hybrid intrusion alarm systems, which are especially well received both in china and overseas. For perimeter alarm field, the Company constantly extending its product line, and launched the next generation distributed vibrating optical fiber system, which helps to enrich the border/coast control application. For security radar field, the Company has developed a plethora of situational perceptional radar products based on demands from marine safety, railways, and fishery industries, such as land radar, shore-based water surface radar, laser radar, and LiDAR and Camera Integration System.



#### 3.1.2 Edge Domain Products: Extending Intelligent Business with In-depth Industrial Experience

Hikvision edge domain products centered around industrial vertical applications, further deepened AI application, enhanced system/products opening. They are designed to empower customers with artificial intelligence and serve the digital and intelligent transformation process.





#### 1) Integrated Devices for Intelligent Applications

**DeepinMind NVR, AI-Powered Core Product for Edge Domain Application:** Hikvision's DeepinMind series products flourished in 2021, covering both generic and industrial-specific scenarios with a comprehensive lineup.

Hikvision is the first to propose the concept of "inclusive AI" for universal smart surveillance. Promoting the widely use of smart NVRs (network video recorders), the Company's "AcuSense" series NVRs features HD recording, lightweight AI applications, multi-dimensional perception, and on-demand data aggregation, offering an upgrade option with remarkable price performance for small and medium enterprises, buildings, and communities.

For industrial scenarios, Hikvision's DeepinMind products are augmented by cutting-edge, powerful AI processors with high hashrate that could run multiple algorithms in parallel. The Company is committed to building an ecosystem, where clients have access to the open platform to quickly train their own AI models with data collected in real-life fragmented scenarios. On the other hand, with HEOP, the hardware itself is built as a "container", and can be quickly switched between proprietary or third-party algorithm and software, creating smart integrated devices with high flexibility.

**Fusion Storage, Only One-Step to Comprehensive Ddge Domain Solution.** In normal circumstances, 80% of the collected data is video related data. As the amount of data grows exponentially, indexing and retrieving valuable information from data is becoming increasingly a challenge. Hikvision constantly integrates "smart fusion" storage with computing, storage, and smart analysis with cutting-edge technologies such as GPU&HDD hybrid hot swapping. Users are given the freedom of adjusting software plugins, which massively improve the video data post-analysis ability, extending the storage cycle of key data and speeding up the access to key clips.

#### 2) Conference Surfaces

#### **Conference Management Software: An Enriched Solution Matrix**

Hikvision conference surface products keeps upgrading. Take the latest smart conference management V2.0 for example, it forms a lite smart conference solution by adopting the interactive display as the heart of the scenario, supported by other devices, such as conference room digital signage for announcement, and HikMicro Thermal Presence Detector for attendance check. The result is a flexible solution that broadly covers the entire process of events, including: making appointments, administrational approval, multi-screen display of conference information, non-contact sign-in before the event; remote collaboration, wireless screen sharing, shared whiteboard writing, and multi-party conference call during the event; relocating conference room, generating meeting minutes, automated data analysis, centralized device/facility management, event process optimization, and intelligent resource allocation after the event. The software solution can be connected to smart campus and security guard platforms as a component, adding new ability to existing platforms in one-click.



#### **Conference Tablet Hardware: Taking over the Premium Market**

Hikvision D5D, one of the Company's premium conference tablet, features a slick anodized body, ultrapowerful processor, 8 GB of RAM and 64 GB of internal storage, AI-powered conference software, and cloud-

### **HIKVISIO**N

based application marketplace. With 48 MP camera that automatically focuses on the speaker, automated directional audio capture with an 8-Mic array, remote conference and collaboration is made an experience. Better still, a motorized cover automatically obstructs the camera when it's not in use, further ensuring the privacy.



#### 3) Intelligent Video Transmission

The transmission products is the key nodes and nexuses for Internet of Things. Hikvision designs its smart video feed delivery system based on the philosophy of "visualized topology, unified management, intelligent operation and maintenance". A single hardware unit can handle up to 5,000 video channels. Based on intelligent video transmission system, the Company has widely built network delivery solutions for many scenarios and industries. Port authorities benefit from connected areas and unified management offering by the system. Resident community managers are relieved by the integration of video surveillance and network management, where everything can be done in the same user interface, making the process intuitive and cost-effective. For enterprise campus operators, being able to quickly identify and resolve issues in the surveillance network really cuts down their cost and improve their efficiency. The Company is well aware of its excellence, and striving from good to better. In the future, the Company will keep expand its vertical applications to help the customer reach a smart way to operate and maintain the network.





# 3.1.3 Cloud Center Product: A Solid Ground with Steady Improvements in Storage and Computing Capabilities

The age of big data has come, and it depends on IT infrastructure with outstanding performance and reliability. Hikvision has solid lineup of servers for general computing, big data, and artificial intelligence to address stable, reliable, safe and advanced needs.



#### 1) General Computing Products

With over a decade of experience, Hikvision generic server products covers single, double, and multiple processor setups, with different forms like workstations, tower servers, rack servers, and edge servers, with variety product series and powerful performance to keep the market well-served.

Hikvision generic server products are compatible with domestic and international mainstream technologies. The product family is well segmented for the most competitive, addressing general needs of data centers and specific industrial scenarios, such as government, internet, energy, finance, and telecom verticals. All Hikvision clients have access to general computing infrastructure with outstanding performance, reliability, and security.

#### 2) Intelligent Computing Products

Thanks to the Company's accumulation of industries experience and outstanding technological abilities, Hikvision's smart server business has been excelling in domains such as AI-IOT, big data and business intelligence, continuing to outperform competitors.

"Intelligent server" covers many forms, including all-in-one, hardware only, and algorithm software only, which satisfy different clients and sales model. All products are compatible with domestic and international mainstream CPU and GPU, backed by a prosperous ecosystem and robust supply chain. For centralized computing, the Company just released the next generation of GPU rack servers in 1/2/4 units, maximizing cost efficiency with tiered options. For edge computing, the Company offers servers that are heat/corrosion/dust proof and low energy consumption, adapted to various working environments.

As a leader of algorithms, Hikvision has released over a hundred commercial algorithms with scientific rating standards. The Company is experienced in the development and sales of algorithms. Added self-learning ability make Hikvision algorithms especially adaptable, minimizing the workload of data collection and labeling.

#### 3) Universal Storage Products

Hikvision constantly evolving universal storage line of products, which covers SAN, NAS and object-based storage. The storage products are designed in two different architecture: server & controller distributed deployed and all-in-one, with support from industry-leading technologies such as SDS<sup>3</sup> and HCI<sup>4</sup>. They are already widely adopted in a plethora of sectors, including office automation, database hosting, manufacturing management, and data center infrastructure, regularly rated the very top brand in IDC network storage.

<sup>&</sup>lt;sup>3</sup> SDS: Software Defined Storage.

<sup>&</sup>lt;sup>4</sup> HCI: Hyper Converged Infrastructure.

#### 4) Stream Storage

Based on the raw data and multi-dimensional application, Hikvision has developed a streaming storage model for raw data. The model is non-file-based, hence free from data fragmentation and performance degradation after long period data overwriting. By optimizing data writing mode, the solution further boosts file server performance, while systematic, well-streamlined anti-virus measures keep data safe. In a decade since the initial launch, Hikvision storage products are adopted by public security, traffic and transportation, finance, education, real estate, petroleum industry and electricity sectors across over 100 countries and regions.

Hikvision streaming storage products have to been ranked as the top 1 in global video storage brands selection by Omdia (previously IHS), propelled by sales far exceeding competitors. The Company is poised to strengthen its brand power of streaming storage and continue to lead the industry.

#### 5) Large Screen Displays

Hikvision's display products, powered by renowned video processing technology, image restoration technology, image augmentation technology, ultra-high-definition, and smart interaction technolog, is well received in sectors such as monitoring centers and command centers, cloud center and big data center.

The Company continues to invest in Mini LED and energy efficient series products, improving heat management with innovations such as reversed positioning and common cathode technology, and expanding its presence to conference room. The current emphasis is on improved color consistency and higher resolution, which, coupled with convincing price performance, will increase Hikvision's leverage in the professional/commercial display market.

#### 3.2 Software Product Family: Software Platforms + Intelligent Algorithms + Data Models + Business Services

Hikvision's software product family is composed of software platforms, intelligent algorithms, data modeling and business services.

#### 3.2.1 Software Platforms: Basic Platforms + General Platforms + Industry-specific Platforms

**Basic software platforms:** In 2021, the ecosystem of "two pools, three databases, seven platforms and one environment" was continuously enriched and improved. "Two pools" refer to computing storage resource pool and data resource pool for edge cloud and central cloud computing platform, cloud storage platform, and big data fundamental platform; "three databases" refer to component database, algorithm database, and model repository,

respectively supporting the management and reuse of components, algorithms and models; "seven platforms" refer to the resource management scheduling platform, intelligent perception networking platform, AI open platform, perception fusion empowering platform, iDatafusion platform, intelligent application open platform, and integrated operation and maintenance service platform, providing intelligent application scenarios with storage and computing resource scheduling and equipment network access, intelligent algorithm training, intelligent service publishing, data aggregation management, intelligent application development, and integrated operation and maintenance service capabilities; "one environment" refers to the four-dimensional space operation environment, that is, the virtual space-time operation environment instead of the physical world, supporting the storage, correlation and analysis of perception resources and data resources in the same space-time environment. The ecosystem also formerly featured "one screen," referring to the large-screen visual application development tools, "one screen" is integrated with "one environment," which supported the configuration of visual applications and the association with data without coding, realizing the visualization of data in the same space-time environment from multiple angles.

General software platforms: Provides general software functions across industries, including general security and protection, visual command, alarm management, inspection supervision, conference interaction, and content release. The general software platform of visual command, as an example, includes AR scene tag platform, AR virtualization platform, AR command platform, VR panoramic application platform, integrated communication application platform, and portable law enforcement integrated management platform.

**Industry-specific software platforms:** Hikvision, serving over 70 sub-industries, has gradually built more than 200 application software platforms for various industries. Taking the traffic police industry as an example, we provide platforms such as the traffic violation management platform, the comprehensive traffic management and control platform, the urban traffic situation analysis and judgment platform, the traffic accident investigation and judgment platform, the law enforcement comprehensive management platform, the smart traffic signal control platform, the highway traffic safety monitoring and management platform, the smart check station application platform, and the intelligent driving management video inspection platform.

#### 3.2.2 Intelligent Algorithms: General Algorithms + Industry-Specific Algorithms

Offering services to all walks of life, Hikvision has accumulated a large number of video artificial intelligence analysis algorithms which can be divided into general algorithms and industry-specific algorithms.

**General Algorithms:** Algorithms that can be used for the development of intelligent applications in multiple industries. For example, algorithms to detect and classify transportation equipment, motor vehicles and non-motor vehicles, and algorithms to detect traffic flow of people and vehicles, etc.

Industry-Specific Algorithms: Algorithms developed for industry-specific application demands. For example, algorithms for the detection of exposed garbage, bagged garbage, misplacement of kitchen trash bins, road messiness, road ponding, road damages, road leftovers, abnormal sidewalk piles, anti-collision bucket damage, transformer box abnormalities, non-decorative tree hangings, billboard damage, tree protection facility damage, incineration of garbage leaves, illegal parking of non-motor vehicles, and messy materials on construction sites, etc.

#### 3.2.3 Data Model: Industry Business Data Model

Hikvision provides big data application services for all walks of life based on the big data collection, management, analysis and service capabilities provided by the iDatafusion platform. In this process, we have accumulated a batch of industry business data models, which can be managed by the model repository, and can be replicated and optimized in other similar application scenarios.

Taking transportation as an example, we provide an illegal parking remediation model, urban road traffic operation evaluation and diagnosis model, urban road traffic tracing analysis model, urban road traffic short-term prediction model, high-precision real-time online traffic flow simulation model, changeable lane feature research and judgment and control model, tidal lane feature research and judgment and control model, time-space analysis and judgment model for fake-licensed vehicles, racketeering car analysis model, traffic accident address analysis model based on standard semantic analysis, public transportation OD<sup>5</sup> passenger flow analysis model, highway truck detour analysis model, driving behavior habit label and comprehensive scoring model, driving behavior safety risk management and control model, and risky section mining model based on active safety data.

#### 3.2.4 Business Services: System Operation and Maintenance + Data Engineering + Business Operations

Hikvision, concerned with users' application demands, explores the transformation from being a product and system supplier to being a service provider for certain businesses.

<sup>&</sup>lt;sup>5</sup> OD: O stands for Origin, which refers to the departure location, and D stands for Destination, which refers to the end of the journey.

**System Operation and Maintenance Services:** Hikvision provides system operation and maintenance services to certain industry users. For systems and equipment out of warranty, the operation and maintenance team will offer professional system operation and maintenance services.

**Data Engineering Services:** Hikvision delivers data engineering services for IoT resource management, and integration of data collection, management and services.

**Business Operations Services:** Hikvision offers over 10 business operation services based on the Internet operation platform and its private deployment methods. Among them, urban parking operation services have been adopted in more than 200 cities, and its coverage scope is expanding rapidly; business operation platforms for fire protection operation, security check operation, community operation services, and waste classification intelligent management cloud have also been put into use.

#### 4. Business Organizations

With the evolution of core capabilities and business scope, the business organization model of Hikvision is being constantly upgraded. In the new era of AIoT, Hikvision's domestic business is built in layers, with the three business groups progressing their businesses based on the demands of different industries, while its international business is tailored to different countries, with its business and technology systems iterated and elevated according to the characteristics of the international market. Targeting different business models, the Company explores market demands, coordinates internal resources and strengthens its capabilities, as a way to facilitate digital transformation for customers and users at all levels including countries, cities, industries, enterprises and public institutions, and SMEs.

4.1 Public Business Group (PBG): Enhance Product and System Capabilities to Boost the Digital Transformation of Industries and Cities

#### 4.1.1 Overview

As 2021 kicked off the implementation of China's 14<sup>th</sup> Five-Year Plan, the digital reform led by the government showed a trend towards intensive and scientific construction featuring "construction of perception technologies in a systematic way, unified management by one network, unified operation and maintenance, empowerment through big data and AI, and promoting construction through application". Combining its continuous innovation in such technology fields as IoT perception, AI and big data and years of in-depth understanding of the industrial users'



demands in public services, and centering around "AI universal empowerment and deepening of data value", Hikvision has constantly expanded its product portfolio in terms of "hardware, platforms, algorithms, models and services" and deeply integrated product and system capabilities with a focus on the value fulfillment of solutions. Ultimately, it serves to facilitate the digital transformation of public services and cities through the comprehensive expansion of intelligent businesses in public security, transportation, urban governance, services concerning people's livelihood, ecological and environmental protection, etc.

### 4.1.2 Core Technologies: Enhance Big Data-AI Fusion Base Capabilities, Enrich Industry Service Items and Strengthen Systems Engineering Capability

Closely following the demands of customers and users in public services, Hikvision continues to expand its product lineup across industries, enhance the capabilities of the "Perception Base, Intelligence Base and Data Base", enrich industry service items, and strengthen systems engineering capability, thereby contributing to the digital transformation of industries and cities.



#### (1) Continue to expand industrial products and enrich application scenarios

Utilizing its solid technological foundation and first-mover advantage in AIoT and big data, Hikvision digs deep and taps industrial demands, continuously enhances fundamental support capabilities such as the Perception Base, Intelligence Base and Data Base, and enriches intelligent applications in smart cities, public security, intelligent transportation, ecological and environmental protection and other industries.

The Perception Base: Hikvision continues to focus on electromagnetic spectrum perception technology, extending its AIoT products from visible light to infrared rays, X-rays, millimeter wave and other multispectral technologies, from video surveillance to multi-dimensional perception, and from the traditional perception of people and vehicles to the perception of all elements. We have incubated a number of new industrial blockbuster products, such as the Dual-Lens Bullet Camera, the Hyperspectral Multi-Parameter Water Quality Monitor, the Radar-Assisted Camera and the Intelligent Security Inspection System, enabling all industries to quickly build visualized, intelligent and three-dimensional perception capabilities.

The Intelligence Base and Data Base: Drawing on its technological innovation in artificial intelligence and big data, Hikvision provides customers and users with a rich variety of hardware products, software platforms, intelligent algorithms and data models. Hikvision's Big Data-AI Fusion Software Family is growing day by day with basic software such as the "two pools, three databases, seven platforms, one screen, and one environment" and more than 70 pieces of general software in 10 categories such as visualized command and alarm management. The Perception Fusion Empowering Platform, for example, empowers users of various segments of public services through such capabilities as the co-construction of locations, resource sharing, algorithm co-management, computing power integration, capacity sharing and event co-governance etc., and is widely used in urban governance, environmental protection and other scenarios. In addition, hundreds of intelligent algorithms and data models that fit industrial businesses have been created, covering most business scenarios in public services.

Based on the three bases, Hikvision fully opens its Big Data-AI Fusion capabilities covering equipment, platforms, data and applications to gradually create a Big Data-AI Fusion business ecosystem, work with partners to build an industrial innovation consortium, and keep exploring the business segments of various industries with more than 120 pieces of software developed to meet the business demands of different industries, providing a wealth of scenario-based intelligent applications. In the edge node and edge domain, it deepens agile and highly intelligent applications with device coordination and interconnection; in the cloud center, intelligent applications such as the "be responsible for general sanitation, green covering and keeping good social order in a designated area outside the unit building" management system, intelligent monitoring of safety of small reservoirs, full-lifecycle supervision of solid waste, and intelligent monitoring of water quality are further improved for fields such as public security, social governance, transportation, epidemic prevention and control, conservation of natural resources and ecological protection, which has been implemented in hundreds of cities, hundreds of sub-industries and thousands of scenarios, contributing to Beijing 2022 Winter Olympics, Hangzhou 2022 Asian Games, the 14<sup>th</sup> National Games of China

and other important events.

#### (2) Continue to enrich industrial service items and enhance user engagement

Based on its deep industrial understanding and insights, Hikvision continues to enrich industrial service capabilities in data engineering, business operations and other areas, and enhance the engagement of industry users.

**Data engineering services:** Hikvision delivers data engineering services involving multi-dimensional perception data and business data for some industrial users, including factor calibration, data exploration, data governance, data organization, BI visualization analysis and other services.

**Business operation services:** Hikvision offers an increasingly broader scope of business operation services based on the Internet operation platform, covering many fields such as integrated urban operation, video enabling platform operation, urban parking operation, fire protection operation, community security operation, security check operation, and intelligent management of waste classification etc.

#### (3) Steadily improved systems engineering capability to ensure closed-loop project management

Hikvision continues to strengthen product and business integration, comprehensively improve system engineering analysis and design as well as implementation and delivery capabilities covering scientific deployment and management of perception devices, intelligent analysis and association of perception data, and the application of in-depth IoT-Information Network data integrated application, reinforce project management in complex system construction with stronger project management capability in the start-up, planning, execution, monitoring and closing stages, and collaborate with industrial customers to fill gaps and provide users with closed-loop project management.

#### 4.1.3 Value Fulfillment

While deepening its understanding of business in public security, transportation, urban governance, people's livelihood, ecological and environmental protection and other fields, Hikvision strives to build the capabilities of the "Perception Base, Intelligence Base and Data Base" for cities with a focus on "perception, intelligence and data", and continuously expand intelligent industrial services through the Perception Fusion Empowering Platform. By the end of 2021, it has provided a total of 346 system solutions in different business scenarios for government customers and users.

Hikvision is committed to making cities smarter, society safer, transportation more convenient, governance

### **HIKVISION**

more refined, services more targeted, and the ecology more livable. In the meantime, the Company will undertake its corporate responsibility and fulfill its social mission in primary-level governance, rural revitalization, and epidemic prevention and control etc., contributing to modern urban governance.

#### (1) Smarter Cities

In the field of smart cities, Hikvision aims to strengthen the city's overall perception capability, optimize urban business processes and collaborative sharing capability, build decision-making support and early warning and prediction capabilities for urban areas, and develop modern urban governance capability. Take "perception, intelligence and data" as the core, IoT, AI, big data and other technologies are used by Hikvision to continuously upgrade the architecture of "cloud-edge fusion, IoT-information network fusion, big data-AI fusion" and expand the technology system comprised of "hardware, platforms, algorithms, models and services". We have covered the smart city sector in operation and further mined its value, delivering support for smart city operation and management as well as cross-industry intelligent businesses in various fields.

Focusing on the perception fusion empowering platform, we offer the total solutions of intelligent perception middle platform for the construction of smart cities. The platform provides unified video and IoT access and aggregation capabilities, establishes full-lifecycle archives, and helps urban managers gain insights into the construction, operation and use of urban perception resources. Through the intelligent arrangement and scheduling of various perception algorithms and cloud-edge computing power, the platform has doubled the effect of perception resources application. By means of perception openness, intelligent efficiency enhancement and data fusion, the platform quickly enables intelligent applications in various commissions, offices and bureaus, assists cities in building modern governance capability, and helps elevate refined urban management.

The perception fusion empowering platform focuses on video value mining, and, with the idea of "one video with multiple algorithms and one event with multiple streams" in mind, provides capabilities such as the coconstruction of locations, video sharing, co-management of algorithms, capacity sharing, computing power integration and co-governance of events, in order to meet the demand of intelligent video applications in multiple industries and departments. Over the past year, the perception fusion empowering platform has been successfully applied to nearly 100 projects in 72 cities in 19 provinces across China, covering various industries such as smart cities, smart water conservancy, smart environmental protection, emergency management, park management, public security and politics and law, etc.

In the area of primary-level governance, Hikvision continues to penetrate into every segmentation scenario

of towns and streets, collaborates with primary-level party organizations in towns and streets across the country to explore key areas such as integrated command, public management, safe construction, public services, Party construction, Party-government integration, regional development, and comprehensive law enforcement, and implement industry-specific applications at primary-level in public security, transportation, urban management, emergency response, civil affairs and other industries. We have pioneered hundreds of applications, including the early warning, investigation and judgment of events, command and dispatch management, living environment improvement, town and street fire control supervision, and elderly care services, which help effectively tackle the difficulties in traditional town and street primary-level management, primary-level law enforcement, primary-level services and inter-departmental coordination, forming a new proactive, forward-looking and preventive closed-loop of primary-level management that fully elevates the intelligent management of towns and streets.

In terms of rural revitalization, the Company focuses on production, ecological and daily life scenarios in rural areas. Through video, thermal imaging, AI, IoT and other technological means, we deliver the capabilities including construction of digital infrastructure and public support platforms to realize intelligent perception of production monitoring, environmental anomalies, ecological risks, potential hazards in facilities and other elements. Focusing on rural governance, ecological monitoring, rural industries and other elements, Hikvision provides intelligent applications for industrial development, ecological supervision, primary-level governance, people's livelihood services, etc. and creates a new primary-level management model featuring multi-dimensional perception, transparency and visibility, and primary-level co-governance, thereby facilitating the digital construction of rural areas.

In epidemic prevention and control, Hikvision contributes to scientific and precise measures in cities. Based on the self-developed non-contact temperature screening technology and products, the Company has built a Hikvision Infocloud TM—a cloud-based temperature measurement data platform for the cloud networking of such data with services covering various scenarios such as scenic spots, schools, hospitals, farmers' markets and transportation hubs, ensuring the normalization of epidemic prevention and control as well as public travel safety. From temperature measurement, health code scanning and verification to data networking and big data tracing, Hikvision integrates innovative technologies such as multi-dimensional perception, AI and big data to make epidemiological surveys more efficient and accurate, assist the government to quickly cut off transmission routes, and effectively guarantee the work resumption and production for urban enterprises. To help facilitate border epidemic prevention and control, Hikvision has built a three-dimensional, intelligent, integrated, practical and iterablesystem. Based on rich varieties of intelligent perception devices including visible light, thermal imaging, radar, vibrating optical fibers, electronic fence, radio frequency identification. Combined with complex border scenarios, the Company has been constantly refining and optimizing the adaptability of multi-perception devices to scenarios, the intelligent linkage of multi- perception devices, the unified access of multi-type devices, the intelligent analysis of multi-type algorithms, and the strategy optimization of multi-type early warning. The result is the omni-directional intelligent perception, all-weather intelligent perception, intelligent recognition, intelligent tracking and early warning of cross-border targets, providing defense-related technologies to help crack down on cross-border smuggling and effectively prevent the spread of the epidemic across borders.

#### (2) Safer societies

In public safety domain, Hikvision combines the deep understanding of businesses with AIoT technology. Drawing on its accumulation of visible light technologies, the Company has taken a leap from DarkFighter to DarkFighterX and from black & white to ColorVu, delivering a high-definition intelligent view in all weathers and at every moment. Meanwhile, a series of new products which adapted to the "Peaceful China Initiative" have been created to realize the comprehensive perception of public safety elements through thermal imaging, sound wave, radar and other perception technologies.

Based on the capabilities of its video image intelligent application system developed over the years, Hikvision not only provides security guarantee for cities, but also extends its business to the public security control and service of the countryside, railway lines, river basins and other scenarios.

From the Skynet project to the Xueliang project, to today's intelligent communities, primary-level governance, public security prevention and control, Hikvision has worked with ecological partners to transform public security management from post-accident tracking to in-process investigation and judgment combined with prediction and early warning in advance by utilizing "perception integration, computing fusion, intelligence integration, data aggregation, application integration, and the combination of operation and maintenance". Empowered by technology, the Company strives to help build a peaceful China by reducing burden and increasing efficiency for users at all levels.

In terms of traffic safety, Hikvision provides intelligent detection capability for road traffic violations such as red-light running, wrong road side, overrun, overspeed, improper hanging of the number plate, deliberate shielding and defacement of the number plate, inconsistent driving model, disqualified driving, non-motor vehicle violation, pedestrian violation, dangerous driving, truck compartments carrying passengers, vehicle overload, truck turning right without stopping, etc., and data applications for real-time traffic conflict warning, traffic accident portrait analysis, road network structural hazards analysis, analysis of dynamic conflict domain of road network, road network safety optimization, investigation and judgment on vehicles with hidden dangers and overloaded vehicles bypassing, to help ensure a safe transportation environment. Among them, the new technologies for detecting truck compartments carrying passengers, vehicle overload, truck turning right without stopping and truck blind spot warning that were launched in 2021 provides help for the traffic control department to effectively manage risk factors in traffic accidents that occur frequently in recent years. The traffic accident portrait analysis uses automatic restoration technologies ranging from natural language to GIS<sup>6</sup> coordinates, enabling traffic control departments to conduct large-scale machine analysis of historical accident data and assisting in the investigation of high-frequency hidden danger points and accident root cause rules. Based on data provided by radar, video, laser and other trajectory recognition technologies, the dynamic conflict domain analysis of road network provides a powerful tool for traffic control departments to intelligently determine the accident-prone points in road confluence collision, rear-end collision and steering collision.

Hikvision provides vehicle sensing technologies to ensure vehicle safety, generating collision warning, panoramic view, blind spot detection and other applications for buses, passenger vehicles, freight vehicles and online ride-hailing vehicles and serving hundreds of transportation enterprises.

Hikvision delivers multi-dimensional perception capabilities to ensure road safety, providing perception, data analysis and warning for scenarios such as road event detection, safety warning of sharp road turns, road slope falling rock warning empowering most of the country's road infrastructure construction with its solutions and capabilities to help reduce road safety risks.

In emergency management, Hikvision provides comprehensive capabilities to prevent and handle emergencies. To deal with the production safety risks of hazardous chemicals companies, fireworks and firecrackers businesses, non-coal mining enterprises, tailings ponds and all types of small and micro enterprises, the Company establishes a production safety monitoring and early warning system offering data access, data analysis, intelligent early warning, hierarchical push notifications, information backup for reference and other applications that effectively address the supervision pain points of users. Hikvision's solutions for forest fires, floods, geological disasters and other natural disasters feature functions such as comprehensive monitoring of all elements, disaster early warning, comprehensive risk assessment, analysis, consultation, investigation and judgment of disaster progression, laying a solid foundation for disaster prevention and mitigation and establishing a sound system for

<sup>&</sup>lt;sup>6</sup> GIS: Geographic Information System.

natural disaster monitoring and early warning. For different kinds of sudden accidents and disasters, whole-process emergency command and dispatch capability is designed, including key applications such as on-duty management, emergency plans management, coordination and consultation, command and dispatch, summary and evaluation, to help users enhance emergency response and rescue capabilities, reduce disaster losses, and build a complete emergency command and rescue system.

#### (3) More convenient transportation

As for traffic management, Hikvision provides intelligent signal control capabilities such as single-location adaptive control based on real-time traffic parameter perception, dynamic/static trunk green wave control and regional coordinated control, supporting tidal lanes, variable lanes, roundabouts and bus priority control. The Company delivers professional smart travel service capabilities such as city-level traffic situation investigation and judgment, intersection problem diagnosis, traffic flow traceability, traffic simulation, intelligent guidance, vehicle traffic management, real-scene command, information analysis, investigation and judgment, intelligent service investigation and judgment, key vehicle traffic protection, green parking, etc., which are combined with a "Big Data-AI Fusion Traffic Management Base" incorporating road network computing, data computing and model computing to achieve "smart traffic management". After years of engagement in signal control, Hikvision shipped more than 8,900 units of signal controllers in 2021, firmly ranking in the forefront of the industry. Intersection problem diagnosis has been upgraded in 2021, extending from the previous single intersection signal configuration diagnosis to the more practical diagnosis of complex matters such as intersection and road section signal, organization and anomalous events. The "Big Data-AI Fusion Traffic Management Base" integrates basic capabilities such as perception access, data governance operation, model operation, road network computing and thematic databases commonly used in intelligent traffic management. Thanks to its openness and professional performance, it arms customers and users with cost-effective solutions to jointly tackle traffic management challenges.

In urban transportation, Hikvision fully combines the IoT perception technology with industry scenarios to deliver safe and efficient monitoring capabilities for highway maintenance, bridges, slopes, tunnels and other scenarios, as well as visualized industry supervision capabilities for engineering construction and industry management, serving thousands of industry users.

With regard to port management, utilizing multi-dimensional perception and AI algorithms, Hikvision has developed scenario-based solutions such as standard management of work wear, dangerous operation management,

and early warning of port machines' blind spot, which cover "people, vehicles, goods, machines and environment" and other elements, and serve nearly 100 port enterprises, ensuring port operation safety and improving management efficiency.

In railway transportation and rail transit, Hikvision provides comprehensive monitoring and detection in scenarios such as railway stations and hubs, freight yards, power substations, train carriages and railway lines through multi-dimensional perception technology, serving 18 railway administration groups and hundreds of high-speed railway station hubs across China. Hikvision's technologies have been applied to public safety precautions, intelligent operation, intelligent maintenance, digital service and other scenarios in over 100 urban rail transit lines in the country, providing support and guarantee for the safe, efficient and smooth operation of urban rail transit and creating a better and more comfortable ride experience for citizens.

As for airport travel, Hikvision offers passengers convenient and intelligent parking guidance, automatic parking, intelligent navigation display, paperless customs clearance, easy transfer guidance and other applications in nearly 100 airports, helping to build a safe, green and intelligent airport with humanistic care and cultural expression.

#### (4) More refined governance

Hikvision is committed to building solutions for different industries in the field of city governance. In terms of municipal administration, the Company designs industry solutions for the intelligent management of municipal facilities, including monitoring capability for manhole covers, garbage cans, ancient and valuable trees, billboards and other facilities, and IoT perception capability for pipe network's liquid level, water quality, water flow and other data. A closed-loop process that integrates problem collection, dispatching and handling, and feedback and evaluation has been established to facilitate targeted municipal management services. For city appearance and environmental sanitation, Hikvision delivers industry solutions to waste sorting, including intelligent supervision applications throughout the whole process from sorted drop, sorted collection, sorted transportation to sorted disposal, which helps improve waste sorting operation and enhance the refined management capacity for city appearance and environmental sanitation. As for urban management, the Company develops industry solutions oriented towards intelligent urban management, offering mobile intelligent collection, intelligent inspections of violations, "be responsible for general sanitation, green covering and keeping good social order in a designated area outside the unit building" management system, urban flooding monitoring, command and dispatch management, the operation monitoring center and other applications, and building a five-in-one technology system incorporating

perception, analysis, service, command and supervision to help create a clean, tidy and orderly urban environment.

#### (5) More targeted services

Hikvision is dedicated to creating solutions for different industries in services concerning people's livelihood. With regard to elderly care services by civil administration departments, the Company creates systematic solutions for homes, communities and institutions, featuring applications such as elderly security, intelligent nursing, health monitoring and caring services, providing technology support for the safety of the elderly, intelligent and convenient means to ensure the smooth operation of nursing institutions for the aged, and service data support for civil administration departments. To improve primary-level services, the Company focuses on such scenarios as towns, streets, communities and villages, delivering various applications including primary-level workstations, comprehensive violation handling, home safety warning for the elderly, school gate security supervision, fire safety prevention and control and store information library to achieve closed-loop management from event gathering, distribution to handling, assist in collaborative intelligent business control for various commissions, offices and bureaus, and provide technological support for modernizing primary-level governance systems and capabilities.

#### (6) A more livable ecological environment

With the help of video, radar-assisted technology, thermal imaging, hyperspectral, monitoring equipment, big data, AI, knowledge graphs and other multi-dimensional perception and intelligent analysis technologies, Hikvision strives to build an ecological monitoring, management and service system for natural resources, forest and grass, water conservancy, ecological environment, meteorology and other businesses, so as to create a more livable ecological environment.

To help protect land resources, Hikvision sets up an intelligent management platform for nature reserves. Bi-spectrum thermal imaging, wildlife protection cameras, insect detection lamps and unmanned aerial vehicles are combined with animal identification, fireworks identification and other algorithms for such application as wildlife monitoring, forest and grass fire prevention, pest monitoring, ecological live streaming, human activity management and emergency command, to assist in natural ecological protection as well as science popularization and education. The forest fire monitoring and early warning platform is built to monitor forest fires and human activities through high-point bi-spectrum thermal imaging and low-point intelligent cameras, realizing fire monitoring and early warning, fire investigation and judgment, firefighting command, situation analysis, disaster damage assessment, fire supervision and other functions, and enhancing comprehensive forest fire prevention and control capabilities. An intelligent monitoring platform for natural resources is created to identify characteristic elements of suspected illegal activities through high-point intelligent cameras and AR cameras, which are then integrated with data on spatial geography and national land for analysis to implement applications such as farmland protection, post-approval supervision of construction land and supervision of illegal mining at night, thereby effectively enhancing our capability to oversee natural resources. A cloud platform for geological disaster monitoring is built to combine sensor devices such as rainfall gauge, GNSS<sup>7</sup> and soil moisture meter with intelligent video equipment to monitor rainfall, surface displacement, soil moisture content and other factors, realizing three-dimensional and visual monitoring of geological disasters such as landslides, collapses and debris flows, and providing intelligent assistance in geological disaster warning and relief.

For the purpose of water conservancy and flood prevention, Hikvision provides an intelligent management platform for river and lake management and protection. Through video AI analysis, multi-spectrum visual perception, satellite remote sensing interpretation and other technologies, the platform can intelligently detect the disorder and chaos events of rivers and lakes, such as illegal sand excavation, shoreline destruction and garbage stacking, so to help improve the long-term protection and dynamic control of rivers and lakes, revive the ecology of rivers and banks, and create a beautiful environment. An intelligent and comprehensive water safety management platform is set up to achieve such applications as safety monitoring of dams, embankments, and water gates and pumping stations, condition monitoring of electromechanical equipment and intelligent patrol through displacement meter, seepage and seepage pressure meter, video water level meter, thermal imaging, etc., and integrate information on work conditions and rain conditions with real-time panoramic AR images, so as to obtain real-time updates on safe project operation and protect water conservancy projects during floods. A command and scheduling platform for water disaster prevention is provided to integrate audio and video resources such as voice and video conference through the integrated communication gateway, offer GIS scheduling, conference scheduling, video scheduling and other functions, and realize "full access for one system, full connectivity of one network, full display on one screen", ensuring vertical linkage and horizontal coordination of flood control command and scheduling. A soil and water conservation monitoring platform provides satellite remote sensing monitoring, unmanned aerial vehicles, video monitoring, sensors and other integrated monitoring capabilities for key monitoring scenarios of soil and water conservation, such as production and construction projects and check dams, to improve the ability to forecast and give early warning of soil erosion. Comprehensive monitoring and management schemes are formulated to protect

<sup>&</sup>lt;sup>7</sup> GNSS: Global Navigation Satellite System, a system built by the European Space Agency.

the safety of small reservoirs during floods.

As for ecological protection, Hikvision provides an intelligent monitoring platform for the atmospheric environment, using LiDAR, hyperspectral Fourier transform, thermal imaging, video AI and other technologies to achieve intelligent applications such as prohibition of straw burning, VOCs<sup>8</sup> monitoring, particulate matter monitoring, exhaust gas monitoring and dust control. Through innovative technologies, the Company strives to protect the environment, support more real, accurate and comprehensive atmospheric environment monitoring, and enable efficient supervision, so as to help defend the blue sky. An intelligent monitoring platform for the water environment is created to monitor water quality factors such as chlorophyll, total nitrogen and total phosphorus in rivers and lakes in situ with the self-developed hyperspectral water quality monitor, providing water quality monitoring, trend analysis, water quality evaluation, pollution traceability and other intelligent applications, so as to help users gain an understanding of the status and changing trend of water environment quality and provide support for rapidly treating water pollution. An intelligent whole-process supervision platform for solid waste is created to achieve the closed-loop management of solid waste throughout the process from generation, collection, storage, transfer disposal through such technologies as IoT, video AI and big data. Dynamic data collection and intelligent analysis and early warning are used to deliver intelligent applications such as "refined supervision, wholeprocess supervision, risk supervision and law enforcement supervision" of solid waste, effectively curbing illegal dumping and preventing environmental risks.

In meteorological operations, Hikvision works with the meteorological department to develop the weather modification prototype on Tianquan Mountain in Deqing County, achieving intelligent control of key places of weather modification and coordinated command between superiors and subordinates, and improving safety supervision capability in weather modification operations. An intelligent meteorological observation and management platform is built for the intelligent observation of cloud cover, cloud shape, visibility, snow cover and other meteorological elements by means of video AI and multi-dimensional perception. AR panorama, radar-assisted linkage and other new technologies are used to enable such applications as unattended observation stations, video review of weather phenomena and integrated display, generating more accurate and timely observation data and taking meteorological observation to the next level.

The 14<sup>th</sup> Five-year Plan period has created a huge opportunity for rapid development of the digital economy, digital society and digital government. Together with multiple ecological partners, Hikvision will continue to

<sup>&</sup>lt;sup>8</sup> VOCs: volatile organic compounds.



promote the upgrading and iteration of products, systems and services, facilitate digital governance of the government, and ensure social harmony and prosperity.

# **4.2** Enterprise Business Group (EBG): deepen digital transformation and accelerate efforts to improve the innovation capacity of enterprises

#### 4.2.1 Overview

The digital economy is playing a leading role in high-quality economic growth amid the prominent uncertainty in the macro environment. Revolution of new energy, new energy vehicles, new infrastructure and machines replacing humans, for instance, demonstrate strong vitality and immense potential as they guide this new wave of industrial digital transformation and continue to contribute to new growth in the digital industry. Digital technologies such as the Internet of Things (IoT), artificial intelligence (AI), big data and cloud computing have been integrated, applied and innovated by enterprises in managing their production and operation, assets and facilities, personnel organization and cost control, enabling various industries to increase efficiency, innovate operation, optimize organization and control costs. Together with partners, Hikvision will continue to innovate around products, solutions and service systems. With abundant practical experience and keen industry insight, the Company is committed to making itself the preferred brand of intelligent scenarios IoT, a major supplier of equipment and facilities IoT, and a strategic partner for digital transformation.

#### 4.2.2 Core Technologies: build an AIoT product and solution system and implement digital applications

Based on the unified software technology architecture, Hikvision builds its domain-end intelligent perception capability and creates intelligent scenarios IoT and equipment and facilities IOT by utilizing AIoT technologies, develops data aggregation, analysis and mining capabilities with IoT-information network fusion data, and pushes forward the closed-loop implementation of intelligent applications by drawing on its AI engineering capabilities. By building the Huipin Application Empowerment Platform for smart parks and providing the Hik-Cloud enterpriselevel SaaS service for chain users, the Company responds rapidly to user needs, supports the innovation of industrial applications and helps with the implementation of digital applications in numerous industries.



Enei	rgy Manufa- Construc- Education Finance Health Care	
Data intelligence application	Enterprise safe Campus loT Digital enterprise operation platform platform platform	Hik-Cloud Hik-Cloud general
	Huipin Application Empowerment Platform	Hik-Cloud enterprise-level SaaS service
Data i ap	Inspection Device manage- engine Ment engine Attendance	General service Developer
ک د	Al platform Data platform Algorithm Device Algorithm Data analysis Data	did Determined in 1
Capability platform	tuning management management Data analysis processing integr	Video loT capability capability
3 -	Intelligent scenarios IoT Equipment and facilities IoT	
کی		

Hikvision will continue to refine digital enterprise solutions integrating enterprise informatization, equipment and facilities IoT and intelligent scenarios IoT, enhance industrial insight, and innovate applications for digital transformation in such fields as digital energy, intelligent manufacturing, intelligent buildings, education and teaching, financial services, digital countryside, intelligent medical services, intelligent communities, cultural tourism, intelligent construction sites, retail chains and intelligent logistics.

#### (1) Constantly innovate AIoT products featuring comprehensive perception of elements

Using its technological strengths in AIoT, Hikvision continues to innovate and strives to build a full-domain intelligent perception product system by expanding the perception boundary of the physical world through continuous breakthroughs in the multi-dimensional perception technology system.

Diversified product forms enable devices to better fit into the deployment environment. For example, the micro-distance meter-reading camera is easy to deploy and install thanks to its compact design, and energy-efficient with a long battery life; the anti-corrosion cameras, featuring a special structural design for airtightness, are widely used for monitoring offshore wind turbines; HikMicro Thermal Presence Detector blends right into conference rooms and other business settings with its futuristic look.

Challenging on-site environments demand higher levels of equipment performance. For instance, hightemperature highlighting cameras can be used for furnace observation and steel slag scraping to gain visibility into the operation process in harsh environments; the anti-fumigation camera can operate continuously in hazardous and high-risk environments such as a grain depot; in centralized control applications, professional low-latency cameras have reduced the end-to-end image delay to 70 milliseconds, and the response delay is almost imperceptible to the naked eye.

Flexible applications focus more on device portability. For example, designed with low power consumption, the small AI badge can provide continuous audio and video recording for 11 hours, documenting the entire service process; the safety helmet with an anti-shake camera helps manage site construction by recording videos clearly and reliably, ensuring that the construction process is safe and controllable; explosion-proof PTZ cameras can be quickly and efficiently installed for temporary control and emergency management on the construction work site.

With a vertical product system established across coal, electric power, communities, education and other industries, Hikvision hopes to work with partners in the future to create industry-specific products, expand the scope of business application and facilitate the digital transformation of our users.

#### (2) Push the limits of AI engineering capabilities to accelerate business implementation

Hikvision vigorously explores a common path for AI empowerment, improves the efficiency of ecological empowerment and assists in rapidly completing the business layout of partners. Meanwhile, the Company sharpens its industrial insight, deeply integrates intelligent applications with the business process, and helps users' applications go online quickly, form a closed-loop system of intelligent application business and fulfill their value. To boost the efficiency of ecological empowerment, Hikvision has made its HCA-AIOPE (Hikvision Certified Associate-AI Open Platform Engineer) technology certification system available for ecological partners, enabling them to build an AI technology team and expand into more business fields together with the Company.

Hikvision's AI engineering continues to serve users in education, electric power, chemical engineering, agriculture, food and other industries. For example, in the energy industry, guided by the technology roadmap of the AI+ automatic control system, technologies such as automatic belt deviation correction and dynamic fan speed control have been successfully implemented; in real estate, the low-code AI+ engine can rapidly increase business efficiency, reduce labor cost in operation and maintenance, and assist in intelligent building inspection, etc., demonstrating its business value in providing convenience, improving efficiency and control processes; in logistics, the combination of AI and AGVs has further contributed to flexible robot dispatching, making it possible to adjust capacity at any time according to on-site status; in retail, AI+Hik-Cloud empowers enterprises to carry out intelligent remote store inspections and create a monitoring system for cleaner kitchens so as to manage closely with greater efficiency.

In the past year, Hikvision has cooperated with more than 1,000 ecological partners and jointly developed more

than 13,000 intelligent applications. We will work with partners to continue to advance the digitalization process for various industries.

#### (3) Achieve closed-loop business management through the Huipin Application Empowerment Platform

Based on the unified software technology architecture and in accordance with the design concept of "intelligent applications by putting modules together", Hikvision has learned from successful digitalization practices in various industries to build the Huipin Application Empowerment Platform, providing users with out-of-the-box modular component services and using low-code technology engines to facilitate rapid innovation of applications.

Based on low code engines and the componentization technology, the Huipin Application Empowerment Platform can be used to implement digital business applications quickly and conveniently. Take the inspection engine as an example. In 2021, it provided extensive services to thousands of users in energy, finance, manufacturing, construction, education and other industries, constructing applications such as property inspection, equipment inspection and production line inspection, and driving the implementation of value-creating businesses. Using IoT middle platform capabilities, the platform has realized comprehensive perception of elements in parks and enabled closed-loop management for production safety, park management, equipment and facilities, personnel management, emergency operation, auxiliary for centralized control, data map walls, achieved digitalization empowerment across all business scenarios, and built an agile operation system for parks. So far, the Huipin Application Empowerment Platform has achieved the fully quantified implementation of applications for multiple users including Langjiu Group, Xi 'an Electronic Technology University and Guoneng Shouguang Power Plant.

The Huipin Application Empowerment Platform can serve users from various industries such as enterprise parks, chemical industrial parks, campus scenic spots and industrial parks. Under the scenario of equipment and facilities management in enterprise parks, for example, low-code engine capabilities including processes, work orders and report forms are fused into equipment lifecycle management covering spot inspection, repair, maintenance, scrap, spare parts and ledgers, enabling the equipment management department to effectively standardize business processes and improve the efficiency of equipment quality management. Under the scenario of daily inspection of industrial parks, inspection engine is applied, where offline and online integration, AI-assisted automatic inspection and other methods are adopted to form a closed business loop from inspection plan execution to rectification and optimization, enabling the operation and maintenance department of the park to raise inspection quality and efficiency and guard against security risks. Under the scenario of directing operation of chemical industrial parks, a new UI is built for the digital world based on low-code engine capabilities, which has reshaped the interactive management experience by enriching it with multi-screen interaction, interaction between the virtual world and the real world, data analysis, remote command and other capabilities, thereby providing managers with a panoramic view of the overall situation as well as insight into the details.

Addressing the challenges faced by parks with constantly updated technologies and ideas, the Huipin Application Empowerment Platform incorporates all kinds of new digital technologies to provide overall solutions for the construction of intelligent parks. As a firm believer in openness and integration, Hikvision cooperates closely with partners to jointly empower users to achieve digital transformation and continues to create value.

#### (4) Provide segmented scenario-based applications through the Hik-Cloud enterprise-level SaaS service

Utilizing such technologies as AIoT, the mobile Internet and AI, Hik-Cloud focuses on intelligent store systems, intelligent community business, intelligent logistics services and digital management of schools with more segmented scenario-based applications, while continuing to expand business in new scenarios such as intelligent construction site management and intelligent agricultural IoT.

For example, Hik-Cloud is combined with AI to provide closed-loop applications for intelligent cashier risk identification, traceability and statistics in chain stores, thereby increasing management efficiency. In K12 schools, Hik-Cloud bridges the communication gap between parents and school, through Education Digital Signage, a multi-scenario interactive terminal, and helps build an intelligent campus. In residential real estate, Hik-Cloud serves to normalize community epidemic prevention by rapidly launching the "temperature measurement and health code checking for entrance control" program boasting digital traceability of "one person, individual temperature and individual code", enabling communities to carry out epidemic prevention more efficiently. Hik-Cloud also continues to serve customers in logistics, construction, agriculture and other chain industries with a steady stream of digital solutions of connectivity, management, intelligence and insight.

In 2021, the number of Hik-Cloud users and access devices continue to grow rapidly. Hik-Cloud has been applied to more than 40,000 offices, 280,000 retail stores and 600,000 logistics nodes, serving 4.16 million community home owners and 3.5 million parents of students, and accessed by 2.5 million devices. With a focus on various fields such as enterprise-level SaaS digital marketing and content operation, Hik-Cloud will continue to create new business value for industry users.

#### 4.2.3 Value Fullfillment

Parks are cities in miniature, spaces for industrial development and key bases for digital transformation, which



is why the digital operation of parks and the operation, maintenance and management of equipment and facilities have become focus areas in the digital transformation of enterprises. Based on a value system centered on "shortening management distance, improving business efficiency, regulating operation behaviors and preventing safety risks" and a value delivery methodology covering "vision setting, value matching and value fulfillment", Hikvision has been exploring, practicing and summarizing its applications in various park-like settings such as enterprise parks, industrial parks, chemical industrial parks, business parks, campuses, hospitals, scenic spots and venues. The result is a digital approach for intelligent parks combining "a security closed loop from the entry and exit of people and vehicles to overall management, a logistics closed loop from service delivery to feedback on results, a safe production closed loop from manpower, machine, material and environment to event handling, an equipment management closed loop from point inspection to work order management, and an auxiliary control closed loop from the command center to emergency response", empowering more partners to forge the path to digital transformation.



#### (1) Create a security closed loop from the entry and exit of people and vehicles to tracking

Hikvision is committed to building new digital intelligent parks, constantly expanding the security business boundary, extending the management scope from local management to global management, and transforming the management method from governance by people to digital governance. A security closed loop from the entry and exit of people and vehicles to tracking based on the comprehensive perception of personnel, vehicles, perimeter and other elements has been created and implemented for multiple users including Langjiu Group.

In industrial parks, with people and vehicles as key management objectives, a park operation management system with a panoramic view and a controllable process is built to manage personnel, vehicles, visitors and others. Thanks to the B-visual Engine, a digital board is set up to display details of park operation in real time.

In logistics parks, a multi-dimensional system for crime prevention and control centering around people, vehicles, goods and warehouses is built in such scenarios as warehouses, freight yards, platforms and roads in the park. At the same time, it is connected to the scheduling system to realize the full control of vehicle entry and exit and intelligent guidance of platform scheduling, thus improving the utilization rate of platforms in the park by more than 50%.

In chemical industrial parks, a park supervision system characterized by intelligent prevention and scientific control is built on "prevention, management and control" as its core focus. Digital applications such as the management of vehicles carrying hazardous chemicals and closed park management have been implemented to achieve whole-process control of vehicles carrying hazardous chemicals from booking, waiting for inspection, guiding them into storage, queuing and paying fees.

In hospitals, an efficient, reliable, intelligent, visualized and multi-directional personnel management and control system is built for access control and intelligent security check. The health code system, the hospital information system (HIS), inpatient management and other systems are interconnected to facilitate security check and identity verification, providing strong support for hospital security work.

#### (2) Create a logistics closed loop from service delivery to feedback on results

Hikvision focuses on enterprise operations and services, providing green and efficient conference management, comfortable and convenient canteen management, safe and energy-saving dormitory management, easy and flexible information release, and smooth, high-end smart showrooms. A logistics closed loop from service delivery to feedback on results, which is established to improve operation and management efficiency and user experience, has already been put into practice by Xidian University and other users.

In Campus, a smart campus security system integrating management, prevention and control has been created to achieve intelligent management of restaurants, dormitories, attendance, meetings, information announcement and other services, incorporating data from the campus information network to provide convenient and high-quality campus services for teachers and students.

Aimed at improving the service level at venues, an intelligent large screen and a query and guidance system are built to broadcast event information repeatedly in rotation and perceive the information about the latest events in advance. At the same time, it is inter-connected with the ticketing system to guide the audience to quickly check seat information and the recommended routes through information release, thereby improving the service level.

In enterprise parks, based on the dormitory management platform and smart locks, Hikvision provides dormitory supervisors and residents with information-based management capabilities, making room status visible and allowing for intelligent and convenient room allocation, quick and convenient asset repair reports, precise access control, accurate dormitory statistics, and meticulous expense settlement.

An energy consumption management system featuring intelligent identification and active response is created to support device running detection, production energy efficiency analysis, energy waste supervision, energy consumption data display and other functions, so as to increase energy consumption management efficiency and continuously optimize energy performance. As show in our user cases, total energy consumption can be reduced by roughly 1% to 3%.

## (3) Create a safe production closed loop from manpower, machine, material and environment to event handling

Based on the perception of elements in the production process, Hikvision establishes a safety management system to ensure safe and stable production. Utilizing the full-stack spectral perceptive technology and AI engineering capabilities, a management closed loop boasting real-time monitoring, intelligent identification, linkage disposal and event archiving is targeting on key production factors such as personnel, equipment and environment, so as to eliminate potential safety hazards in time and ensure normal and orderly production. This has been implemented by multiple users including Anshan Iron and Steel Group Corporation (Ansteel Group).

In coal mining enterprises, with the goal of "identifying hidden dangers and creating closed loops" in mind, we build an "intelligent and complete visualized AI security control system" combining videos and AI to achieve closed-loop management (ranging from hazard identification to security control) of ten production factors including manpower, vehicles, materials and environments, offering underground miners a 24-hour "safety net".

Centering on construction work site safety, a safety control mechanism featuring "project-enterprise synergy and intensive supervision" is established at the site to provide intelligent monitoring of equipment running status, early warning of potential risks related to personnel and operation, and traceability of key construction processes. Real-time on-site data are gathered to assist the refined management of projects and help enterprises with intensive management.

In iron and steel enterprises, focusing on the goal of "intelligent manufacturing and intelligent safety management", online diagnosis of thermal faults, online monitoring of running and leaking, online supervision of crane operation, belt abnormality detection and other functions have been realized in the material plant as well as sintering, coking, iron-making and steelmaking processes, as a way to lower the risk of production accidents and ensure stable operation.

At gas stations, real-time intelligent analysis is conducted on personnel, vehicles and materials, and a safety operation control system is created to implement more than 20 intelligent applications such as oil unloading status identification, oil stabilization time detection, operator detection and safety precautions detection, thereby improving the efficiency of safety control and ensure the safe operation of gas stations.

#### (4) Create an equipment management closed loop from point inspection to work order management

With a focus on the utilization efficiency of equipment and facilities, which are the core assets of enterprises, Hikvision facilitates the transformation of equipment and facilities management from general operation and maintenance to intelligent operation and maintenance through management and predictive maintenance, and creates an equipment management closed loop from point inspection to work order management. This has been put into practice by Guoneng Shouguang Power Plant and other users.

In power plants, the intelligent inspection robot, infrared temperature measurement and other intelligent perceptive terminals form a real-time perception network, contributing to closed-loop performance of inspection tasks from planning, execution, review to analysis in the operation and maintenance of key equipment assets such as coal handling equipment, steam engines and boilers, and resulting in a greater efficiency of equipment management and defect management.

In intelligent manufacturing bases, combined with the intelligent inspection, an equipment inspection report is generated with the equipment operating status information collected by the front-end perceptive device. An equipment management ledger is thus formed, and a full-cycle equipment management system covering installation, operation, maintenance and scrapping is created to assist decision-making concerning equipment operation and maintenance.

In liquor-making enterprises, we focus on the status and hazard analysis of such core production equipment as packaging lines, boilers, water devices and desulfurizers and cover the entire lifecycle of equipment and facilities

from pre-shift inspection, daily inspection, warranty servicing, routine maintenance to asset inventory, with the purpose of promoting equipment management execution, standardizing business processes and substantially raise the overall efficiency of equipment.

In metal smelters, thermal-imaging cameras, orbit robots, environmental sensors and other devices can be connected through IoT gateways to realize online monitoring of equipment abnormalities, real-time warnings, maintenance task assignment and other functions, in hope of "putting safety first and increasing both quality and efficiency".

#### (5) Create an auxiliary control closed loop from the command center to emergency response

Hikvision helps enterprises build AIoT perceptive systems with enriching full-scale total data on all factors, effectively enhancing their ability to prevent and respond to emergencies. Real-time closed-loop business handling is achieved in such business areas as fire management, park inspection and situation analysis. Through free viewpoint, augmented reality (AR), data cockpit and other applications, an auxiliary control system featuring multi-dimensional presentation and three-dimensional visualization has been created for closed-loop auxiliary control from the command center to emergency response, and implemented by Robam and other users.

In iron and steel enterprises, a free viewpoint stitching together images taken by multiple cameras is constructed to panoramically monitor the process of iron and scrap conversion of converters in production settings, and the ladle hook is displayed through picture-in-picture with a low-latency camera to remotely control crane operation and reduce the risk of personnel working on-site.

In manufacturers, a digital AR workshop, the most intuitive way to present production status, is connected to an Manufacturing Execution System (MES) to obtain equipment and facilities information and material information, which is then integrated with an AR real map to build a digital twin of the production scene, thereby assisting in making management decisions and enhancing production efficiency through digital means.

In pharmaceutical enterprises, centering on the concept of "multi-dimensional perception, data sharing and business linkage", we build an agile operation command center, which uses big data technologies to mine the IoT perceptive data and present the overall situation of production parks and achieve visualized command and scheduling based on 3D maps and real-scene command applications.

In hydroelectric power station, the communication platform and the business system are inter-connected and integrated to create a "agile, well-coordinated, orderly and unified" emergency command system, which will provide dynamic risk monitoring and early warning based on the intelligent perception network and support decision making with data intelligence through data sharing and fusion.

As digital transformation continues to bring new development and business opportunities, Hikvision focuses on the continuous innovation of AIoT and relies on the capabilities of its products and solutions system to create an open, co-built and win-win ecosystem that empowers partners to grow together and facilitates digital transformation for users.

# **4.3 SME Business Group (SMBG): Enhance the Digital Transformation Service Capability of the Whole Industry and Improve the Generic-Security Industrial Internet**

#### 4.3.1 Overview

Small and medium-sized enterprises (SMEs) are an important part of the national economy. The interwoven pressures and forces of epidemic control, economic fluctuations, policy guidance and technological iteration are encouraging SMEs to seek change in adversity and accelerate digital transformation and upgrading. As estimated by iResearch, the market size of digital upgrade services for SMEs will reach 330 billion RMB in 2022, with huge market potential. For SMEs, to engage in digital transformation is essentially to improve the efficiency of production and operation. SME users require generic-security IoT devices to connect various scenarios and lay a data foundation as well as timely and effective services that fit the business. Despite constantly emerging digital demands, the project contractors that provide products and services for SMEs are inefficient in reaching users and obtaining business opportunities, and the cost of project implementation, operation and maintenance, and management remains high. Therefore, the project contractors face an increasingly urgent demand to sharpen their digital marketing capability. As a result, the market is in need of an industrial platform with a wide-ranging influence to link the vast number of channels, project contractors and SMEs, enable digital marketing, and better meet the demands for digital transformation of customers and users.

Working with general practitioners and drawing on technological elements such as big data and AIoT, Hikvision integrates industrial chain resources, empowers channel customers, project contractors and ecological partners, offers standardized services, builds an open and interconnected generic-security industrial platform, and develops intelligent omni-scenario IoT solutions, all in hopes of driving digital transformation and upgrading for SMEs.

### 4.3.2 Core Technology: Mutual Promotion Between Online and Offline Channels Driven by Hikvision Interconnectivity and Hikvision SMBG E-commerce

The product matrix of the generic-security industrial Internet created by Hikvision is comprised of two mainline platforms: SMBG-SII HikLink and Hikvision SMBG E-commerce, which provide a channel digitalization platform, a project contractor workbench, an SME service platform and an open platform for ecological cooperation that serve channel customers, project contractors and SME users. Based on the infrastructure capacity of Hikvision and the marketing network of partners, an empowerment platform is built to adapt to the traditional industrial structure.



**SMBG-SII HikLink:** It creates a service platform for SME users, integrating the capabilities in device management, solution applications, cloud-edge fusion, content purchase guide, value-added services and etc. to provide one-stop scenario-specific solutions. The platform can access video, access control, intercom, fire protection, transmission and other major categories of products, including nearly 10,000 SKUs, linked to millions of equipment; the platform builds SaaS solution packages around communities, offices, stores, factory parks and other scenarios, and increases business value through subscription services; based on SMBG-SII HikLink, the Company has derived an open platform for ecological cooperation, drawing on the strength of ecological partners to achieve the expansion of solutions in vertical segments and horizontal business fields. The SMBG-SII HikLink Project Contractor Platform

provides equipment management, project management, and tool & service capabilities to accumulate project data, improve the business efficiency of project contractors, and help them increase revenue in the long term.

**Hikvision SMBG E-commerce**: It provides channel customers with a digital platform that empowers the vast number of security practitioners and integrates supply chain empowerment, marketing empowerment, tool provision and service operation to create a marketing service system, enable industrial chain digitalization, and move business online; the platform relies on digital marketing tools to enable employees and users to be online, accumulate and analyze business data assets, and support decisions with data.

The SMBG-SII HikLink and Hikvision SMBG E-commerce platforms are mutually supportive and spirally driven to help channel customers excel in digital supply chain and digital marketing and enable project contactors to efficiently manage equipment and projects, enhance professional capabilities and serve users efficiently, thereby creating one-stop preferred products and services defined by omni-channel, whole-process and omni-scenario offering for SMEs.

#### 4.3.3 Value Fulfillment

#### (1) Build a generic-security industrial platform

Hikvision provides a working interface for project contractors and software and hardware service providers to assist in equipment management, efficiency improvement, business operation and service professionalism enhancement, and combines its strengths with those of its partners and sharpens its competitive edge through ecological cooperation to better empower the industry. SMBG-SII HikLink has further expanded its client coverage, supports access and control of all kinds of intelligent devices with an open architecture, and enables out-of-the-box third-party business plug-ins in a component-based development mode, providing users with multi-scenario options and realizing data visualization and flexible use of multiple terminals. Hikvision continues to extend the product line, providing channel customers and SME users with one-stop procurement, embrace a wider range of professional generic-security channels for a two-wheel drive composed of high quality channels and high quality products, and establish localized channels to provide products and services with better qualities for localized markets. The Company works with channel customers to build a localized service ecosystem, provide inclusive AIOT capabilities and applications for SMEs, improve whole-process service before/during/after sales, and promote subscriptionbased value-added services, thereby facilitating the implementation and service upgrading of one-stop intelligent security.
### (2) Promote channel digitalization

Hikvision's channel digitalization for SMEs focuses on digital supply chain and digital marketing.

In terms of digital supply chain, Hikvision opens up transaction links between the Company's production, channel customers, contractors and SME users to integrate purchasing and marketing. At present, nearly ten beehive logistics centers have been built nationwide to move the whole process from order to delivery online, reduce cost and prevent loss, release the energy of channel customers, and focus on improving marketing capability; fully online management of purchase, sale and inventory data is achieved to help increase the efficiency of inventory management; the intelligent goods sorting capacity is enhanced to ensure sorting efficiency during periods of tight supply; the intelligent prediction/channel business intelligent (BI) system is enhanced for greater prediction accuracy and a stronger approach to data management.

In terms of digital marketing, Hikvision builds digital stores to enhance overall competitiveness and brand influence. The store image and system are upgraded with modular display and application scenario expansion to elevate in-store user experience, and an information-based system is introduced to manage information and store inspection tours, laying a foundation for digital operation. The Company has strengthened integrated marketing, successfully communicated the value of key products and programs, and significantly increased omni-channel exposure; it has helped launching hundreds of online marketing events in epidemic-stricken areas, empowering more than 100,000 security professionals to improve their professional and marketing capabilities; it pushes forward the creation of digital marketing platforms, helps customers realize the digitalization of whole-chain, multi-channel marketing, and facilitates the digitalized management of business opportunities, customers and assets.

Looking to the future, SMBG will continue to work with channel customers, project contractors and ecological partners to create a new vision of intelligent security, help enable the digital transformation of SME users, build the Internet of Things, and open up more possibilities.

## 4.4 International Business: Continue to Build a Global Marketing Network and Optimize the Channel and Industry Layout Step by Step

### 4.4.1 Overview

Starting from its initial foreign trade model, Hikvision's international business has gradually evolved to build regional centers for localized sales, and now it has established sales and service channels all over the world, and

## **HIKVISION**

ushered in the stage of localized marketing based on the "one country, one strategy" tactic. By 2021, the Company has set up 66 branches in the international market as well as Hong Kong, Macao and Taiwan, providing localized services in more than 150 countries and regions.



In the international market, Hikvision focuses on channel product sales while actively expanding into vertical markets, covering a wide range of industries including transportation, education, retail, logistics, health care, energy and manufacturing, to provide customers and users with products and integrated solutions. In addition to continuously developing the video business, the Company offers non-video products with a rich set of features, such as access control, alarms, intercoms as well as security and AIoT management software, to cater to different application scenarios. Meanwhile, AI-based applications and solutions are being applied in more and more countries and regions and continuing to deliver business value to users.

In recent years, geopolitical issues and the global epidemic have brought many challenges and uncertainties to business development. Facing such complicated external environment, the Company focuses on meeting the demands of customers and users, designing and developing suitable products and solutions, strengthening the supply chain system, improving and optimizing internal operations, and ensuring the effective operation of local services and local businesses. Although some countries and regions are affected by force majeure, the international business as a whole is still progressing steadily.

### 4.4.2 Core Technologies: Lay a Sound and Solid Technological Foundation and Create a Targeted Research and Development System

Hikvision perseveres in technological innovation and proceeds from industry needs to expand the Company's technological boundaries. Based on the overall technological basis of the Company, a unique product and technology system in line with the international business strategy and market demand has been formed for the international business. The Company provides users with products and solutions suitable for different application scenarios with solid product capabilities, sophisticated AI algorithms, various multi-dimensional perspective technologies and diverse fusion applications.

### (1) High-resolution image technology

Products with a strong competitive edge are one of the most important factors for customers and users to choose a brand in the international market. Hikvision integrates visible light, infrared and other image perceptive technologies to produce clear images and capture details throughout the day in all weather conditions. Using highperformance sensors and ISP (Image Signal Processing) technologies, the Company continues to explore camera imaging technology at night and in complete darkness with no light, and has developed a series of devices that tailor to different scenarios and applications, such as"ColorVu " camera series, and "DarkFighter X" series featuring bispectrum imaging, which are very popular in the international market. In addition, 4K Ultra HD, multi-lens seamless image stitching, high magnification zoom lenses and other technologies enable users to broaden their horizons and achieve HD preview and playback.

### (2) Extensive application of artificial intelligence

The value of artificial intelligence (AI) as one of the basic technologies reshaping the security industry is increasingly recognized by industry users in the international market who have started to put it into extensive use. According to the application demands, development stages and policy differences concerning AI in different countries and regions, Hikvision has launched intelligent product series based on deep learning algorithms, such as DeepInview, DeepinMind and AcuSense. These products have been applied in the international market to help users discover new uses of AI in various scenarios such as target detection, target recognition, perimeter alarm, passenger flow statistical analysis, queuing detection, safety helmet detection and license plate recognition etc., ensuring efficiency and safety for users while creating more business value.

### (3) Rich multi-dimensional perception

Combining visual perception with the multi-dimensional perceptive technology, Hikvision is constantly expanding the scope of global perception through high-precision radar, audio, temperature measurement and etc, based on which the Company has launched the radar-assisted camera, the radar-assisted PTZ dome camera, visual intercoms, thermal imaging cameras and other products, combining multi-dimensional perception with traditional video to offer a more complete perception capability and provide users with a more comprehensive reference for decision-making. At the same time, the Company has further introduced access control, alarms, interactive screens and other product lines into the international market, released non-video systems including "MinMoe" smart access control and AX PRO, combining with video applications, to constantly enrich the application scenarios of physical security from various dimensions.

### (4) Diverse integrated applications

As the security industry continues to change and develop, the integration of different technologies and systems is being widely used to effectively address practical user problems. The Company integrates video applications and non-video applications, such as access control, alarms, fire prevention and emergency management, into a unified management platform, and has successively launched HikCentral series platform management software that meets the demands of different scenarios. Through diversified integrated applications, the Company fully satisfies the business needs of integrated security systems. In the meantime, Hikvision also provides multi-business system integrated solutions, integrating security systems with various enterprise information systems (such as human resources, finance, inventory, logistics systems, etc.) to break down information silos, strengthen collaboration between systems, and equip users with more comprehensive data and analysis to support decision-making.

### 4.4.3 Value Fulfillment

Oriented by user value, Hikvision has refined complete solutions that match different business needs and continues to provide in-depth localized services, striving to create value for customers and users.

### (1) Enable SMEs to upgrade management

With the progress of intelligent technologies, the demand of SMEs for security is no longer limited to video recording; instead, they are further pursuing more intelligent applications, images with higher quality, and remote access and management at anytime and anywhere. Hikvision has launched a series of solutions targeting SME

scenarios, integrating advanced intelligent applications, the high-definition image technology, cloud management and rich product lines to ensure the safety of personnel and property, enhance the efficiency of business operations, and help SMEs to upgrade their security systems.

#### (2) Facilitate digital transformation of enterprises

Driven by user value, Hikvision provides AIoT industrial solutions to automate enterprise workflows and procedures, and collaborates with ecological partners to create best practices for industrial digital transformation, boosting the development of energy, logistics, manufacturing, retail, education, health care and other industries. For example, in the logistics industry, we help users to ensure transportation safety, lower transport costs and improve transport efficiency and quality; in education, we help promote ubiquitous access to education through synchronous classroom teaching.

### (3) Promote extensive ecological cooperation

Together with ecological partners, Hikvision provides customers and users with more diversified products and solutions in the security industry and more cross-industry fields. The Company provides open capability for hardware devices based on the HEOP architecture to run algorithms of partner manufacturers, thereby meeting the practical needs of users in different scenarios and applications. At the same time, the Company opens its platform software integration capabilities to partners and collaborates with other application systems to enable users to manage more comprehensively and efficiently.

### (4) Contribute to the harmonious development of society

Hikvision is committed to making contributions to improving social security and the ecological environment through technological innovation and enhancing incident warning and safety protection capabilities. For example, safety risks in the production process can be lowered through the application of safety helmet detection and personnel off-duty detection; based on the high-precision radar and video fusion technology, real-time road conditions can be predicted effectively to reduce traffic accidents. In addition, the company implements environmental protection requirements in its daily operation and production, actively responds to the call for lowcarbon development, practices green manufacturing and fulfills corporate social responsibility.

Hikvision continues to improve the global marketing service network and remains committed to more timely and efficiently response to customer and user needs. In addition to branches located globally, Hikvision has established research and development centers in Canada, the U.K. and other places to design and develop products and solutions tailored to local needs at a faster pace. The company has also built a number of overseas manufacturing bases and regional logistics centers, which cover trans-regional distribution while ensuring product delivery capacity. In addition, Hikvision has set up a number of call centers around the world and after-sales service outlets in more than 70 countries, providing customers and users with timely and excellent after-sales service.

Hikvision will continue to intensively explore the international market, utilize cutting-edge perception technologies and intelligent applications to provide customers and users with high-quality products and solutions as well as exceptional localized services, so as to better meet market demands and become a reliable technological partner for customers and users.

### 5. Innovative Businesses

Hikvision's continuous efforts in technical reserves and expanding business scope provide a good basis for innovative business development. Currently, the innovative business camp includes EZVIZ Network, HikRobot, HikMicro, HikAuto, HikSemi, HikFire, Rayin and HikImaging. The solid development and growth of innovative business has continuously injected new impetus into the long-term stability and sustainable development of the Company.

### 5.1 Innovative Business - EZVIZ Network

EZVIZ Network is committed to becoming a reliable provider of smart home services and IoT Cloud Platform. For consumers in smart home scenarios, EZVIZ Network possesses whole-chain capabilities covering the design, R&D, productions, sales, operation and technical services of smart home products. Alongside with signature products including smart home cameras, smart home entry, smart control, and smart service robots, it also provides value-added services such as cloud storage, phone reminders, screen abnormal detection, intelligent recognition, and crying detection. For industrial consumers, EZVIZ Network offers open cloud platform services, including product intelligence solutions and software development technologies and tools. With such services, it assists traditional manufacturing clients with the intelligent upgrade of products, and help solution clients to develop solutions for complex scenarios.

As of the end of December 2021, 159 million IoT devices were connected to the EZVIZ IoT Cloud Platform, with the number of connected video IoT devices remains the leading position in China. The number of users of the EZVIZ IoT Cloud Platform recorded over 90 million, including over 35 million monthly active users; EZVIZ

Network Cloud Video application had more than 1.5 million average monthly paying users, and more than 200,000 registered domestic and overseas industrial clients at EZVIZ IoT open platform.

### 5.1.1 Core Technologies

Adhering to independent technological innovation, EZVIZ Network independently owns core technologies and responds rapidly to user demands, having thus established a mature and proven technology R&D management system. A great deal of technology R&D has been undertaken surrounding cloud platform construction, visual and audio AI technology, and product intelligence. EZVIZ Network is among the first in China to develop a video IoT Cloud Platform – the EZVIZ IoT Cloud Platform – and to independently establish an infrastructure for the IoT era.

Smart home products: EZVIZ Network works on the intelligent upgrade and transformation of all kinds of household equipment, focusing on integrating intelligent technology into products. In specific, general-purpose intelligent technologies are centered on equipment's universal capabilities, such as interconnectivity and interoperability, wireless communication and visual interaction, with the constant iteration of codec and transmission technology, wireless communication technology, intelligent interconnection technology, comprehensive low-power technology, multi-dimensional perception technology, differential and modular IoT device upgrade technology, adaptive image delivery technology, multi-lens computing visual technology, fog computing application and other technologies; special-purpose intelligent technologies are developed around the four smart home product categories identified by the Company, including camera adaptation to home environment technology, smart lock structure and smart application technology, sensor-controlled equipment capacity expansion technology, and robot control and application technology, etc.

**IoT Cloud Platform:** Oriented for cloud infrastructure, IoT access, operation & maintenance assurance, and service middle platform, EZVIZ Network independently develops cloud infrastructure technology, IoT access technology, multimedia technology, cloud security technology, cloud platform operation & maintenance assurance technology, application development technology, platform messaging technology and many other core technologies required for the construction of cloud platform. An IoT Cloud Platform featuring access of hundreds of millions of devices, all-time operation & maintenance, real-time security protection, and high-bandwidth traffic has been constructed upon public cloud using the above technologies. Meanwhile, based on the AI computing framework of the cloud platform, the Company concentrates on the development of visual and audio AI algorithms, and has acquired video codec optimization technology, video detection and classification technology, video recognition technology, audio analysis technology and other core algorithm technologies, thereby

developing the intelligent analysis capabilities of middle platform. Also, it owns holistic platform-based capabilities for various IoT devices, which range from access, encryption, forwarding, to storage and intelligent analysis, providing consumers with value-added services and industrial clients with open platform services.

EZVIZ Network has produced a number of scientific research findings in the fields of cloud platform construction technology, visual and audio AI algorithm technology, and product intelligence technology. The Company had more than 50 authorized invention patents by the end of December 2021.

### 5.1.2 Major Products and Services

For consumers, EZVIZ Network's smart home products and services, based on the long-standing expertise in visual and audio AI technology and product intelligence technology, focus on exploring visual interactions, resulting in four featured product lines of smart home cameras, smart home entry, smart control and smart service robots, as well as diverse ecosystem products such as smart water purifier, smart fresh air system, smart wristband, and smart pet feeder. On the basis of smart home products, EZVIZ Network provides consumers with cloud storage, phone reminders, voice assistants, screen abnormal detection, intelligent identification, key escrow and other value-added services tailored for home or home-like scenarios, thanks to its robust IoT Cloud Platform capabilities. With the above product and cloud services, EZVIZ Network now offers whole-house intelligence solutions to users in household scenarios, covering home security, home access security, emotional care, comfortable environment, and interaction etc. Based on value-added services, EZVIZ Network has established an algorithm store for the flexible deployment of AI algorithms on smart home devices, allowing consumers to choose AI algorithms and develop customized solutions.

Smart Home Cameras (SHC): In 2021 EZVIZ Network continued to innovate on hardware and software, and launched a 2K smart home camera with hyper-comprehension capability that supports the algorithm store. Consumers may select AI algorithms in the store and dynamically load them via smart home products, meeting their own differentiated demands in smart home scenarios. The Company has leveraged its powerful AI algorithm capabilities and EZVIZ IoT Cloud Platform's global services to upgrade the cameras from "being able to see" to "being able to understand." Through algorithm innovation, it has given birth to diversified services such as intelligent identification, irregularity detection, baby/pet care, and elderly care etc. Meanwhile, to meet users' personalized demand, EZVIZ Network has launched C8PF dual-lens pan-tilt-zoom camera, BC2 battery-powered camera, BM1 baby C6WI 4K extra-high-definition camera, and camera, among others.





**Smart home entry**: EZVIZ integrates emerging technologies into products such as smart door locks, smart visualized door viewer and smart visualized doorbells, to upgrade their technologies and functions. In April 2021, the Company released DL31FVS, the first face recognition smart lock with dual-lens 3D structured light technologies. It has been greatly improved in safety and environmental universality, and won the Outstanding Technological Innovation Award from Tech G. In the same period, the DP2S smart door viewer was launched, featuring face recognition, water-proof, and large screen, the product is designed to meet the needs of users who pursue a premium lifestyle, and was honored the 2021Award for Recommended Product by Zol.com.cn.

**Smart control:** It mainly includes smart sensors, smart display, smart central control, and whole-house wireless coverage solutions for smart home scenarios. In particular, the whole-house wireless solutions, primarily composed of wireless AP and AC controllers, provide stable, high-speed and complete wireless network coverage both indoors and outdoors for smart home products and home users. The whole-house wireless coverage series products are the Company's cornerstone in the field of smart home, as well as a new start for EZVIZ Network to establish presence in the wireless network products market.

**Smart service robots:** EZVIZ Network has developed a robot product line to address the diversified demands of consumers in smart home scenarios, including smart companion robots and smart robot vacuums. In March 2021, EZVIZ Network launched RK2, an intelligent companion robots for kids that supports remote video control, intelligent voice chatting, two-way video calling and other functions. Equipped with intelligent applications such as face recognition, intelligent reminder, and picture book reading, the robot is able to think independently according

to the results of face recognition, actively greet different family members and give tailored intelligent reminders. It can also interact with and follow users leveraging body recognition and visual tracking technologies. The robot vacuum RS1N released concurrently, featuring separated dToF<sup>9</sup> LiDAR for accurate mapping and positioning, and offers multiple functions such as area division, no-cleaning area setting, smart path planning, automatic charging, and fixed-point cleaning. Moreover, the product is equipped with a ToF 3D imaging camera and a 720P HD camera, both on the course direction, to enable visualized housekeeping in addition to cleaning and sweeping.

For industrial clients, EZVIZ Network is committed to providing product intelligence solutions and technologies and tools for application development. Based on EZVIZ IoT Cloud Platform's holistic middle-platform service capabilities, it intends to increase the openness of cloud platform. For product-oriented clients in need of intelligent transformation, EZVIZ Network has launched an Open IoT Platform to provide solutions for product intelligence and cloud service application, which helps clients easily make their products networked, digital, and intelligent; for application-oriented clients' demand for application development in complex scenarios, the Company has created an Open Software Platform, which provides clients with APIs, SDKs, SaaS components and SaaS boosters to develop SaaS-layer applications, thereby helping them to form tailored solutions under complex scenarios.



<sup>&</sup>lt;sup>9</sup> dToF: direct Time of Fly. That is to measure the distance from the object by measuring the time it takes for the reflected light to return after emitting a short pulse of light.

According to the statistics by the iResearch mobile big data platform, among all smart home applications the EZVIZ Cloud Video Application's number of monthly active users ranks among the top two in the industry. iResearch's data also shows, in 2020 the worldwide shipment of household cameras was 88.89 million, while EZVIZ Network's smart home camera shipment was approximately 12.79 million, accounting for approximately 14.39% global market share, leading in the global market. Its smart door viewer has ranked top one in the brand ranking of Access Control/Door Viewer on 11.11 Global Shopping Festival, 618 Shopping Festival, and other online shopping festivals on Tmall for many consecutive years; smart door lock has also ranked among the top ten in the category of electronic door locks on November 11, June 18 and other online shopping festivals on Tmall for many times, and climbed to the top three at the June 18 shopping festival on Tmall in 2021. EZVIZ Network's smart control, smart service robots and other innovative smart home products are also expanding their presence: its companion robot for kids ranked among the top ten of the children's robot category on Tmall at the June 18 shopping festival in 2021.

In the sector of IoT Cloud Platform, as of the end of December 2021, 159 million IoT devices were connected to the EZVIZ IoT Cloud Platform, with the number of connected video IoT devices remains leading in China.

#### 5.1.3 Outlook

EZVIZ Network adheres to the IoT Cloud Platform as its business foundation, and visual technology as its core feature. Dedicated to the smart home industry and the IoT Cloud Platform industry, it aspires to become a reliable provider of smart home services and IoT Cloud Platform.

With the wide application of the IoT, cloud services and AI technologies to smart home scenarios, the smart home industry is evolving from single smart products to an interconnected smart system, and is expected to upgrade to human-centered personalized services, driven by the extensive application of privacy computing architecture and AI algorithms. EZVIZ Network will insist on continuous investment in visual technology and cloud platform technology, and continue to strengthen its own visual and audio AI capabilities. It aims to bring greater application value to consumers and users through its core technical capabilities, by developing the video IoT into the visual IoT, transforming the 2D image processing capability into the spatial information processing capability, and upgrading from "able to see" to "able to understand" and from simple intelligence to advanced intelligence.

### 5.2 Innovative Business - HikRobot

Centered on technologies such as visual perception, AI and navigation control, relying on its solid algorithm

accumulation, strong software and hardware development capabilities, and a complete marketing system, HikRobot focuses on intelligent manufacturing, and continuously invests in the fields of mobile robots and machine vision to promote the digitization and intelligence of production and logistics.

### 5.2.1 Mobile Robots: Focus on Intralogistics and Promote Intelligent Logistics of Factories

As a dedicated provider of mobile robot products and solutions, HikRobot continuously concentrates on breakthroughs and upgrades in products and technologies, in a bid to improve efficiency of the entire process from design and development to implementation and deployment, and create more value for users using technological innovation. In 2021 the company released its new-generation AMR (Automatic Mobile Robot) architecture platform – "Intelligent Base" and new hardware products based on this platform. Meanwhile, as required by business development, product lines have been integrated into four new hardware products series, with the first generation of low-code application development platform unveiled.

### Four hardware product series

LMR (Latent Mobile Robot) series: As HikRobot's signature product series, LMR is the first to apply the modularization and componentization technologies of the new-generation "Intelligent Base" to new product development, thus leading to higher safety standards and offering higher flexibility. With faster delivery and more convenient operation and maintenance methods, it can efficiently respond to complex and scenario-based requirements in reality. In 2021, HikRobot released the fourth-generation products Q7 and Q3, with greatly improved intelligence features and enable easy deployment in more application scenarios.

**CMR/HMR (Conveyor/Heavy-duty Mobile Robot) series:** The CMR/HMR product line, focused on industrial applications, aims to develop differentiated products to meet the demands of cargo tranship, cargo delivery, heavy-duty handling, etc. In 2021, the series was further improved in performance, to meet the industry's general requirement for accuracy with a driving positioning accuracy of  $\pm$ 5mm and a docking accuracy of  $\pm$ 2mm; and to meet safety requirements in the case of mixed traffic flows of people and vehicles with a 360-degree safety protection scheme. HikRobot CMR/HMR product series is now widely used in the panel display and SMT production lines in the 3C industry, lithium battery and photovoltaic production lines in the new energy industry, as well as automaking, machinery manufacturing and other sectors.

**FMR (Forklift Mobile Robot) series:** Thanks to a new system architecture, FMR product series has been improved in terms of storage capacity, efficiency, security, and scenario-based intelligent perception. HikRobot's independently-developed 3D SLAM laser navigation algorithm has simplified implementation and improved the

rapid deployment capability of products without compromising positioning accuracy and reliability. Apart from conventional omni-directional, stacking and handling forklifts, in 2021 the Company extended to two sub-series – reach and counterbalance forklifts, with the maximum stacking height of over 5 meters.

**CTU (Cargo Transport Unit) series:** The entire CTU range has been upgraded based on a new structure, aiming for diversified types, maximum storage capacity and optimal efficiency. The new cargo transport unit applies to a wider range, available in three sub-series – small, medium and large; the actuator structure has been expanded from clamping to lifting; the weight of the product is reduced by more than 20%, and the single-machine productivity has greatly improved. The ST6 workstation independently developed by HikRobot features a floor area that is only 20% of that of some competing products, and the overall operating efficiency of its system is greatly boosted.

### Software product series

The RCS (Robot Control System) independently developed by HikRobot features three systems – scheduling, simulation and digital twin through the construction and combination of varied components. It is designed to instruct more than 1,000 AMRs of different types and different navigation modes for collaborative work, realizing swarm intelligence. The iWMS (intelligent Warehouse Management System), which is independently developed for warehousing, is deeply engaged in core fields such as data fusion, human-computer interaction, service orchestration, and algorithm services on the technology side, and adapts to the trends of industry-specific system and scenario-based application on the service side. The purpose is to advance the intelligent logistics model of "goods to people" towards "multi-industry, all-scenario, and full coverage."

### Solution development

Automotive industry: The AMR solutions for the automotive industry include a variety of software access modes, multi-category AMR collaboration and scheduling, and multi-level caches, so as to adapt to different material preparation models and determine different inbound and outbound strategies. Harnessing the underlying open architecture of software platforms, it enables the smooth connection of production data, helping customers to steadily achieve agile manufacturing and solidly promote lean management.

**3C** industry: HikRobot has developed and designed an array of AMR models, equipped with iWMS/RCS/WCS (Warehouse Control System), as well as hoists, automatic doors and other equipment. Now it has been applied to cell phone production, PCB processing and other typical whole-plant logistics scenarios in the 3C sector, covering all stages of intralogistics such as material warehousing, material delivery, production and handling,

and finished product warehousing. It is expected to realize unmanned, automated and intelligent material handling throughout the plant.

**New energy industry:** HikRobot boasts highly standardized solutions for the photovoltaic and lithium battery segments. In each key production stage, the combination schemes of LMR+CMR+FMR can help businesses save labor costs and increase production capacity.



The mobile robot market is expected to maintain a rapid growth, as the demand for transformation and upgrading continues in the conventional manufacturing industries, and the demand for automated logistics maintains at a high level. In 2022, HikRobot plans to introduce AI applications in AMR's perception, planning, control, and collaboration, and leverage 3D vision and other perception technologies to enhance the autonomous capability of AMR, striving to expand application scenarios and market presence. To empower partners, HikRobot will build an industrial software platform in the field of AMR, so that partners will be able to more easily customize robots, more rapidly tailor systems, and better serve end users.

### 5.2.2 Machine Vision: Focus on Industrial Perception and Drive Digital and Intelligent Production

As the core of industrial perception, machine vision is the eyes of robots and automation equipment. It is a key technology for building the industrial Internet and the perception network for digital factories. It is also an integral part of flexible and intelligent production. In 2021, HikRobot continued to enrich and optimize machine vision products, and gradually extended from 2D vision to 3D vision, giving birth to three new product lines: 2D vision product line, intelligent ID product line and 3D vision product line. In the meantime, it tried to cultivate a vision application ecology centered on the Visual Master (VM) Algorithm Software Platform, and work with partners to meet the application demands of fragmented industrial scenarios.

2D vision product line: HikRobot provides industrial customers with a holistic visual imaging and acquisition solution that is centered on industrial cameras, and supported by industrial lens, industrial light sources and

## HIKVISION

industrial capture cards. In 2021, based on the new FPGA platform architecture, HikRobot continued with performance optimization and product expansion, and achieved comprehensive improvements in power consumption control, image quality and transmission stability, resulting in two complete product series – the new CS second-generation industrial camera and the CU universal camera. The CH high-speed and high-resolution camera series was expanded to better meet high-end applications; and the 8K and 16K CL line scan cameras were introduced, completing the CL line scan camera product layout from 2K to 16K. HikRobot has also developed a 25-megapixel industrial lens series, which is adaptive to C-mount ultra HD image sensors. As for industrial light sources, it joined hands with partners to design and develop a new series, as part of HikRobot's light source product series with consistent product family design and higher quality. Capture cards supporting CoaXPress, Cameralink, Gigabit Ethernet, and USB3 interfaces have been developed; and FPGA processing, protocol optimization, driver layer optimization and other technologies were used to boost transmission stability, reduce packet loss rate, and ease the load on the post-processing end.

Intelligent ID product line: HikRobot provides the industry with an high-efficient and high-performance intelligent processing platform, centered on vision algorithms, and focusing on open algorithm platforms and general-purpose intelligent hardware products. In 2021, concerning vision algorithms, HikRobot thoroughly optimized the AI algorithms for industrial applications, developed AI detection algorithms, unsupervised defect detection algorithms, and ultra-high-resolution image analysis algorithms based on small samples, and increased the application width and depth of vision algorithms. Concerning intelligent products, the open-architecture algorithm platform VM4.0 was released. It is open from underlying modules to solutions, supports two-way secondary development of algorithm layer and application layer, and adapts more efficiently and flexibly to highly differentiated industrial scenarios and rapidly changing application development. HikRobot unveiled the 20-megapixel deep learning enabled smart camera SC7000Pro, which supports AI applications of larger field of view and higher precision. Concerning ID products, a number of compact high-speed smart code readers of ID2000 and ID3000 series were unveiled to address difficulties in industrial applicationa such as ultra-small codes, problematic codes, high takt time and small space. HikRobot has also released a number of handheld code readers to meet the information collection needs in scenarios of logistics, intelligent manufacturing and others, which enriched methods of information collection.

**3D vision product line:** HikRobot provides one-stop 3D vision application solutions for industrial customers, taking 3D sensing technology as the core and 3D software system as the platform. In 2021, HikRobot increased investment in the 3D technology, a key development direction of machine vision, and launched a variety of RGBD

3D cameras. Meanwhile, focusing on the application of robotic arms, the first 3D Random Picking Platform was released, together with a number of solutions such as single-piece separation and automated robotic conveyor tailored for the express delivery and logistics industry. HikRobot continued to optimize and enrich linear laser 3D measurement products, gradually building up a product lineup. With improved accuracy and environmental adaptability in 3D measurement and inspection applications, the products have been recognized by users in logistics, lithium battery, 3C and other industries.

### **Ecosystem construction**

Based on hardware and software offerings, HikRobot endeavors to establish a new ecosystem of machine vision. At the beginning of 2021, HikRobot initiated the Ecosystem Partner Program. It includes free machine vision engineer training and certification nationwide – to explore and cultivate ecosystem partners – and engagement in machine vision application training, textbook compilation, skills competition etc. in colleges and universities – to support the fostering of intelligent manufacturing talent. As a result, a machine vision application ecosystem based on the VM Platform has been initially established. At the same time, HikRobot has formed up an ecosystem promotion team, which is dispatched to respective regions to better empower system integrators and equipment vendors. V Community, a vision technology forum also went live, serving as a professional technical exchange and communication platform for ecosystem partners.

The machine vision industry is expected to maintain rapid growth, with the continuous transformation and upgrading of traditional industries, the rapid development of new energy, semiconductor and other industries, and the drive of AI, 3D and multispectral technologies. In 2022, driven by technological innovation and guided by market demands, HikRobot will focus on the upgrading and iteration of products and platforms, and continue to provide customers with simpler and more open hardware and software products and systems. More resources will be invested to establish a new ecosystem of machine vision, serving partners at all levels of the industry chain and creating value together.





In the future, HikRobot will continue to focus on intelligent manufacturing. It will remain committed to the two business areas – mobile robots and machine vision, and improve quality & efficiency, downsize staffs and reduce costs for users through technological innovation of software and hardware products and platforms and continuous improvement of delivery processes. HikRobot will facilitate the development of global intelligent manufacturing.

### 5.3 Innovative Business - HikMicro

Centered on infrared thermal imaging technology and with MEMS-based technology, HikMicro provides core devices, detectors, modules, infrared thermal imaging products and overall solutions to the world. It works hard to substantially reduce the cost of core components and expand application scenarios, promoting infrared thermal imaging products from a niche to the general public.

### 5.3.1 Core Devices: Steady Upgrade of Technology and Process, Continued Increase in Mass Production Capacity

In 2021, HikMicro continued to develop uncooled infrared focal plane detector technology, and tap into its five core technology fields – readout integrated circuit design, MEMS design, MEMS and encapsulation process development, high vacuum encapsulation, and industrialization capability. Through technology upgrade, it seeks to optimize product cost, improve product performance, and continuously enhance product competitiveness. On the

basis of the original 17um product platform, HikMicro has developed and completed the construction of a 12um product platform, further launched and mass-produced a full range of 12um detectors with area arrays. With a minimal resolution of 160\*120 and a maximal resolution of 1280\*1024, the series can meet the personalized needs of customers in varied scenarios. The full range of 12um detectors features superior performance, with NETD<sup>10</sup>  $\leq$ 40mk. All arrays are available in advanced wafer-level packaging, which means smaller size and lower cost. Built-in analog-digital converter modules are used to improve the anti-interference ability of detectors and simplify the circuit design of peripheral hardware, which facilitates subsequent application development.

In 2021 HikMicro further improved its detector industrialization capacity, with its detector industrialization base in Tonglu, Hangzhou put into use. The new MEMS production line has also been activated, serving as a strong driving force for the popularization of thermal imaging.

# 5.3.2 Product Solutions: Technology-based Performance Improvement, Demand-driven Iteration and Innovation

Over years, HikMicro has established five advantages in finished products – clear image, smart algorithms, efficient temperature measurement, stable application and reliable manufacturing. The business has seen rapid growth, relying on its technical advantages in independently developed sensors and product design. In 2021, oriented for market demand, HikMicro continued to expand, optimize, and upgrade its three categories: generic-security products, temperature measurement products, and commercial vision products.

Generic-security products: In the segment of civilian security, commanding heights are a typical application scenario, where equipment usually undertakes security surveillance in large space, and is required to perform frequent cruise and focusing. Therefore, positioning accuracy becomes a key to application performance, and the error control of motors and the service life of lens are also much concerned. To improve positioning accuracy, HikMicro has developed an attitude perception feature to accurately monitor the equipment attitude information in real time, and then combine the attitude information with GIS map. It has managed to reduce the positioning error to a maximum of 87M within 5 kilometers – becoming new industry benchmark. To address the accumulated error caused by cruise and focusing, HikMicro has launched an intelligent closed-loop control function to ensure that equipment can self-correct motor's loss of synchronism after long time cruise, permanently preventing deviation

<sup>&</sup>lt;sup>10</sup> NETD: Noise-Equivalent Temperature Difference, that is, the minimum temperature difference that an infrared detector can detect, is one of the primary indicators to measure the performance of infrared detectors.

# **HIKVISIO**N

from the preset position. Based on the thermal imaging lens of the non-contact servo-control system, and coupled with smart focusing algorithms, the service life of lens has been increased by nearly 10 times, significantly improving the reliability and stability of devices. Products with improved functions have been widely used in forest fire prevention, fishery administration vessels, prohibition of straw burning, border and coast defense and other commanding height scenarios, and received positive feedback.

Temperature measurement products: Thermal imaging has long been a helpful tool for epidemic prevention and inspection, flaw detection, equipment predictive maintenance, and temperature monitoring during manufacturing process. Since the scenario-based demands for temperature measurement is fragmented, it is difficult for one single product or solution to meet the needs of different users. In 2021, HikMicro completed its temperature screening product category by improving the online temperature measurement, handheld temperature measurement, and inspection robot product series. It developed a self-adaptive distance compensation algorithm, which ensures temperature measurement accuracy without manually configuring distance parameters. Suitable for targets of different sizes and similar distances, it has greatly improved the reliability of temperature measurement accuracy and the convenience of device usability.

**Commercial vision products:** Thermal imaging's outdoor applications are mainly for hiking, expedition, search and rescue, criminal manhunt, and crackdown on drug and smuggling, among other scenarios. The application scenarios are roughly divided into two categories. In outdoor applications, which are demanding on the cost performance of equipment and ease of use, HikMicro has launched 256\*192 resolution single-lens handheld observation products and mobile phone modules to bring users a professional-grade imaging experience. For vertical applications, HikMicro has integrated DarkfighterX technology, thermal imaging and laser ranging as one, and matched it with the industry's debut scroll-adjusted unbounded continuous zooming function, to enable high-precision one-click distance measurement and one-handed operation. It has redefined outdoor single-lens equipment, offering great convenience to professional users. HikMicro provides a full series of commercial vision products of various models and prices, from detectors, components to finished products, and delivers one-stop integrated services to partners.





Following HikMicro's launch of its 160\*120 resolution signature product in 2019, which brought down the general price of thermal imaging to less than RMB 1,000(namely "thousand-RMB era"), thermal imaging products have been applied in more and more industries, stimulating more fragmented demands. In 2020, HikMicro fully upgraded its economical products, and empowered applications with open AI platforms, to meet more fragmented and customized needs of customers. In 2021, HikMicro launched a full series of 256\*192 resolution products priced at around RMB 1,000, further broadening the product category. The large-scale applications of the original 160\*120 resolution products has further reduced the cost and popularized thermal imaging, benefitting thousands of industries. As for the high-end market, HikMicro introduced high-resolution products such as 1280\*1024 resolution zoom camera module and positioning system in 2021, to strongly benefit to professional industry applications.

With independently-developed capability of core components, HikMicro will continue to consolidate its product technical superiority, explore more application scenarios, and consistently lead thermal imaging from a niche to the general public.

### 5.4 Innovative Business - HikAuto

HikAuto focuses on the field of intelligent driving. Centered on video sensors, and in combination with technologies such as radar, AI, and perceptual data analysis and processing, HikAuto is committed to becoming the industry's leading supplier of vehicle safety and intelligent products powered by video technology. It provides a wide range of services to passenger vehicle users, commercial vehicle users, and other types of consumption as well as industry users globally.

### 5.4.1 Improving Day by Day in the Passenger Vehicle Before-market

2021 saw significant changes to the before-market structure of the passenger car. China's vehicle market has



achieved positive year-on-year growth for the first time during the past three years, reaching 21.48 <sup>11</sup>million vehicles. Amid the trend of electric and intelligent vehicles, domestic brands have greatly improved their product performance, and expanded their market share, while creating more business opportunities for domestic suppliers. Capitalizing on the trend, in 2021 the HikAuto's passenger vehicle before-market delivered doubled growth, and the number of new designated projects doubled as well. The expected sales of new contracts quadrupled compared with the end of 2020, laying a solid foundation for continued growth in later stages.



With the rapid expansion of intellignent driving applications, HikAuto has made significant breakthroughs in all of its product lines. It has acquired a leading market share of vision sensors in China. Capturing the opportunity of the explosive growth in demand for intelligent driving perception cameras, it has achieved industry-leading coverage of customers and vehicle models, laying a foundation for expanding market share and maintaining rapid growth. In terms of intelligent driving, HikAuto started from fully automatic parking system, relying on its advantages in full-stack self-developed system solutions and UV fusion<sup>12</sup> perception algorithms, and developed industry-leading product performance. It has won over 10 designated projects of production car models from leading independent brands such as Great Wall Motor, Geely, and Chang'an. Regarding intelligent cockpit, HikAuto focusing on both exterior and interior visual perception systems, has launched the VIMS (Video Intelligent Monitor System). The system supports up to 8 channels of HD video access, and is equipped with smart algorithms for face recognition inside and outside the car, fatigue driving monitoring, driving behavior analysis, gesture recognition, etc. It is designed to help customers build more powerful smart cockpits, and has won more than 10 official

<sup>&</sup>lt;sup>11</sup> Data from the China Association of Automobile Manufacturers.

<sup>&</sup>lt;sup>12</sup> Ultrasonic Vision fusion, refers to the combination of ultrasonic radar and vision.

designated projects including Great Wall Motor, Geely, Chang'an and other customers.

In the meantime, HikAuto continued to develop joint ventures and international brand markets, and obtain a number of designated platform-based product projects including Volkswagen, Volvo, Mazda, Toyota and other brands on in 2021.

In 2022 HikAuto will continue to increase investment in intelligent driving sensors, algorithms and system products, give full play to its advantages in the technology of vision, ultrasonic and millimeter-wave radar fusion perception, and develop a more competitive driving-parking integrated full-stack system. Active efforts will be spared to explore integrated application solutions of intelligent driving and intelligent cockpit, so as to provide customers with more smart options.

### 5.4.2 Innovating in the Passenger Vehicle Aftermarket

In the automotive aftermarket, passenger car owners' demand for dashcams and panoramic view monitors continues to increase, and driving video recording, rear-end collision evidence, injured feigning prevention, and parking view assist have gradually become rigid demands. In 2021, HikAuto's dashcams and panoramic view monitors maintained rapid growth, with both sales and shipments doubling year-on-year.



Based on differentiated technical capabilities such as night vision, AI, and networking, HikAuto has enriched its dashcam product line, which is divided into two series: general-purpose and special-purpose, completing a comprehensive product mix ranging from 2-megapixel to 4K. The products have covered all channels including mainstream online e-commerce platforms, 4S store groups, and offline auto parts sales channels. The iconic F6/C6 dashcam series has become a market benchmark of 5-megapixel HD intelligent networked recorders. On such basis,

HikAuto launched C8, a new 4K series in 2021, which has introduced the exclusive night vision technology, elevating the night vision performance of driving recorders to a new height.

Regarding the Panoramic View Monitor system, HikAuto has expanded to 7 major vehicle lines and over 50 vehicle models on the basis of 5 major vehicle lines and 31 vehicle models in 2020. The system has become an industry leader in key indicators such as image definition, night visibility, seamless splicing, ultra-low delay, and product reliability. In 2021, the whole industry was challenged by supply chain stress. With the support from its suppliers, HikAuto ensured the normal delivery of products and offered superior and reliable products and service experience to the majority of car owners and consumers.

HikAuto has established a solid brand image and won the trust of customers in the automotive aftermarket. In the future, HikAuto will remain committed to the aftermarket and innovation, to meet the needs of customers and car owners.

### 5.4.3 Booming in the Commercial Vehicle Market

In 2021, the commercial vehicle market went through subtle changes, and it has become a consensus that the application of on-board video surveillance should be expanded from specified buses, coaches and trucks to all freight vehicles. Intelligent technologies such as ADAS (Advanced Driving Assistance System) and DMS (Driver Monitor System) have been largely applied to millions of vehicles; while urban public transportation embraced further transformation driven by intelligent networking technologies. HikAuto's commercial vehicle business doubled in 2021.



HikAuto has completed the cross-platform development of fundamental technologies, using middleware technology to rapidly transplant application development to different chip platforms. This improves its response efficiency to customers' tailored needs, and greatly reduces the delivery risk caused by chip shortage. With regard to key technologies, the focus is on the optimization of memory read/write performance, BeiDou positioning accuracy, and intelligent algorithms such as ADAS/DMS. Related products and solutions are being applied to special-purpose vehicles, trucks, buses, construction vehicles, taxis, ride-hailing, and metro vehicles as scheduled. Cloud platforms have enabled access to more than 200,000 vehicle-mounted video channels, providing customers with cost-effective O&M solutions. Furthermore, HikAuto has completed transactions with over 1,200 customers, and established more than 10 best practice cases, including the Heilongjiang Special-purpose Vehicles for typical alpine regions, the Shenzhen Public Transport as a window to the entire world, the Shou Qi Tailored Taxi Services serving the Winter Olympics, and the Yutong Bus, the world's top bus seller.

In 2022, the commercial vehicle market is expected to continue the reform and embrace more application amount, higher integration level and greater practicability. In the special-purpose transport vehicles for passenger and dangerous goods and freight vehicles market, HikAuto plans to speed up the application of ADAS/DMS, as well as the integration of mobile monitoring system and overload/overspeed monitoring systems; in the market for public transport, it will promote the intelligent public transport 3.0 system starting with provincial capital cities, and advance the integrated application of subsystems such as those for bus monitoring, public transportation scheduling, ADAS/DMS, blind zone collision warning, illegal bus lanes occupation, pedestrian priority at crosswalk, electronic rearview mirrors, and 5G-V2X; in the construction vehicle market, fatigue driving monitoring, aggressive driving monitoring and blind zone collision warning systems will be widely applied and connected with police traffic check point and E-police for composite management, to lower the traffic accident rate; and in international markets, video surveillance networks will be built for school buses, public transport, and other fields, in order to accelerate intelligent application. HikAuto will continue to increase investment in R&D in the commercial vehicle market, lower accident losses, and improve dtransportation efficiency.

### 5.5 Innovative Business - HikSemi

HikSemi is committed to providing worldwide users with professional overall storage solutions, with focusing on application scenarios such as industrial control, data center, video surveillance, and consumer business. Boasting

complete design, development and manufacturing capabilities, it is now operating four product lines: solid-state hard disk SSD, front-end storage, embedded storage and flash memory application.

### 5.5.1 Products and Technologies

Centered on user needs, HikSemi is consistently engaged in technology innovation, to constantly develop and improve its four product series.

Solid-state hard disk SSD products: In 2021 HikSemi upgraded the Zoned 2.0 algorithm cluster, and improve reliability and service life of the products to enhance its application advantages in the field of video servers. And the first dedicated disk for video surveillance based on QLC<sup>13</sup> technology was released in 2021, offering a better option for high-performance, large-capacity, and high-density video surveillance applications. Based on customer service data and its established technological capabilities, HikSemi has successively launched services such as service life warning, fault diagnosis, data migration from out-of-warranty failed disks and product life extension to optimize user experience.

**Front-end storage product line:** Relying on the powerful status of the high-end video surveillance sector and long-standing expertise in video storage technologies, HikSemi has launched cost-effective video surveillance cards suitable for continued data writing scenarios. Meanwhile, it continuously expands the memory cards market, with the introduction of cost-effective and highly compatible consumer memory cards to be widely used in civilian security, mobile phones, cameras, speakers and other products, as well as dashcam cards for driving recording, and handheld gaming cards favored by gamers. HikSemi is also actively investing in the market for memories – a integral part of overall storage solutions, and has launched consumer memory products for personal computers and industrial memory products for autonomous servers.

**Embedded storage product line:** Since its launch in 2019, the range has been providing customers with highly reliable and highly compatible products and local services, relying on continued R&D investment, rigorous quality control standards and extensive experience in embedded storage application. As of 2021, HikSemi's embedded

<sup>&</sup>lt;sup>13</sup> QLC: Quad-Level Cell, is a type of flash memory.

storage was available in SLC<sup>14</sup> NAND, eMMC<sup>15</sup>, LPDDR<sup>16</sup>, DDR4<sup>17</sup> and other product series, meeting the needs of customers in electric power, networking, mobile phones, security, smart home and other industries.

Flash memory application product line: HikSemi regards satisfying the diverse storage needs of consumers as its responsibility, with continued efforts to innovate products and optimize software systems. In terms of mobile storage, HikSemi has released up to 10 X-series USB flash drive products. Tailored for different groups of consumers, the products feature varied materials, appearance and design, and are powered by self-developed firmware. They have been well received among users, rapidly emerging as a leading brand. Regarding the mobile solid-state hard disk SSD series, EliteX, a benchmark product with a bandwidth of up to 40Gbps, was released in July, in order to meet the strong demand for ultra-high-speed reading and writing among professionals and the technology-fancier. Its transfer rate is as high as 3000MB/s, making the product a great helper for office work. As for the cloud storage series, combined with years of technical expertise, HikSemi released a crowdfunding G1 Master of single-disk edition on Xiaomiyoupin.com, to meet the needs of Xiaomi fans. Once released, the product became an instant hit for its appealing design and premium use experience. 7,000 units were crowdfunded in just 14 days, demonstrating the popularity of HikSemi's products.

<sup>&</sup>lt;sup>14</sup> SLC: Single-Level Cell, is a type of flash memory.

<sup>&</sup>lt;sup>15</sup> eMMC: embedded Multi Media Card, formulated by the MMC Association, is the standard embedded memory specifications for products such as mobile phones or tablets.

<sup>&</sup>lt;sup>16</sup> LPDDR: Low Power Double Data Rate SCRAM (Synchronous Dynamic Random Access Memory), is a communication standard developed by the US JEDEC Solid State Technology Association for low-power memory. Known for low power consumption and small size, it is specially used for mobile electronic products.

<sup>&</sup>lt;sup>17</sup> DDR4: 4th generation Double Data Rate SCRAM (Synchronous Dynamic Random Access Memory), is a component used to store programs and data in computers.





### 5.5.2 Business development

HikSemi continues to build a marketing network, and pays equal attention to the industry and channels by actively expanding the industry market and steadily developing the channel market. While continuously improving its user service system, it sees steady growth in the total number of customers, which reached over 3,000 in 2021, and the sales revenue delivered rapid growth as well.

Depending on the characteristics of different channels of industry, consumption and OEM, HikSemi has been building differentiated manufacturing and operation models. Powered by production management tools ERP, PLM and SRM, it is committed to developing a digital supply chain in line with strict and improvement-oriented quality management systems, continuously enhancing its delivery capability and quality.

As an irreplaceable functional device in the sectors of consumer electronics, communication equipment and IoT, semiconductor memory is one of the most fundamental core components of modern information industry applications. Chinese semiconductor memory manufacturers are expected to embrace greater opportunities, with the continuous development and growth of emerging industries such as big data, cloud computing, AI, and 5G.

## **HIKVISION**

HikSemi will stay true to its original intention of "storing every beautiful moment and using intelligence to change lives" and adhere to its user service concept of "dedicated to customers' continual success, adding value to companies and communities." Oriented for user demand, it aspires to gain insight into economic trends, and keep providing enterprises and consumers with safe and reliable storage devices, systems and solutions through product innovation, technological innovation, marketing innovation and brand building, aiming for a leading supplier of overall memory solutions in China.

### 5.6 Innovative Business - HikFire

HikFire is dedicated to the construction of the fire protection IoT, visual management and digital transformation of fire protection, driven by emerging technologies such as multi-dimensional perception, IoT, Internet of Vision, cloud computing, big data and AI, as well as professional image processing technologies, innovative security-fire protection integration and IoT-information network integration applications. HikFire's business covers traditional fire protection, smart fire protection, fire safety e-commerce, operation services and other sectors, and is committed to developing one-stop fire safety system solutions and one-stop fire management service solutions. The aim is to enable smart perception, smart prevention and control, smart management and smart rescue of fire protection, making the environment safer and life better.

### 5.6.1 Smart Fire Protection: Innovative Technologies for the IoT for Fire Protection

As the traditional fire protection industry undergoes continued changes, the smart fire protection market becomes increasingly mature. HikFire has released a full range of smart fire protection products and operation management platform software to meet the organization level, industry level and city level's fire-fighting IoT construction and operation needs, featuring 3D, full coverage and full time domain. Through multi-dimensional perception, security-fire integration, system coordination, data sharing and service integration, HikFire aims to enable the early warning, early prevention and control, and early handling of fires, reduce fire safety risks, and improve fire management efficiency.





**Promoting technological innovation:** In 2021, HikFire released a bi-spectrum<sup>18</sup> smoke detector to reduce the false alarm rate. With active exploration of the integrated application of thermal imaging, AI-based image recognition, and spectral analysis technologies, Hikfire released a multi-spectral fire detector that combines thermal imaging technology and AI flame analysis to improve the accuracy and timeliness of flame identification. In order to enrich the application of security-fire integration in IoT, HikFire has also unveiled a smart terminal graphic display device that is integrated with multiple systems such as fire-fighting IoT access, video surveillance, fire alarm review, and collaborative firefighting. Through the fusion of the wired advantages of traditional fire protection and the wireless technology of smart fire protection, HikFire offers more fire management options for diverse scenarios.

Advancing industrial application: According to the characteristics of various industries, HikFire has developed fire-fighting IoT solutions for a wide range of industries, including financial services, cultural relics and ancient buildings, education, communities, smart buildings, industrial and commercial enterprises, energy and metallurgy, elderly care, commercial chains, and new energy. In 2021, HikFire improved product performance in different scenario and the efficiency of platform-based management, make the products easy to install, use, and maintain, and reduce the comprehensive cost of fire protection establishment and operation, bringing long-term value to users.

<sup>&</sup>lt;sup>18</sup> Bi-spectrum detection: The scattering and reflection features of particles of different sizes vary in different wavelengths of infrared light and visible light, so that interference sources such as water vapor and dust can be better distinguished from smoke particles.

# **5.6.2** Traditional Fire Protection: System Integration and Upgrading for the Digital Transformation of Fire Protection

HikFire's traditional fire protection product portfolio continues to expand, in order to cover the general fire protection market. The offerings are divided into four sectors – early warning, fire alarm, emergency evacuation, and automatic fire control. For these four sectors, nine systems have been launched – including automatic fire alarm system, emergency lighting and evacuation indicator system, fire broadcasting and phone call system, electrical fire monitoring system, fire equipment power monitoring system, residual pressure monitoring system, fire door monitoring system, combustible gas detection alarm and gas fire extinguishing control system. Through continuous commitment and investment, HikFire aims to strengthen the R&D and accumulation of the underlying technologies of traditional fire protection products, promote the integration and upgrade of systems, and improve the application capabilities of traditional fire protection systems.



The new-generation digital technologies such as the IoT for fire protection, multi-dimensional perception, and big data are accelerating the fusion of traditional fire protection and smart fire protection, leading the fire protection sector into the era of AIoT with physical-digital interconnection. Combining industries' characteristics and realistic scenarios, HikFire leverages the three-in-one technical advantages of "traditional fire protection + smart fire protection + smart fire protection + smart security," and continuously upgrades security-fire integration solutions that are gradually

covering various industries and scenarios. HikFire proactively explores solutions for security-fire integration and prevention-control integration, in a bid to develop a new integrated fire safety solution for both private and public sectors, all industries and cities.

### 5.6.3 Fire Safety E-commerce: Pursuit of a Green, Smart and Safe Lifestyle

As fire emergencies frequently take place in residences and vehicles, people's safety awareness and environmental protection awareness are rapidly rising, which further stimulates individual consumers' and SMEs' demand for new green and safety products. HikFire has been accelerating its e-commerce retail business. The gas detectors, smoke detectors, and emergency kits are gaining popularity, with sales and reputation on continuous rise on leading e-commerce platforms. According to the statistics by the China Bicycle Association, the annual sales of electric bicycles in China is over 30 million, and the total ownership is nearly 300 million. In active response to the state-level goals for carbon peaking and neutrality, HikFire launched a comprehensive solution for electric bicycle fire safety management to facilitate orderly parking and centralized charging control. Featuring a charging protection mechanism and connected firefighting, the solution is expected to contributed to a smart and safe life.



### 5.6.4 Operation Services: Provider of One-stop Fire-fighting Operation and Trusteeship Services

A digital platform is the key to digital transformation. HikFire's fire protection operation and trusteeship platform provides on-duty services, maintenance services, electric moped management services and unit management, and employs multi-dimensional monitoring indicators to ensure the quality of operation services. Seeing the Internet of Everything as the cornerstone of an intelligent world, HikFire works with fire-fighting operation partners to explore a one-stop fire prevention operation and trusteeship model combining "technology + service + insurance." This is designed to promote fire-fighting operation at the town and sub-district levels, and



assist grass-roots grid fire management. HikFire seeks to offer standard service models, build a knowledge and technology empowerment system which covering training and certification to improve the technical service capabilities of fire protection engineers, fire protection operators, fire maintenance service providers and key social organizations. With the consistently high maintainability of systems and the premium and efficient O&M services, HikFire brings more powerful support and greater value to partners.



### 5.6.5 Outlook: Standards Upgrade, Imports Substitution, Welcoming Market Growth

Domestic products are increasingly replacing their foreign counterparts in the traditional fire protection industry, and the general-purpose fire protection<sup>19</sup> market is seeing the constant upgrade of specifications and technologies. While further expanding the market capacity, the new policies are expected to further expand the market capacity and enhance the technical threshold of upgrade intelligent applications. Taking GB51309-2018 *Technical Standard for Fire Emergency Lighting and Evacuate Indicating System* as an example, the standard has proposed changes to the conventional practices of fixed installation and nearby evacuation, requiring to evacuate using the evacuation guideline that best suits the fire situation; at the same time, the positioning of the system in construction projects is in transition from the strong electricity sector to the weak electricity sector.

The establishment and release of industry standards, regional standards, and group standards for smart firefighting products are gaining maturity. The demand for integrated management is emerging among schools, hospitals, commercial enterprises and other enterprises and institutions. The industry is presenting a trend of IoT integration, prevention-control integration, security-fire integration, and data-intelligence integration, which is highly consistent with HikFire's philosophy. HikFire will actively participate in the dialogue with industry platforms, work hard to promote the establishment of standards, develop the AIoT for fire protection, and assist the visual

<sup>&</sup>lt;sup>19</sup> General-purpose fire protection: It mainly refers to civil and general commercial fire protection, as opposed to industrial and special-purpose fire protection.

management and digital development of fire protection, jointly shaping the digital and intelligent future of the fire protection industry chain.

### 5.7 Innovative Business - Rayin

Rayin is focusing on X-ray detection technologies, dedicated to be a leading technology R&D, manufacturing, equipment sales and leasing services provider of invisible light detection equipment . Relying on the long-standing expertise in X-ray, millimeter-wave, other multidimensional perception technologies, AI, IoT, etc., Rayin keep enabling technology and creating value for the fields of intelligent security inspection and intelligent industrial manufacturing.



### 5.7.1 Luggage Security Inspection

Rayin continues to expand its intelligent luggage security inspection product category. On the basis of the existing 5030/6550/100100 conventional security inspection machines, in 2021 Rayin released the 140100 security inspection machine designed for logistics and the 4233 lightweight security inspection machine to meet the needs of luggage inspection in different scenarios. Data networking, intelligent recognition, person-luggage association and other technologies are employed to expand intelligent applications and provide one-stop security inspection offerings, empowering users for the closed-loop management of security inspection.

Committed to the research on X-ray imaging technology, Rayin has released the Ji Xian series of intelligent security inspection machines equipped with high-performance security inspection dedicated processors for and the new-generation image enhancement engine. While realizing the vivid recovery of image information, it offers clearer images and more details, significantly optimizing the experience of staff checking tiny items in the luggage.





Keyboard sample/ Details rendered by traditional X-ray imaging/ Details rendered by new-generation image processing engine

### 5.7.2 Human Security Inspection

In the early stage of the COVID-19 pandemic in 2020, Rayin innovatively integrated and expanded a variety of IoT sensing methods based on the conventional metal detection technology, for the purpose of non-contact and quick temperature measurement and security inspection. In 2021, the temperature measurement and security inspection product continued to be optimized and upgraded. It was networked with the Health Code, and meanwhile improved in metal detection and classification capabilities, to meet the fragmented and personalized needs of customers.

Rayin also released a millimeter-wave human body check gate integrated with active high-frequency millimeter-wave imaging technology, intelligent recognition technology, and image processing technology. Intended to detect and alarm potential dangerous goods such as metals, liquids, and plastics, it has expanded the inspection scope of prohibited goods and improved detection accuracy, ensuring the safety of key locations.

### 5.7.3 Industrial Detection



## **HIKVISION**

Rayin leverages the penetrating and imaging capabilities of X-ray and advanced AI analysis algorithms to identify different detection targets according to their specific imaging characteristics, thereby enabling the intellignet detection of foreign objects and defects in industrial production. Integrated industrial detection products and solutions are also developed to empower business partners to jointly create new applications in industrial intelligent manufacturing.

Rayin has launched product series for industrial flaw detection, electronic inspection, food inspection and others, which greatly improves the accuracy and efficiency of industrial detection. The products have been applied to a number of projects for industrial flaw detection, foreign matter/defect detection, and intelligent material counting.



Detection of foreign matters and defects in food/ SMT material counting/Result of defect detection

Based on its understanding of detection technologies such as X-ray and millimeter-wave, Rayin implements Hikvision full-spectrum IoT strategy and plans to continue increasing R&D investment in invisible light imaging technology. The aim is to improve product performance, expand market coverage, and tap into application potential. Rayin focus on developing more innovative applications of intelligent security check and industrial intelligent manufacturing, and consistently contribute to the creation of a safer, more convenient and better society.

### 5.8 Innovative Business – HikImaging

HikImaging probes into the needs of users in the medical industry, committed to the research on vision imaging, multi-dimensional perception, AI and other related technologies in medical scenarios, so as to provide customers with products and related solutions. HikImaging's business scope covers medical vision and digital healthcare, among other professions.

### 5.8.1 Core Technologies

To address the professional requirements of the medical industry for specific imaging effects, HikImaging has developed certain competitive advantages in full-link 4K, real-time streaming media transmission, and intelligent AI algorithms based on its technology accumulation and continuous R&D in video images:

**Full-link 4K:** 4K Ultra HD produces images that are four times the resolution of traditional HD images. In medical practice, 4K Ultra HD endoscopy allows users to observe fine blood vessels, nerves and fascia, as well as details of lesions and biopsy sites that are difficult to see using traditional HD endoscopy. Compared with traditional endoscopy, 4K Ultra HD, with higher resolution, definition, and color distinction, is able to provide physicians with a stronger sense of depth and better control over surgeries. With years of operation experience in the video field, HikImaging not only possesses multi-spectral fusion and 4K imaging technologies for front-end acquisition, but has also enabled full-link 4K vision imaging from transmission, storage and display, with clearer details and better color reproduction.

**Real-time streaming media transmission:** Depending on mainstream real-time transmission technologies, HikImaging has optimized the underlying media transmission engine and combined it with HikImaging's CODEC expertise to improve QoE (Quality of Experience). In the case of private deployment, HikImaging's real-time transmission technology supports more than 500 users for simultaneous real-time audio and video interactions across the Internet, and dynamically adjusts coding parameters to adapt to various network conditions, guaranteeing the real-time ability of media transmission and the integrity of interaction information. For the medical industry, it is also adaptive to the complex images of endoscopes, and enables the smooth transmission of 4K streams across Internet environment.

**Intelligent AI algorithms:** HikImaging combines intelligent AI technologies with endoscopes. By building mapping knowledge domains and applying AI-based automatic recognition, it assists physicians in diagnosis and treatment and reduces missed diagnosis of lesions. Through determination powered by AI algorithms, the inspection screen can present digital and characterized information to help doctors quickly determine whether there is a lesion in inspection sites, and accurately locate the lesion, making diagnosis more efficient, faster and accurate.

### 5.8.2 Solutions

### 1) Medical Vision:

In minimally invasive surgeries, diagnosis and treatment, endoscopes are used to help the doctor see lesions
that cannot be displayed by X-ray, MRI and other external examination approaches. Therefore, endoscopy systems play a crucial role in inspections and are considered to be an extension of modern doctors' hands and brains, almost "pervasive".

In 2021 HikImaging launched a series of hard endoscopy solutions (4K auto-focus camera system, 4K fluorescence camera system, 3D camera system, ultra-HD optical endoscopy, etc.) and medical display solutions for minimally invasive surgeries; and for minimally invasive diagnosis and treatment, it has introduced an array of electronic endoscopy solutions (electronic endoscopic camera system, reusable electronic endoscope and disposable electronic endoscopes and other overall solutions.) These solutions have now covered gastroenterology, respiratory, general surgery, thoracic surgery, urology, orthopedics, gynecology and other departments, becoming indispensable medical diagnostic and surgical devices.

HikImaging's medical vision products all comply with the general requirements for electromagnetic compatibility in the YY0505 standard for medical electrical equipment and the general requirements for basic safety in the standard GB9706.1. Together with the independently-developed test software HIKMED iTest, it can perform performance parameter tests in line with the YY/T1603 and YY/T1587 standards, which greatly shortens the cycle of registration and inspection. In 2021, HikImaging helped 8 domestic customers obtain registration certificates for medical endoscopic imaging equipment (4K camera systems, etc.), while assisting customers with registration and declaration in 4 provinces.



#### Hard endoscopy solutions/ Electronic endoscopy solutions

Endoscope is a medical device that directly contact with the skin, mucous membranes and sterile tissues of patients. However, since the endoscope contains many small, narrow and long open channels, it potentially provides an environment for the survival and cross-infection of microorganisms, secretions and blood, which may lead to medical malpractice. In 2021 HikImaging introduced fully compatible disposable electronic endoscopes ranging from 40,000-2 million pixels, catering to the needs of different departments and surgical procedures. Also, a full-link solution consisting of a disposable scope + host was unveiled. Lightweight, portable, and free from

decontamination, it gives endoscopy more flexible application scenarios.

#### 2) Digital Healthcare

In 2021, HikImaging continued to upgrade its digital medical products, and introduced high-frame-rate 4K surgical field camera, 4K panoramic camera, medical video recording terminal, 5G medical video communication terminal, 5G mobile teaching demonstration system and other products. Powered by 5G technologies, the ultra-HD video products have been flexibly and rapidly applied to digital operating room, digital ward, telemedicine, medical education and training and other professions.

**Digital operating room:** By professional 4K surgical field imaging, panoramic recording, image access of CT/surgical microscope/DSA/monitor and other medical equipment, multi-screen fusion, lip synchronization, audio and video two-way interaction, public network cloud interaction, cloud live broadcast and other technologies HikImaging is able to meet demand for patient information access, intraoperative image scheduling, remote surgical teaching demonstration, cloud live broadcast of surgeries, remote surgical instruction, surgical consultation, intraoperative remote family communication, surgical process recording and documentation, and medical exchanges during the clinical operations at hospitals. The purpose is to establish information-driven, networked and digital operating rooms.

**Digital ward:** HikImagin intelligent nursing system has introduced smart bedside cards, smart interactive screens, smart doorway screens, corridor screens, nurse station call management hosts and nurse station smart care screens surrounding the varied requirements of doctors, nurses, patients, medical staff, nursing managers, and hospital managers. It is thus able to provide wards with a new model of timely, mobile, continued, closed-loop, and user-friendly information management.



Digital Healthcare products					
Digit	al operating room				
SG+4K medical video communication terminal Medical video Medical video recording host Video communi- cation terminal Surgical file camera ser		tration 🚽			
	Digital ward				
call manage- ment host intercom bedside screen bedside screen smar	rse station 15.6-inch 10-inch embe-	Efficient 2011 Effect Efficient   22.3C 10.272 33 Efficient   D double-sided LED doubled- sided lattice corridor screen Toilet alarm button			
	Telemedicine				
Video communi- cation terminal Surgical field camera series 21.3-inch 3MP grayscale diagnosis display	21.3-inch 3MP colored diagnosis display	Mobile ward round system			
Medical edu	cation and training system				
Training recording and broadcasting terminal Close-shot camera		bile theory-practice integrated teaching system			
So	ftware platform				
Web PC Mobile device Telemedicine platform	Digital operating room platform	Smart nursing comprehensive management platform			

**Telemedicine:** Based on its technical capabilities in audio and video processing, IoT, big data, and AI, HikImaging has independently developed a series of telemedicine products (5G remote system, 5G medical video communication terminal, remote consultation system, remote ward round system, 4K shot camera system, etc.) for medical and health institutions at all levels from province, city, county, township, to village. With access capabilities to all scenarios and terminals, it enables remote consultation, remote surgical diagnosis, remote teaching, remote monitoring, remote ward rounds, two-way referral and other services.

**Medical education and training:** The traditional teaching model of watch & learn is limited by limited observation space, as well as little practice time and few practices for students, which undermines the effect of medical teaching and training. In response to the above shortcomings, HikImaging has launched a comprehensive solution for visual medical teaching for medical education scenarios, and a comprehensive solution for experimental training and teaching for middle and higher vocational training scenarios. With professional medical education and training equipment, fixed/mobile teaching systems, medical teaching platforms, comprehensive application

platforms for experimental training and other software and hardware, a holistic range of teaching services from preview before class, class teaching, to after-school review has been established. At the same time, supported by cloud interactive platforms, teaching activities are extended to a wider range, powering famous teachers' classes, large-scale teaching, and remote interaction between schools and hospitals, schools and companies.

During the pandemic, HikImaging helped medical staff with non-contact communication and consultation with patients through digital equipment. With nurse station call management host, visual hospital bed extensions, and hospital bed intercom extensions installed, two-way visual intercom and non-contact remote consultation between patients and medical staff are realized, which makes it convenient for medical staff to know about the patients' illness in time and lower the risk of infection among medical staff.

The construction of a healthy China will be comprehensively advanced, according to the *Resolution on the Outline of the 14th Five-Year Plan for Economic and Social Development and Long-Range Objectives through the Year 2035.* In the *Medical Equipment Industry Development Plan (2021-2025)*, the Ministry of Industry and Information Technology has made a detailed plan for the key priorities and breakthroughs of medical equipment. In particular, medical endoscopes and other imaging diagnostic equipment are one of the strategic objectives that require breakthroughs.

In 2022, HikImaging will stay committed to the healthcare field, probing into the needs of users in the medical industry, and making continuous investment in the R&D of ultra HD, AI, 3D, miniaturization, and multi-spectral technologies. By focusing on the image effects and intelligent applications of audio and video medical products, HikImaging aspires to consolidate its core competitiveness and develop differentiated products. It will also prioritize the investment in the automatic manufacturing technique of miniaturized products, establish a production quality control system, and build up a complete supply chain system, providing industry users and customers with more professional products and solutions.

#### **II.** Analysis of Core Competitiveness

Demand in the AIOT industry has always been fragmented and scenario based. How to meet personalized demands and create scenario-based solutions while maximizing business economies of scale is a challenge that faced by all industry participants. The fragmentation and personalization of user demands make it difficult to get an accurate picture of customer/user demands, making the product diversification and customization necessary, thus

the characteristics of industrial segmentation and demand customization of solutions are increasingly prominent. Providing marketing support for customers and users is also becoming delayering and more specialized due to fragmented demand. Small orders and flexibility in the production process have become a necessity, while other aspects of business operations have also changed to accommodate the fragmented industry characteristics. With its over two decades of experience in the fields of security and AIoT, Hikvision is able to adapt to the fragmentation of industry demands, understand the limitations of such fragmentation on efficiency improvement, and also foresee the feasibility of certain degrees of scalability. Hikvision firmly believes that AIoT breeds broad market opportunities, helping people to establish perception, connections, computing, and applications between people and things as well as between things. This is the best platform for Hikvision to grow alongside the industry. We expend great effort pursuing science and technology for good, in a hope to enable everyone to enjoy a brighter future.

In 2021, the predictability of the internal and external environment is extremely poor. The difficulties brought by the global epidemic, sanctions, chip shortage, rising raw material/labor costs, industry reshuffle, etc., pose great challenges to the continuity and stability of enterprise operations. The external environment is ever changing, posing extremely high requirements on the enterprise management strategy of long-term stability, short-term flexibility and aggressiveness, and other aspects. Adhering to the business philosophy of "professionalism, honesty, and integrity", Hikvision strives for development in difficulties and survival in challenges. The performance achieved by Hikvision in 2021 demonstrates the company's aggressiveness, tenacity and stability, which is also the result of the company's long-term approach.

# 1. Continuous increase in R&D investment, advancement of platform-based operation of software and hardware R&D

With video technology as the starting point, Hikvision has gradually expanded perception technology from visible light to infrared, X-ray, millimeter wave and other fields, continued to explore perception methods such as sound, temperature, humidity, pressure and magnetism, and further expanded upon multi-dimensional perception capabilities. Hikvision's technical capabilities in the fields of AI and big data is increasingly profound. The Company expanded AIoT applications to thousands of industries, forming a complete system from perception to cognition, from products to solutions, and from data to applications. In addition, we have continued to improve our practice-oriented capabilities through the design, implementation and operation of medium and large-scale projects, while improving technologies, products and solutions through real project practice, forming a virtuous circle from R&D to the market and from the market back to R&D.

During the reporting period, Hikvision's investment in R&D accounted for over 10% of its total operating income, while the number of R&D and technical service personnel continued its stable growth, accounting for nearly 50% out of Hikvision's total workforce. The Company will continue to maintain high intensity of technical investments, consolidate the foundation of intelligent technology, enrich the varieties of intelligent devices, concentrate on exploring the performance and efficiency of intelligent applications, and build comprehensive capabilities through continuous R&D investments, in order to lay a solid foundation for Hikvision's steady development in the AIOT industry.

#### 2. In-depth exploration of user demands to enhance regional marketing capabilities

Facilitated by its provincial business centers, Hikvision continues to localize business footprint, with over 300 city branches covering most cities across China, forming a hierarchical city-based marketing system prioritized by economic development and population density, while taking the pilot area as the benchmark. The Company has established 23 regional functional centers and corresponding 66 branches overseas, forming a marketing network architecture of headquarters–regions–countries. The headquarters is tasked with building business support capabilities, while regions establish operations and service systems, and countries adapt to local conditions to deeply cultivate specific local markets. Hikvision's long-term and consistent investment in the construction of marketing system has formed a broad and strong network of domestic and overseas marketing organizations, local talent, and partners, enabling marketing teams to quickly communicate demands with customers and users and engage in productive information exchange and business communication.

Hikvision has expanded industry applications through dividing domestic business into three business groups: public business group (PBG), enterprise business group (EBG) and SME business group (SMBG); overseas distribution and industry are complementary to one another, and put into practice "one policy for one country". The organic synergy of industry-driven region, region-driven industry, marketing-driven R&D, and R&D-driven marketing helps the company to gain insight into user demands, enabling both marketing and technical R&D work to be performed in a targeted manner, thereby steadily driving the Company's business forward.

#### 3. Constantly improving resilience to ensure supply chain stability

Hikvision sells nearly 30,000 different models of hardware equipment and often encounters scattered orders, frequent changes in demands, and high requirements for the completeness of supply chain. Therefore, its supply chain system must have flexible and efficient manufacturing capabilities to meet the fragmented and diverse industry needs. During the reporting period, the Company appropriately responded to the adverse effects of chip

shortages and raw material price hikes resulting from the imbalance of chip production capacity and supply, ensuring the continuous and stable supply of its products.

With its domestic manufacturing bases in Hangzhou Tonglu and Chongqing, Hikvision has proceeded with the construction of a manufacturing base in Wuhan and expansion plans in Tonglu and Chongqing, while establishing local factories in India, Brazil and the United Kingdom to support global product supply. The Company has established an agile and flexible manufacturing system and industry-leading automated production capabilities, which allows it to continuously improve its capacity for lean production and intelligent manufacturing to meet the demands of small batch, multi-batch, and large-scale product manufacturing.

Taking advantage of its procurement scale, Hikvision has developed stable and mutually beneficial cooperative relations with suppliers, helping them quickly iterate and improve upon products over the long-term. The Company has helped over a thousand supplier partners around the world to achieve rapid development, which in turn has strengthened the stability of the overall industrial supply chain. In response to supply chain uncertainty caused by sanctions and the COVID-19 epidemic in recent years, the Company has continued to maintain large stockpiles of raw materials and to hedge the risks brought by changes in the external environment through high inventory level.

#### 4. Continuously improving internal management capabilities through optimizing methods and tools

Amidst an ever-changing competitive landscape, whether a company can perform internal resource allocation more efficiently than competitors and lower the cost of internal information exchange is an important aspect of enterprise competitiveness. Irrespective of how the internal and external environment and times have been changing, Hikvision has always taken a realistic and pragmatic approach to its business and has remained focused on how to make the business better and stronger, while adhering to the business philosophy of "professionalism, honesty, and integrity" as the guidance of the business development and the belief system to be upheld by all employees.

As its business continues to evolve, Hikvision has consistently updated its resource organization and management methods accordingly. As for business direction and goal setting, the company has formed a systematic strategic planning method which is regularly updated and applied universally, facilitating effective communication and alignment of each business and functional department to ensure clear goals and division of responsibility. In terms of internal management, Hikvision has promoted customer-centered management reform, implementing over 100 management reform initiatives each year to continue optimizing resource layout and streamlining collaboration. The Company focuses its efforts on IT system construction to continuously optimize and improve the efficiency of business systems. The company is striving for continuous improvements in many aspects including promoting the

identification and management of financial risks, building a digital quality management system, improving internal control mechanisms, pursuing the construction of compliance systems, protecting innovation achievements, and etc.

#### 5. Attracting and uniting outstanding talents, building a people-oriented organizational climate

Hikvision considers talents as the most important source of enterprise competitiveness, recruiting talent from all around the world, while adhering to the employment concept of "talent-focused, growing together." The Company has formulated a dual career development path consisting of management sequence and professional sequence, constantly improving upon the talent discovery and performance appraisal mechanism and identifying and assigning people in an empirical manner, to boost the morale and creativity of employees and improve organizational capabilities. The comprehensive employee reward system has initially taken shape, which consists of compensation and benefits, equity incentives and innovative business co-investment etc., further developing the distribution mechanism for employees to participate in and benefit from the Company's growth. Employees participating in incentives shares and co-investment can obtain long-term individual returns through their contributions to the Company's performance, coordinating the long-term development of business with the continuous employee growth.

Hikvision provides multi-level training courses for employees on various career tracks, which provides impetus for the consolidation and upgrading of the Company's crucial role players and reservation and development of backup talent. Hikvision provides extensive and in-depth training services to all employees, which guarantees the continuous reinforcement of the Company's values and improvement of professional capabilities. The Company encourages its employees to freely organize hobby clubs and regularly hold diversified cultural and recreational activities to create an equal, open-minded and positive organizational climate. In addition, themed events such as "Face-to-Face with Executives," "Dialogue with Managers," "Humanities Lecture Hall" and "Book Club" have promoted well-rounded growth of employees.

#### **III.** Core Business Analysis

#### 1. Overview

As the global COVID-19 epidemic persisted in 2021 for the second year, epidemic prevention and antiepidemic continued to have a huge impact on the regional economy. With the intensification of reverse globalization, conflicts and confrontations between certain countries continued to increase, and the political and economic landscape posed increasingly severe challenges to business operations. Global chip shortages continued, and soaring raw material prices exacerbated rising manufacturing costs, while domestic policy adjustment in the education and real estate industries led to a reshuffle of the industry and resulted in significant changes.

Amidst the complex and rapidly changing domestic and foreign landscape, the challenges for enterprises to achieve sustainable and stable growth are ever increasing. Faced with various external uncertainties, Hikvision remained focusing on developing its inherent capabilities, maintained a consistent business strategy, and ensured the smooth development of global business through steady and continuous supply chain management. During the reporting period, the Company achieved a total operating income of RMB 81.42 billion, representing year-over-year growth of 28.21%, and realized a net profit attributable to shareholders of the Company of RMB 16.80 billion, representing year-over-year growth of 25.51%.

#### (1) Sustained investment in R&D, forming a solid foundation for company development

In 2021, Hikvision invested RMB 8.25 billion in R&D, accounting for 10.13% of the company's total operating income. The Company had over 20,000 R&D and technical service personnel, upholding its commitment to significant R&D investment. Technological innovation serves as the driving force for the development of Hikvision, and only through continuous technological innovation can the Company continue to grow.

Hikvision continued to advance technology accumulation in AIoT fields, gradually expanding its full-spectrum perception technology platform from visible light to infrared, X-ray, millimeter wave and other bands. After years of product R&D and innovation, the Company currently has nearly 30,000 product models for sale, enabling it to better meet the fragmented demands of users. Hikvision will continue to exploit the advantages of transforming technology to product engineering, and continue to develop new technologies and products to lead the development of the industry.

#### (2) Building a technology platform to enhance comprehensive technical strength

In 2021, the Company continued to promote the construction of technology platforms, further strengthened the

construction of underlying technology capabilities and specialized technologies, and improved R&D efficiency, quality and skills through the reuse and empowerment of technical capabilities, thereby concentrating superior resources to break through the core technical pain points and forming the technical foundation to support the long-term development of product business. At present, the Company has formed a number of general technology platforms and product technology platforms.

In 2021, leveraging its unified software technology framework, the company has gradually unlocked software development efficiency and gradually improved its software development platform, continuously supporting the customization and development capability of regional software.

#### (3) Continuous increase in inventory level to ensure continuous and stable supply

In 2021, the company proactively responded to the fluctuations and challenges caused by the imbalance between supply and demand of certain raw materials and supply chain switching, working closely with its upstream partners to continue to increase inventory levels, effectively cope with the industrial-wide shortage of chips, stabilize the adverse effects caused by fluctuations in commodities, in order to ensure supply continuity. Through prudent supply chain planning, the company was able to further solidify its advantages in product supply and price competition.

In 2021, the company also continued to promote lean production management, improved the level of intelligent manufacturing, optimized delivery efficiency, and overcame various challenges brought by labor and energy consumption to ensure the steady development of business.

#### (4) Innovative business layout to support long-term solid growth

In 2021, five innovative business companies achieved operating income in excess of RMB one billion with positive net profits. With the rapid development of innovative businesses, the overall contribution of innovative businesses to the company's total sales has further increased, and is becoming an increasingly important growth driver for the company.

In 2021, real estate, education and other industries in China experienced large fluctuations as a result of policy adjustments, which had a certain impact on the overall growth of EBG business. However, real estate and education are closely related to the national economy and livelihood of the people, so they still have plenty of potentials for future development, and it is expected that there will still be great growth in the future. SMBG and PBG business maintained solid growth. Despite the impact of the COVID-19 epidemic in overseas markets, the company's

overseas market share continued to increase thanks to its good supply capacity and solid business development on the marketing end. Diversified business layout is the guarantee for the stable growth of the company, and different businesses form good synergy and interaction, which together help the company to achieve stability and long-term sustainable development.

#### (5) Continuous promotion of digital marketing to improve the marketing system

In 2021, the Company continued to expand its marketing service network, bringing itself closer to customers and users. At present, Hikvision has 32 provincial business centers and 309 city branches and offices nationwide, as well as 66 overseas branches to provide products and services to 155 countries and regions around the world, solidifying its marketing and service network presence around the world.

The Company continues to advance process management reform, enhance company-wide operational efficiency, and improve organizational management capabilities, ensuring that it evolves and keeps up with the times to support the company's long-term business development.

### 2. Operating Incomes and Operating Costs

#### 1) Operating income structure

					Unit: RMB
	2021		202	20	YoY Change
	Amount	Proportion to operating income	Amount	Proportion to operating income	(%)
Total operating income	81,420,053,539.27	100.00%	63,503,450,891.78	100.00%	28.21%
Classified by industry					
AIoT products and services	81,420,053,539.27	100.00%	63,503,450,891.78	100.00%	28.21%
Classified by product					
Products and services for main business <sup>20</sup>	65,145,683,074.74	80.01%	55,720,857,614.39	87.74%	16.91%
Constructions	4,003,746,727.88	4.92%	1,614,246,940.42	2.54%	148.03%
Subtotal	69,149,429,802.62	84.93%	57,335,104,554.81	90.29%	20.61%
Smart home business	3,948,427,896.29	4.85%	2,918,904,302.62	4.60%	35.27%
Robotic business	2,761,636,666.33	3.39%	1,358,653,520.55	2.14%	103.26%

<sup>&</sup>lt;sup>20</sup> Main business refers to the business parts other than the innovative businesses.



	20	21	2020		YoY Change
	Amount	Proportion to operating income	Amount	Proportion to operating income	(%)
Thermal imaging business <sup>21</sup>	2,214,127,005.65	2.72%	35,203,088.48	0.06%	6,189.58%
Auto electronics business	1,431,895,295.48	1.76%	654,061,647.69	1.03%	118.92%
Storage business	1,384,585,038.78	1.70%	791,441,667.03	1.25%	74.94%
Other innovative businesses <sup>22</sup>	529,951,834.12	0.65%	410,082,110.60	0.65%	29.23%
Subtotal	12,270,623,736.65	15.07%	6,168,346,336.97	9.71%	98.93%
Classified by region					
Domestic	59,434,989,705.17	73.00%	45,806,567,913.73	72.13%	29.75%
Overseas	21,985,063,834.10	27.00%	17,696,882,978.05	27.87%	24.23%

Note: The data listed in the subtotals may differ slightly from the aggregated results of the relevant individual data due to rounding.

## **Operating income structure**<sup>23</sup>

Unit: RMB 100mn

		2021	2020	YoY Change (%)	2019
	PBG	191.61	159.87	19.85%	153.14
Domestic	EBG	166.29	147.24	12.94%	124.49
main	SMBG	134.90	92.09	46.49%	93.46
business	Other products and services for main business	9.43	9.71	-2.88%	8.26
Overseas main business	Products and services for main business	189.26	164.44	15.09%	152.86
]	nnovative businesses <sup>24</sup>	122.71	61.68	98.93%	44.37
	Total	814.20	635.03	28.21%	576.58

<sup>&</sup>lt;sup>21</sup> The thermal imaging business' 2020 operating income only includes thermal imaging sensor's operating income.

<sup>&</sup>lt;sup>22</sup> Other innovative businesses include the products and services of the innovative business subsidiaries, such as HikFire, Rayin and HikImaging. Same below.

<sup>&</sup>lt;sup>23</sup> The operating income from domestic main business (including three major business groups in domestic and other products and services for main business) and overseas main business only include Hikvision's main business's products and services, excluding operating income from innovative businesses.

<sup>&</sup>lt;sup>24</sup> Innovative businesses' operating income includes its domestic and overseas operating income

# 2) Industries, products or regions accounting for more than 10% of the Company's operating income or operating profit

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

						Unit: RMB
	Operating income	Operating cost	Gross margin	YoY Change (%) of operating income	YoY Change (%) of operating cost	YoY Change (%) of gross margin
Classified by industr	Classified by industry					
AIoT products and services	81,420,053,539.27	45,329,400,332.65	44.33%	28.21%	33.49%	-2.20%
Classified by produc	t					
Products and services for main business	65,145,683,074.74	34,944,137,550.04	46.36%	16.91%	21.60%	-2.07%
Constructions	4,003,746,727.88	3,084,364,818.86	22.96%	148.03%	127.88%	6.81%
Innovative businesses	12,270,623,736.65	7,300,897,963.75	40.50%	98.93%	88.77%	3.20%
Subtotal	81,420,053,539.27	45,329,400,332.65	44.33%	28.21%	33.49%	-2.20%
Classified by region						
Domestic	59,434,989,705.17	33,005,873,384.67	44.47%	29.75%	30.84%	-0.46%
Overseas	21,985,063,834.10	12,323,526,947.98	43.95%	24.23%	41.15%	-6.71%

When the statistical caliber of the Company's main business data is adjusted during the reporting period, the Company's main business data would be adjusted according to the end of the reporting period in the most recent period.

 $\Box$  Applicable  $\sqrt{$  Inapplicable

## 3) If revenue from physical products sales greater than revenue from providing services

 $\sqrt{\text{Yes}}$   $\square$  No

Industry	Item	Unit	2021	2020	YoY Change (%)
AIoT products and	Sales volume	Per unit	194,410,923	139,309,170	39.55%
services	Output volume	Per unit	207,744,025	138,254,927	50.26%

Explanation on why the related data varied by more than 30% on a YOY basis

√Applicable □Inapplicable

During the reporting period, the Company's performance maintained steady growth, while implementing a high inventory strategy to secure the supply chain, resulting in an increase in both sales and production.

### 4) Fulfillment of signed significant sales contracts and procurement contracts by the reporting period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

#### 5) Operating cost structure

Classified by industry

						Unit: RMB
		2021		2020		YoY Change
Industry	Item	Amount	Proportion to operating cost	Amount	Proportion to operating cost	(%)
AIoT products and services	Operating cost	45,329,400,332.65	100.00%	33,957,697,857.73	100.00%	33.49%

#### Classified by product

						Unit: RMB
		2021		2020		VaV Change
Product	Item	Amount	Proportion to operating cost	Amount	Proportion to operating cost	YoY Change (%)
Products and services for main business	Operating cost	34,944,137,550.04	77.09%	28,736,623,697.81	84.62%	21.60%
Constructions	Operating cost	3,084,364,818.86	6.80%	1,353,524,939.67	3.99%	127.88%
Innovative businesses	Operating cost	7,300,897,963.75	16.11%	3,867,549,220.25	11.39%	88.77%
Subtotal	Operating cost	45,329,400,332.65	100.00%	33,957,697,857.73	100.00%	33.49%

## 6) Any change in consolidation scope during the reporting period

 $\sqrt{\text{Yes}} \square \text{No}$ 

During the reporting period, the Company has newly set up one wholly-owned subsidiaries and four holding subsidiaries, acquired two subsidiaries, added a new subsidiary due to the change in voting rights, liquidated and cancelled four subsidiaries, reduced one subsidiary due to the cancellation of the entrusted management agreement, which have caused the change in consolidation scope. For more details, please refer to Financial Report Note (VI) "Changes in consolidation scope" of the financial statement.

# 7) Significant change or adjustment of the Company's business, products or services during the reporting period:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### 8) Major customers and suppliers:

# Sales to major customers of the Company

Sales to top five customers (RMB)	2,763,453,340.67
Total sales to top five customers as a percentage of the total sales for the year (%)	3.39%
Total sales to the related parties in top five customers as a percentage of the total sales for the year (%)	0.00%

### Information on top five customers

No.	Name of Customer	Sales Amount (RMB)	Percentage of total sales for the year
1	First	786,004,392.08	0.97%
2	Second	751,944,177.56	0.92%
3	Third	471,189,238.44	0.58%
4	Fourth	402,390,635.86	0.49%
5	Fifth	351,924,896.73	0.43%
Total		2,763,453,340.67	3.39%

#### Other information of major customers

 $\Box$ Applicable  $\sqrt{Inapplicable}$ 

## Major suppliers of the Company

Total purchases from top five suppliers (RMB)	8,818,154,553.89
Total purchases from top five suppliers as a percentage of the total purchases for the year (%)	17.81%
Total purchases from the related parties in the top five suppliers as a percentage of the total purchases for the year (%)	2.93%

Information on top five suppliers of the Company

No.	Supplier Name	Purchase Amount (RMB)	Percentage of total purchase for the year
1	First	4,045,973,116.10	8.17%
2	Second	1,499,990,535.26	3.03%
3	Third	1,448,578,862.48	2.93%
4	Fourth	947,822,146.38	1.91%
5	Fifth	875,789,893.67	1.77%
Total		8,818,154,553.89	17.81%

Other information of major suppliers

 $\Box$  Applicable  $\sqrt{$  Inapplicable



# 3. Expenses

Unit: RMB

	2021	2020	YoY Change (%)	Note of significant change
Selling expenses	8,586,443,668.02	7,377,790,744.58	16.38%	Continue to increase investment in domestic and overseas marketing networks
Administrative expenses	2,132,250,463.96	1,790,013,088.76	19.12%	Due to the expansion of the Company's business scale and increased number of employees
Financial expenses	-133,343,257.84	396,254,772.56	-133.65%	Affected by foreign exchange rate fluctuations, foreign exchange losses decreased
R&D expenses	8,251,645,101.39	6,378,651,762.42	29.36%	Continue to increase R&D investment

### 4. R&D Investment

√Applicable □Inapplicable

# R&D personnel of the Company

	2021	2020	Change Percentage
Number of R&D staff (ppl)	25,352	20,597	23.09%
R&D staff as percentage of Total headcount	48.06%	48.25%	-0.19%
Education structure of R&D staff	-	-	-
Bachelor degree	16,305	12,873	26.66%
Master's degree	7,159	6,275	14.09%
Master's degree or above	129	100	29.00%
others	1,759	1,349	30.39%
Age composition of R&D staff	-	-	-
Under 30 years old	15,388	12,945	18.87%
30-40 years old	9,425	7,324	28.69%
Over 40 years old	539	328	64.33%

# R&D investment of the Company

	2021	2020	Change Percentage
Amount of R&D expenses (RMB)	8,251,645,101.39	6,378,651,762.42	29.36%
R&D expenses as a percentage of operating income	10.13%	10.04%	0.09%



	2021	2020	Change Percentage
Capitalized R&D expenses (RMB)	0.00	0.00	0.00%
Capitalized R&D expenses as a percentage of R&D expenses	0.00%	0.00%	0.00%

Reason and effect of significant change in the composition of the Company's R&D personnel

 $\Box$  Applicable  $\sqrt{$  Inapplicable

Reason of significant change of total R&D expenses as a percentage of operating income as compared to last year

 $\Box$  Applicable  $\sqrt{$  Inapplicable

Reason and explanation of its reasonableness of significant change of the capitalized R&D expenses

 $\Box$  Applicable  $\sqrt{$  Inapplicable

#### 5. Cash Flow

			Unit: RMB
Item	2021	2020	YoY Change (%)
Subtotal of cash inflows from operating activities	90,984,859,750.26	72,871,160,858.85	24.86%
Subtotal of cash outflows from operating activities	78,276,335,063.27	56,783,004,292.18	37.85%
Net cash flows from operating activities	12,708,524,686.99	16,088,156,566.67	-21.01%
Subtotal of cash inflows from investing activities	6,370,051,168.33	1,904,368,743.55	234.50%
Subtotal of cash outflows from investing activities	9,526,380,351.62	4,459,002,700.82	113.64%
Net cash flows from investing activities	-3,156,329,183.29	-2,554,633,957.27	-23.55%
Subtotal of cash inflows from financing activities	6,123,487,832.52	7,057,371,569.92	-13.23%
Subtotal of cash outflows from financing activities	15,914,985,474.12	11,617,474,855.16	36.99%
Net cash flows from financing activities	-9,791,497,641.60	-4,560,103,285.24	-114.72%
Net increase in cash and cash equivalents	-420,893,449.11	8,509,169,869.91	-104.95%

Explanation of why the related data varied significantly on a YoY basis

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

The main reason for the change in net cash flow from operating activities was the increased expenditure on stocking during the reporting period; the main reason for the change in net cash flow from investing activities was the purchase of long-term assets and the increase in external equity investment during the reporting period; the main reason for the change in net cash flow from financing activities was mainly due to the net outflow of borrowings and the increase in dividend distribution during the reporting period.

Explanation of reasons leading to the material difference between cash flow from operating activities during the reporting period and net profit for the year



 $\Box$  Applicable  $\sqrt{$  Inapplicable

# **IV. Non-core Business Analysis**

□Applicable √Inapplicable

# V. Analysis of Assets and Liabilities

#### 1. Material changes of asset items

Unit: RMB January 1st 2021 December 31st 2021 YoY Percentage Percentage Change Note of significant change Amount of total Amount of total (%) assets assets -6.39% No significant change Cash and bank balances 34,721,870,931.36 33.43% 35,459,729,108.27 39.82% Accounts receivable 26,174,773,100.42 25.20% 22,056,067,917.79 24.77% 0.43% No significant change Operating income of 1.00% 1,411,372,624.91 1.36% 319,404,544.10 0.36% Contract assets constructions increased Increase in sales led to Inventories 17,974,112,407.60 17.31% 11,477,906,040.70 12.89% 4.42% increased stocking Long-term equity 982,165,546.45 0.95% 864,026,710.23 0.97% -0.02% No significant change investment Fixed assets 6,695,590,671.27 6.45% 5,830,677,198.85 6.55% -0.10% No significant change Increase in construction investments on Science Construction in process 2,323,336,098.68 2.24% 1,425,235,193.72 1.60% 0.64% and Technology Parks in various locations 0.11% Increase in rental of Right-of-use assets 566,393,672.75 0.55% 392,997,553.30 0.44%0.05% buildings Lease liabilities 317,951,879.21 0.26% 0.31% 230,055,273.70 -0.57% No significant change Short-term borrowings 4,074,962,469.97 3.92% 3,999,246,634.59 4.49% Contract liabilities 2,580,894,226.59 2.48% 2,161,166,671.26 2.43% 0.05% No significant change Long-term borrowings 3,284,371,642.52 3.16% 1,961,167,761.30 2.20% 0.96% Decrease in project Non-current liabilities borrowings 596,915,360.58 0.57% 3,644,798,414.28 4.09% -3.52% due within one year

High proportion of overseas assets

 $\Box$  Applicable  $\sqrt{$  Inapplicable



# 2. Assets and liabilities measured at fair value

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

									Unit: RMB
Item	Item Opening balance		Profit or loss from change in fair value during the period	Difference on translation of financial statements dominated in foreign currency	Provision for decline in value during the current period	Purchased amount during the period	Sales during the period	Other changes	Closing balance
Financial a	assets								
1. Deriva financ assets	cial	22,679,846.77	11,711,591.07	-71,427.01					34,320,010.83
2. Other curren financ assets	nt vial	491,939,067.27	-53,214,895.05						438,724,172.22
3. Receiv for financ	vables ving	1,959,601,195.25						-643,566,073.19	1,316,035,122.06
Subtotal of financial as		2,474,220,109.29	-41,503,303.98	-71,427.01				-643,566,073.19	1,789,079,305.11
Financial Liabilities		7,405,771.15	3,303,279.51	-40,174.07					4,062,317.57

Whether there were any material changes on the measurement attributes of major assets of the Company during the reporting period:

 $\Box$  Yes  $\sqrt{No}$ 

# 3. Assets right restrictions as of the end of reporting period

Unit: RMB

Item	Closing Book Value (RMB)	Reasons for being restricted
Cash and bank balances	117,926,502.16	Various cash deposits and other restricted funds
Notes receivable	711,238,103.83	Endorsed to suppliers
Receivables for financing	4,337,929.69	Pledge for issuance of bank's acceptance bills
Accounts receivable	197,358,387.51	Pledge for long-term debts
Contract assets	104,842,914.69	Pledge for long-term debts
Intangible assets	62,497,900.00	Pledge for long-term debts
Other non-current assets	1,667,721,944.32	Pledge for long-term debts
right-of-use assets	23,923,145.37	Fixed assets leased under finance leases
Total	2,889,846,827.57	



# **VI.** Investments

# 1. Overview

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Investment in 2021 (RMB)	Investment in 2020 (RMB)	YoY (%)
2,534,882,042.80	2,666,845,621.23	-4.95%

# 2. Significant equity investment during the current reporting period

 $\Box$ Applicable  $\sqrt{Inapplicable}$ 

# 3. Significant non-equity investment during the current reporting period

# $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

Unit: RMB

Project name	Invest method	Fixed assets investment or not	Project industry	Investment during the current reporting period	Cumulative amount of investment by the end of the current reporting period	Source of funds	Project schedule	Reasons for not reaching planned progress and expected benefits	Disclosure Date (if applicable)	Disclosure Index (if applicable)
Chengdu Science and Technology Park Projec		Yes	AIoT products and services	374,660,696.76	896,287,490.09	Self- fund	45.52%	None	September 23 <sup>rd</sup> 2017	Announcement on Investment and Construction of Chengdu Science and Technology Park Project in Chengdu (No. 2017-033)
Chongqing Science and Technology Park Project-Phase II	Self- built	Yes	AIoT products and services	175,974,725.06	425,784,975.85	Self- fund	100.00%	None	September 23 <sup>rd</sup> 2017	Announcement on Investment and Construction of Chongqing Science and Technology Park Project in Chongqing (No. 2017- 035)
Hangzhou Innovation Industry Park	Self- built	Yes	AIoT products and services	55,489,079.67	393,310,782.16	Specific Loan	38.33%	None	September 23 <sup>rd</sup> 2017	Announcement on Investment and Construction of Hangzhou Innovation Industry Park Project in Hangzhou (No. 2017-034)
Security Industrial Base (Tonglu) - Phase II Continued Construction	Self- built	Yes	AIoT products and	315,975,312.09	390,702,241.74	Self- fund	45.91%	None	October 16 <sup>th</sup> 2014	Announcement on Investment and establishment of a wholly-owned subsidiary in Tonglu and new

Hikvision 2021 Annual Report

Project name	Invest method	Fixed assets investment or not	Project industry	Investment during the current reporting period	Cumulative amount of investment by the end of the current reporting period	Source of funds	Project schedule		Disclosure Date (if applicable)	Disclosure Index (if applicable)	
Project			services							construction of Hikvision Security Industrial Base (Tonglu) Project (2014-044)	
Xi'an Science and Technology Park Project	Self- built	Yes	AIoT products and services	168,330,152.28	181,009,327.21	Self- fund	7.95%	None	September 23 <sup>rd</sup> 2017	Announcement on Investment and Construction of Xi'an Science and Technology Park in Xi'an (2017- 031)	
EZVIZ Industrial Base (Infrastructure Part)	Self- built	Yes	Smart home business	92,990,105.25	95,322,172.33	Self- fund	12.67%	None	-	-	
Shijiazhuang Science and Technology Park Project	Self- built	Yes	AIoT products and services	98,124,086.75	100,184,640.21	Self- fund	11.16%	None	March 22 <sup>nd</sup> 2018	Announcement on Investment and Construction of Shijiazhuang Science and Technology Park in Shijiazhuang (2018-016)	
Security Industrial Base (Tonglu) Phase III	Self- built	Yes	AIoT products and services	48,109,601.71	48,768,905.95	Self- fund	6.33%	None	-	-	

Hikvision 2021 Annual Report

Project name	Invest method	Fixed assets investment or not	Project industry	Investment during the current reporting period	Cumulative amount of investment by the end of the current reporting period	Source of funds	Project schedule	Reasons for not reaching planned progress and expected benefits	Disclosure Date (if applicable)	Disclosure Index (if applicable)
Zhengzhou Science and Technology Park Project	Self- built	Yes	AIoT products and services	28,500,043.29	42,029,452.82	Self- fund	8.67%	None	-	-
Wuhan Intelligence Industry Park Project	Self- built	Yes	AIoT products and services	19,234,593.60	21,605,140.49	Self- fund	0.91%	None	September 23 <sup>rd</sup> 2017	Announcement on Investment and Construction of Wuhan Intelligence Industry Park in Wuhan (2017-036)
Total				1,377,388,396. 46	2,595,005,128.85					

Note: In accordance with the Company's *Authorization Management System*, EZVIZ Industrial Base project, Security Industrial Base (Tonglu) Phase III project and Zhengzhou Science and Technology Park project were approved by the Chairman of the Board of Directors.

## 4. Financial asset investment

#### (1) Securities Investments

 $\Box$  Applicable  $\sqrt{$  Inapplicable

There no such case in the reporting period.

# (2) Derivatives Investments

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Unit: 0,000 RMB

Operation party of derivatives investment	Whether Related party	related	Type of derivatives investment	derivatives	Initial date	Termination date	Opening investment amount	Purchased amount during the reporting period	Sold amount during the reporting period	Impairment provisions (if any)	Closing investment amount	Proportion of closing investment amount to the Company's net assets at the end of the reporting period	Actual gain or loss during the reporting period
Commercial bank	No	No	foreign exchange contract	351,670.38	October 21 <sup>st</sup> 2020	August 30 <sup>th</sup> 2024	351,670.38	693,947.52			205,031.34	3.14%	11,360.81
Total				351,670.38			351,670.38	693,947.52			205,031.34	3.14%	11,360.81
Capital source	e of deriv	vatives inve	stment	Company's own fund									
Prosecution	(if applica	uble)		Inapplicable									
Announcement date for approvals of derivatives investment from the Board of Directors (if any)				April 17 <sup>th</sup> 2021									
Announcement date for approvals of derivatives investment from the general meeting of shareholders (if any)				Inapplicable									
Risk analysis	and cont	trol measure	es	For details of the r	isk analy	sis and contr	ol measures, please	refer to the Annou	incement c	on Conductin	g Foreign Exchang	ge Hedging T	Fransactions in

(including but not limited to, market risk,	2021 (NO. 2021-030) dated April 17 <sup>th</sup> 2021 of the Company
liquidity risk, credit risk, operational risk,	
legal risk, etc.) of holding derivatives during	
the reporting period	
Change of market price or fair value of	
invested derivatives during the reporting	The Company carried out recognition and measurement in accordance with the Accounting Standards for Business Enterprises Article 22 -
period; specific methods, related	Recognition and Measurement of Financial Instruments, Chapter VII "Determination of Fair Value". During the reporting period, a total of RMB
assumptions and parameter setting of the	15.01 million of gains from changes in fair value of derivatives were recognized, and the fair value is determined according to the exchange rate
derivatives' fair value analysis should be	and interest rate provided by banks and other pricing service institutions, measured and recognized on a monthly basis.
disclosed	
During the current reporting period, whether	
there was significant changes of accounting	
policies and accounting principles of the	Inapplicable
Company's derivatives comparing to the	
prior reporting period	
	The relevant approval procedures for the Company's foreign exchange hedging business complies with the relevant national laws and regulations
Specific entries on the Compony's	and the relevant provisions of the Articles of Association. The Company has established a sound process for the organization, business operation
Specific opinions on the Company's derivatives investments and risk control from independent directors	and approval for conducting foreign exchange hedging business, as well as the Foreign Exchange Hedging Management System. Under the premise
	of ensuring normal production and operation, the Company conducts foreign exchange hedging business, which enables the Company to avoid and
nom maependent directors	prevent sharp exchange rate fluctuations and its adverse effects on the Company's operations, and contributes to controlling foreign exchange risks.
	There is no damage to the interests of the Company nor of its shareholders.

# 5. Use of raised funds

 $\Box$  Applicable  $\sqrt{$  Inapplicable

During the reporting period, there was no use of raised fund

# VII. Disposal of Significant Assets and Equity

# 1. Disposal of significant assets:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

There is no disposal of significant asset for the Company during the current reporting period.

# 2. Sale of significant equity:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

# VIII. Analysis of Major Subsidiaries and Holding Companies

Information about obtaining and disposal of subsidiaries during the reporting period

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Company name	Equity acquisition and disposal method during the reporting period	Impact on overall production results	
Daishan Hailai Yunzhi Technology Co., Ltd.	Change in voting rights	Business development	
EQUIPOS PROFESIONALES DE COMUNICACIÓN S.A. DE C.V.	Transfer of equity in cash	Expand overseas sales channels	
SISTEMAS Y SERVICIOS DE COMUNICACIÓN, S.A. DE C.V.	Transfer of equity in cash	Expand overseas sales channels	
Shanghe Smart City Technology Co., Ltd.	Cash contribution	Business development	
Chongqing EZVIZ Electronics Co., Ltd.	Cash contribution	Business development	
Hangzhou Hikrobot Automation Co., Ltd.	Cash contribution	Business development	
Hangzhou Haina Yuzhi Entrepreneurship Investment Partnership Co., Ltd.	Cash contribution	Business development	
Hikvision Chile SpA	Cash contribution	Expand overseas sales channels	
Hangzhou EZVIZ Technology Co., Ltd.	Releasing the entrustment agreement	Reorganization	
Hundure Technology (Shanghai) Co., Ltd.	Liquidation & cancellation	Reorganization	
Secure Holding Limited	Liquidation & cancellation	Reorganization	
Guangzhou Hikvision Technology Co., Ltd.	Liquidation & cancellation	Reorganization	
Hikvision Joint-Stock Company (Original name: ZAO Hikvision)	Liquidation & cancellation	Reorganization	

# IX. Structural Entities Controlled by the Company

 $\Box$  Applicable  $\sqrt{$  Inapplicable

# X. Outlook for the Future Development of the Company

## 1. Development Trends for the Industry

AIoT is a fundamental capability that provides the possibility of connection and interaction between people and things as well as between things. This is happening right now, with a huge impact on the way decisions are made. Boasting a trillion RMB-level market potential, AIoT will set off a wave of technological innovation that will sweep across thousands of industries with unprecedented changes. Proceeding from industrial businesses based on large-scale scenarios, the company has made abundant preparations in many aspects such as supporting technologies, software and hardware products, system capabilities, business organization and marketing systems that related to AIoT. We are confident that Hikvision will be able to seize the opportunities brought by the rapid development of AIoT.

#### 2. Development strategy of the company

In the future, Hikvision is committed to serving various industries through its cutting-edge technologies of machine perception, artificial intelligence, and big data, leading the future of AIoT: Through comprehensive machine perception technologies, we aim to help people better connect with the world around them; With a wealth of intelligent products, we strive to identify and satisfy diverse demands by delivering intelligence at your fingertips; Through innovative AIoT applications, we are dedicated to empowering every individual to enjoy a better future by building an intelligent world that is more convenient, efficient and secure.

#### 3. Key priorities in 2022

(1) Continuously investing in R&D to preserve advantages in technical and product R&D.

(2) Firmly implement business strategies and seize more business opportunities.

(3) Continue to expand city-based business layout in Chinese, promote the differentiated layout of "One Country, One Policy" in overseas, and optimize the coordination and division of responsibilities between the headquarters and regional centers.

(4) Expand the scale of innovative businesses, pursuing better market positions in their respective segments, and strengthen the cooperation between core business and new innovative businesses.

(5) Strengthen the coordination of R&D, production and sales, and maintain prudent supply chain management to ensure supply chain security.

(6) Promote the integration and mutual promotion of the Company's organizational framework, improve operational efficiency, and give full play to the advantages of economies of scale.

# XI. Reception of Activities including Research, Communication and Interviews during the Report Period

# $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

Time of reception	Location of reception	Method of reception	Type of reception object	Reception object	The main content of the discussion and the information provided	Index of basic situation of the research
December 22 <sup>nd</sup> 2020 – January 11 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	106 investors including China Asset Management- Zhang Fan, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From December 22 <sup>nd</sup> 2020 to January 11 <sup>th</sup> 2021
January 12 <sup>th</sup> 2021 – January 29 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	138 investors including Huachuang Securities-Meng Can, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From January 12 <sup>th</sup> 2021 to January 29 <sup>th</sup> 2021
February 1 <sup>st</sup> 2021 – March 2 <sup>nd</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	56 investors including Haitong Securities-Wang Jing, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From February 1 <sup>st</sup> 2021 to March 2 <sup>nd</sup> 2021
March 3 <sup>rd</sup> 2021 – March 17 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	145 investors including Orient Securities-Kuai Jian, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From March 3 <sup>rd</sup> 2021 to March 17 <sup>th</sup> 2021
April 17 <sup>th</sup> 2021	Headquarters meeting room of the Company	Performance result conference call	Institutional investors; individuals	928 investors including E-fund Management-Ni Chunyao, etc.	The Company's operations in 2020 and the first quarter of 2021	CNINF, Investor Relations Activity Record: April 17 <sup>th</sup> 2021
April 18 <sup>th</sup> 2021 – April 30 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	220 investors including Ping An Fund Management-Zhu Chunyu, etc.	The Company's operating conditions and future prospects	
May 10 <sup>th</sup> 2021 – May 21 <sup>st</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	95 investors including Bosera Asset Management- Chen Pengyang, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From May 10 <sup>th</sup> 2021 to May 21 <sup>st</sup> 2021
May 24th 2021	Headquarters	Site Research	Institutional	79 investors	The Company's	CNINF, Investor Relations



Time of reception	Location of reception	Method of reception	Type of reception object	Reception object	The main content of the discussion and the information provided	Index of basic situation of the research
– June 11 <sup>th</sup> 2021	meeting room of the Company	and telephone communication	investors	including Orient Securities Asset Management- Zhang Mingyu, etc.	operating conditions and future prospects	Activity Record: From May 24 <sup>th</sup> 2021 to June 11 <sup>th</sup> 2021
June 15 <sup>th</sup> 2021 – June 25 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	39 investors including Shenwan Hongyuan Asset Management-Qin Qing, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From June 15 <sup>th</sup> 2021 to June 25 <sup>th</sup> 2021
July 24 <sup>th</sup> 2021	Headquarters meeting room of the Company	Performance result conference call	Institutional investors; individuals	908 investors including Essence Fund-Chen Zhenyu, etc.	The Company's operations in the first half of 2021	CNINF, Investor Relations Activity Record: July 24 <sup>th</sup> 2021
July 26 <sup>th</sup> 2021 – August 6 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	136 investors including Perseverance Asset Management- Zhang Jifeng, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From July 26 <sup>th</sup> 2021 to August 6 <sup>th</sup> 2021
August 9 <sup>th</sup> 2021 – August 27 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	84 investors including Taikang Asset Management-Li Xiaojin, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From August 9 <sup>th</sup> 2021 to August 27 <sup>th</sup> 2021
August 30 <sup>th</sup> 2021 – September 17 <sup>th</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	68 investors including Yinhua Fund Management-Du Yu, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From August 30 <sup>th</sup> 2021 to September 17 <sup>th</sup> 2021
October 23 <sup>rd</sup> 2021	Headquarters meeting room of the Company	Performance result conference call	Institutional investors; individuals	620 investors including ICBC Credit Suisse- Yang Ke, etc.	The Company's operations in the third quarter of 2021	CNINF, Investor Relations Activity Record: October 23 <sup>rd</sup>
November 15 <sup>th</sup> 2021 – December 3 <sup>rd</sup> 2021	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	39 investors including Fullgoal Fund-Zhou Zongzhou, etc.	The Company's operating conditions and future prospects	CNINF, Investor Relations Activity Record: From November 15 <sup>th</sup> 2021 to December 3 <sup>rd</sup> 2021



# Hikvision 2021 Annual Report

Time of reception	Location of reception	Method of reception	Type of reception object	Reception object	The main content of the discussion and the information provided	Index of basic situation of the research
December 14th	Headquarters	Site Research		37 investors	The Company's	CNINF, Investor Relations
2021 -	meeting room	and telephone	Institutional	including	operating conditions	Activity Record: From
December 31st		communication	investors	Tianhong Fund-	and future prospects	December $14^{th}$ 2021 to
2021	Company	communication	ancation	Zhang Tao, etc.	and future prospects	December 31 <sup>st</sup> 2021



# Section IV Corporate Governance

#### I. Basic Situation of Corporate Governance

Since the inception of the Company, we have been strictly following relevant laws and regulations such as the "Company Law", "Securities Law", "Code of Corporate Governance of Listed Companies", "Rules Governing the Listing of Shares on Shenzhen Stock Exchange", and "Shenzhen Stock Exchange Listed Companies Self-Regulatory Supervision Guidelines No. 1 - Standardized Operation of Main Board Listed Companies" as well as the requirements of the regulations and regulatory documents of the regulatory authorities, through continuous improvement of the "3+1" corporate governance structure comprising shareholders' meeting, the Board of Directors, the Board of Supervisors, and the management taking into consideration the actual situation of the Company, and strictly follow the principle of disclosing information in a true, accurate, complete, timely and impartial manner; we have also established and improved internal management and control system, promoted the standardized operation of the Company and ensured the legitimate rights and interests of the Company and investors. During the reporting period, the basic details of corporate governance is as follows:

#### 1. Shareholders and shareholders' meeting

We have ensured the equal status and full rights for all shareholders, especially small and medium shareholders. During the reporting period, the Company held a total of 3 general meetings of shareholders, all of which were convened by the Company's Board of Directors, and witnessed by lawyers on-site with legal opinions issued. Proposals were reviewed in compliance with legal procedures to ensure that all shareholders have the right to know, participate, and vote on major issues of the Company and to fully exercise their legal rights.

#### 2. The controlling shareholders and listed company

The Company's controlling shareholders had no improper conduct and have never directly or indirectly interfered with the Company's decision-making and operating activities overriding shareholders' meeting. There are no such cases that controlling shareholders occupy the Company's funds or the Company provides guarantees for controlling shareholders. The Company, with its own complete business system and management capabilities, has been independent of controlling shareholders in terms of business, personnel, assets, organizations, and finances. The Company's Board of Directors, Board of Supervisors and internal institutions has been operating separately to ensure that major company decisions are made and implemented by the Company.

#### 3. Directors and the Board of Directors

The Company's Board of Directors, operating in a normalized way, has performed its functions invested by the "Articles of Association" and relevant laws and regulations, and implemented the relevant decisions of the shareholders' meeting. The number and composition of the Company's Board of Directors comply with the requirements of laws and regulations. There are four committees for strategy, audit, nomination, remuneration and appraisal under it. Each committee has a clear division of labor, clear powers and responsibilities, and effective operation. All directors of the Company have performed their duties with integrity, loyalty, diligence, professionalism and due diligence, and earnestly safeguard the legitimate rights and interests of the Company and shareholders. The independent directors of the Company performed their duties independently and unaffected in accordance with the "Rules for Independent Directors of Listed Companies" and other relevant regulations, attended the Company's Board of Directors and shareholders' general meetings, and expressed their independent opinions on matters involving the interests of small and medium investors such as related transactions and external guarantees, which ensured the standardized operation of the Company.

During the reporting period, the Company convened 9 board meetings, reviewed and approved 84 proposals including the "Annual Report 2020 and its Summary", "Proposal on the Initial Public Share Offering and Listing on the STAR Market of the Shanghai Stock Exchange of the Subsidiary, Hangzhou EZVIZ Network Co., Ltd", "2021 Restricted Stock Plan (Revised Draft) and its Summary" and "Proposal on Authorizing the Company's Management to Start the Spin-off for the Preliminary Preparations for Listing on the Domestic Stock Markets of the Subsidiary, Hangzhou Hikrobot Technology Co., Ltd..", etc.

#### 4. Supervisors and Board of Supervisors

The number and composition of the Company's Board of Supervisors meet the requirements of laws and regulations; the Company's supervisors have diligently performed their duties and obligations, and carried out supervision and inspection functions being responsible to shareholders, and supervised the Company's financial status, operating conditions and related transactions, and the performance of duties by directors and senior managers to fully protect the legal rights and interests of the Company and all shareholders.

During the reporting period, the Company held 9 Board of Supervisors' meetings, reviewed and approved 40 proposals including the "2021 Restricted Stock Scheme (Revised Draft) and its Summary" and "Participant List of the 2021 Restricted Stock Scheme ", and to verify the participant list specified in the "2021 Restricted Stock Scheme (Revised Draft)". It concludes that the participants listed in the restricted stock scheme are qualified according to relevant laws, regulations and normative documents such as the "Measures for the Management of Equity Incentives"

*of Listed Companies*", and are within the scope of the participants specified in the Company's 2021 restricted stock scheme, and their qualifications as the participants in the 2021 restricted stock scheme are legal and effective, which is conductive to the effective performance of the responsibilities of the Board of Supervisors.

#### 5. Performance appraisal and incentive and restraint mechanism

The Company has established a complete performance appraisal system and remuneration system. The appointment procedures for senior management personnel are open and transparent, and comply with relevant laws and regulations. The remuneration and appraisal committee under the Company's Board of Directors is responsible for performance appraisal of the Company's senior management at the end of the year to determine their remuneration. To further set up and improve the Company's incentive mechanism and strengthen the concept of sustainable development of both the Company and employees, the Company has adopted a restricted share scheme and the plan of core staff's co-investment into innovation business to achieve its development strategy and business objectives, and realize sustainable health development.

#### 6. Information disclosure and transparency

The Company has strictly followed the relevant laws and regulations and the "*Company Information Disclosure Management Measures*" to disclose relevant information truthfully, accurately, completely, timely and impartially, and thoroughly implemented the "*Company Information Insider Registration Management System*" to register insiders and file to further standardize inside information management and to ensure that all shareholders and other stakeholders of the Company have equal access to company information. During the reporting period, the Company disclosed 4 periodic reports and 78 temporary announcements. The Company's information disclosure has been recognized by the regulatory authorities: the Company has been rated as Level A by the Shenzhen Stock Exchange for 11 consecutive years in the main board listed company information disclosure assessment.

#### 7. Continue to improve the internal management system

In accordance with the latest revisions of relevant laws, administrative regulations and normative documents such as the "*Company Law*" and the "*Securities Law*", the Company revised the "*Rules of Procedure for the General Meeting of Shareholders*", the "*Rules of Procedure for the Board of Directors*", the "*Work Regulations for the Independent Directors*" and other internal management systems based on the actual situation of the Company during the reporting period. The Company strengthened the internal management, further improved the corporate governance structure, promoted the Company's compliance operation, and protected the legitimate rights and interests of the Company and shareholders.

#### 8. Investor relations activities

The Company has proactively organized performance briefings after the disclosure of regular reports, held investor reception activities to actively listen to investors' opinions and suggestions, and released the "*Investor Relations Activity Record*" after the event to ensure fair access to company information by all investors. In daily work, the Company has kept in touch with investors through multiple channels such as telephone, e-mail, and irm.cninfo.com.cn to effectively interact and communicate with investors. The Company's investor relations efforts have been recognized by the capital market through the following awards: "Top 100 Chinese Main Board Listed Companies" in the 15th China's Most Valuable Listed Company Selection hosted by the Securities Times, "Top 50 Companies of Market Value" in the Wind 2021 Listed Company Market Value Ranking, "Top 5 Companies in Technology Hardware and Equipment Industry", "Top 50 Most Popular Listed Companies Ranked by Institutions", "Top 50 A-share Companies in the Hot List by Institutional Research" by Wind, "Top 100 Companies with High Quality Development" in the 2021 China's Listed Company with High Quality Development Selection hosted by High Preferred at Public Offerings for the Year" in the 2021 Jing Luan Award for Chinese Listed Companies hosted by JHB show.

Any significant incompliance for the laws, administrative regulations and the relevant regulatory documents issued by China Securities Regulatory Commission in respect of the Company's corporate governance:

 $\Box$  Yes  $\sqrt{No}$ 

There is no significant incompliance for the laws, administrative regulations and the relevant regulatory documents issued by China Securities Regulatory Commission in respect of the Company's corporate governance.

# II. Company's Independence in Assets, Personnel, Finances, Organizations and Businesses from Controlling Shareholders and Actual Controller

The Company is completely independent in business, personnel, assets, organizations, and finances from its shareholders. The Company has established a sound internal control system, being capable of operating independently with its complete and independent business.

- (1) Business independence: The Company has own production, purchases and sales systems, which are completely independent from controlling shareholders. Therefore, there is no competition among the Company, controlling shareholders, and related parties.
- (2) Personnel independence: The Company has independent personnel. The management has set up various independent departments, including R&D, production, administration, finance and operation management divisions, etc., and established complete management methods for labor, personnel, and salary management. Personnel of the Company is independent from controlling shareholders, e.g. the chairman is elected through the general meetings of the Board. In addition, the general manager, senior deputy general managers, the secretary of the Board, CFO, and other senior management personnel of the Company are only employed and remunerated by the Company, and do not hold any position in controlling shareholders and is not remunerated by controlling shareholders. Directors, supervisors and senior management personnel are appointed through legal procedures strictly in accordance with relevant regulations stipulated in *Company Law* and *Articles of Association*. There is no controlling shareholders.
- (3) Asset Completeness: The property rights of assets are explicitly between the Company and the controlling shareholders, and no assets, funds, or other resources owned by the Company are illegally and irregularly occupied or controlled by the controlling shareholders. Assets of the Company are integrated, including complete property rights of fixed assets for production, supporting assets for production, and intangible assets of patents, etc. The Company has the full control and ownership of all assets.
- (4) Independence in organizations: The Company's Board of Directors, Board of Supervisor, management and other internal organizations operate independently, and each functional department is independent from controlling shareholders in duty and personnel. There is no superior-subordinate relation between functional departments of controlling shareholders and those of the Company, which would have an impact on the Company's independent operations.
- (5) **Financial Independence:** The Company has established an independent financial department, as well as a sound and independent financial and accounting system. The Company makes financial decisions independently. There is a standardized financial accounting system and a financial management system for the Company's branches and subsidiaries, and there is no controlling shareholder intervention in the Company's financial and accounting activities. The Company has maintained accounts with banks independently of and do not share any bank account with our Controlling Shareholders. The Company has undertaken independent tax registration in accordance with applicable laws, and paid tax independently.

# **III. Horizontal Competition**

 $\Box$  Applicable  $\sqrt{$  Inapplicable
# IV. Annual General Meeting and Extraordinary General Meetings Convened during the Reporting Period

## 1. General Meetings Convened during the Reporting Period

Meeting	Nature	Proportion of participating investors	Convened Date	Disclosure Date	Resolution of the Meeting
The 1 <sup>st</sup> Extraordinary General Meeting of Shareholders in 2021	Extraordinary General Meeting of Shareholders	70.0131%	March 5 <sup>th</sup> 2021	March 6 <sup>th</sup> 2021	9 proposals including the Proposal on Election of Non-Independent Directors of the 5 <sup>th</sup> Session of the Board of Directors were reviewed and voted. For details, please refer to the Company's announcement: No. 2021-020.
2020 Annual General Meeting	Annual General Meeting	70.2837%	May 14 <sup>th</sup> 2021	May 15 <sup>th</sup> 2021	20 proposals including the 2020 Annual Report and Summary were reviewed and voted. For details, please refer to the Company's announcement: No. 2021-039.
The 2 <sup>nd</sup> Extraordinary General Meeting of Shareholders in 2021	Extraordinary General Meeting of Shareholders	69.1732%	September 27 <sup>th</sup> 2021	September 28 <sup>th</sup> 2021	10 proposals including the Proposal on the spin-off of the Company's subsidiary Hangzhou EZVIZ Network Co., Ltd. to be listed on the Science and Technology Innovation Board in compliance with relevant laws and regulations were reviewed and voted. For details, please refer to the Company's announcement: No. 2021-058.

# 2. Extraordinary General Meetings Convened at the Request of Preferred Shareholders with Resumed Voting Rights:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

## V. Information about Directors, Supervisors, Senior Management

## 1. Basic Situation

Name	Title	Tenure status	Gender	Age	Commencement of term of office	Termination of term of office	Shares held at the beginning of the Period (Shares)	Shares increased during the Period (shares)	Shares decreased during the Period (Shares)	Shares held at the end of the Period (Shares)	Reasons for increase or decrease of shares
Chen Zongnian	Chairman	Incumbent	Male	57	June 19 <sup>th</sup> 2008	March 4th 2024	0	0	0	0	
Qu Liyang	Director	Incumbent	Male	58	March 7 <sup>th</sup> 2018	March 4th 2024	15,750	0	0	15,750	
Wang Qiuchao	Director	Incumbent	Male	71	March 5 <sup>th</sup> 2021	March 4th 2024	35,000	0	0	35,000	
Hu Yangzhong	Director, General Manager (CEO)	Incumbent	Male	57	December 28 <sup>th</sup> 2001	March 4 <sup>th</sup> 2024	182,186,477	0	26,940,000	155,246,477	Personal financial needs
Wu Weiqi	Director, Standing Deputy General Manager	Incumbent	Male	58	March 1 <sup>st</sup> 2003	March 4 <sup>th</sup> 2024	11,371,389	0	2,740,300	8,631,089	Personal financial needs
Wu Xiaobo	Independent Director	Incumbent	Male	62	March 5 <sup>th</sup> 2021	March 4th 2024	0	0	0	0	
Hu Ruimin	Independent Director	Incumbent	Male	58	March 5 <sup>th</sup> 2021	March 4 <sup>th</sup> 2024	0	0	0	0	
Li Shuhua	Independent Director	Incumbent	Male	51	March 5 <sup>th</sup> 2021	March 4th 2024	0	0	0	0	

Name	Title	Tenure status	Gender	Age	Commencement of term of office	Termination of term of office	Shares held at the beginning of the Period (Shares)	Shares increased during the Period (shares)	Shares decreased during the Period (Shares)	Shares held at the end of the Period (Shares)	Reasons for increase or decrease of shares
Guan Qingyou	Independent Director	Incumbent	Male	45	March 5 <sup>th</sup> 2021	March 4 <sup>th</sup> 2024	0	0	0	0	
Hong Tianfeng	Supervisor Chairman	Incumbent	Male	56	March 5 <sup>th</sup> 2021	March 4 <sup>th</sup> 2024	0	0	0	0	
Xu Lirong	Supervisor	Incumbent	Male	59	March 21 <sup>st</sup> 2018	March 4 <sup>th</sup> 2024	303,000	0	0	303,000	
Lu Jianzhong	Supervisor	Incumbent	Male	68	March 5 <sup>th</sup> 2021	March 4th 2024	0	0	0	0	
He Hongli	Senior Deputy General Manager	Incumbent	Female	49	December 18 <sup>th</sup> 2005	March 11 <sup>th</sup> 2024	331,500	0	0	331,500	
Cai Changyang	Senior Deputy General Manager	Incumbent	Male	51	April 8 <sup>th</sup> 2016	March 11 <sup>th</sup> 2024	109,500	0	0	109,500	
Xu Ximing	Senior Deputy General Manager	Incumbent	Male	49	October 11 <sup>th</sup> 2016	March 11 <sup>th</sup> 2024	197,000	0	0	197,000	
Bi Huijuan	Senior Deputy General Manager	Incumbent	Female	51	October 11 <sup>th</sup> 2016	March 11 <sup>th</sup> 2024	273,000	0	0	273,000	
Pu Shiliang	Senior Deputy General Manager	Incumbent	Male	45	March 21 <sup>st</sup> 2018	March 11 <sup>th</sup> 2024	295,900	0	0	295,900	
Jin Duo	Senior Deputy General Manager	Incumbent	Male	57	March 10 <sup>th</sup> 2015	March 11 <sup>th</sup> 2024	109,500	0	0	109,500	

Name	Title	Tenure status	Gender	Age	Commencement of term of office	Termination of term of office	Shares held at the beginning of the Period (Shares)	Shares increased during the Period (shares)	Shares decreased during the Period (Shares)	Shares held at the end of the Period (Shares)	Reasons for increase or decrease of shares
Jin Yan	Senior Deputy General Manager, Person in charge of finance	Incumbent	Female	43	July 22 <sup>nd</sup> 2015	March 11 <sup>th</sup> 2024	284,000	0	0	284,000	
Huang Fanghong	Senior Deputy General Manager, Board Secretary	Incumbent	Female	40	April 8 <sup>th</sup> 2016	March 11 <sup>th</sup> 2024	402,500	0	0	402,500	
Chen Junke	Senior Deputy General Manager	Incumbent	Male	51	March 21 <sup>st</sup> 2018	March 11 <sup>th</sup> 2024	0	0	0	0	
Xu Peng	Senior Deputy General Manager	Incumbent	Male	46	March 12 <sup>th</sup> 2021	March 11 <sup>th</sup> 2024	128,740	0	51,496	77,244	Personal financial needs
Guo Xudong	Senior Deputy General Manager	Incumbent	Male	50	March 12 <sup>th</sup> 2021	March 11 <sup>th</sup> 2024	73,800	0	29,520	44,280	Personal financial needs
Gong Hongjia	Vice Chairman	Resigned	Male	57	June 19 <sup>th</sup> 2008	March 5 <sup>th</sup> 2021	1,016,614,814	0	54,110,000	962,504,814	Personal financial needs
Cheng Tianzong	Independent Director	Resigned	Male	70	March 6 <sup>th</sup> 2015	March 5 <sup>th</sup> 2021	0	0	0	0	
Wang Zhidong	Independent Director	Resigned	Male	55	March 6 <sup>th</sup> 2015	March 5 <sup>th</sup> 2021	0	0	0	0	
Cheng Huifang	Supervisor Chairman	Resigned	Female	69	March 6 <sup>th</sup> 2015	March 5 <sup>th</sup> 2021	0	0	0	0	

Hikvision 2021 Annual Report

Name	Title	Tenure status	Gender	Age	Commencement of term of office	Termination of term of office	Shares held at the beginning of the Period (Shares)	Shares increased during the Period (shares)	Shares decreased during the Period (Shares)	Shares held at the end of the Period (Shares)	Reasons for increase or decrease of shares
Fu Baijun	Senior Deputy General Manager	Resigned	Male	50	January 20 <sup>th</sup> 2009	March 12th 2021	495,000	0	126,000	369,000	Personal financial needs
Jiang Yufeng	Senior Deputy General Manager	Resigned	Male	51	December 18 <sup>th</sup> 2005	March 12 <sup>th</sup> 2021	325,500	0	0	325,500	
Total							1,213,552,370	0	83,997,316	1,129,555,054	

Note:

(1) Number of shares held at the beginning of the period, shares increased during the period, shares decreased during the period for directors, supervisors, and senior management personnel above are all shares directly held by them accordingly, including restricted shares.

(2) On March 5<sup>th</sup> 2021, Gong Hongjia resigned as a director of the Company at termination of term of office, Cheng Tianzong and Wang Zhidong resigned as independent directors of the Company at termination of term of office. Cheng huifang resigned as the board supervisor of the Company at termination of term of office. Wang Qiuchao was elected as a director of the Company's 5<sup>th</sup> session of the Board of Directors, Hong Tianfeng and Lu Jianzhong were elected as supervisors of the Company's 5<sup>th</sup> session of the Board of Supervisors.

(3) On March 12<sup>th</sup> 2021, Gong Hongjia, Fu Baijun and Jiang Yufeng resigned from the Company's senior management position. Xu Lirong resigned from the Company's person in charge of internal audit.

Any resignation of directors or supervisors and dismissals of senior management personnel during their term of office during the reporting period.  $\Box$ Yes  $\sqrt{No}$ 



## Change of directors, supervisors and senior management personnel

## √Applicable □Inapplicable

Name	Position	Types of change	Date	Reason
Wang Qiuchao	Director	Appointment and dismissal	March 5 <sup>th</sup> 2021	General election
Wu Xiaobo	Independent Director	Elected	March 5 <sup>th</sup> 2021	General election
Hu Ruimin	Independent Director	Elected	March 5 <sup>th</sup> 2021	General election
Li Shuhua	Independent Director	Elected	March 5 <sup>th</sup> 2021	General election
Guan Qingyou	Independent Director	Elected	March 5 <sup>th</sup> 2021	General election
Hong Tianfeng	Chairman of the Board of Supervisors	Appointment and dismissal	March 5 <sup>th</sup> 2021	General election
Lu Jianzhong	Supervisor	Appointment and dismissal	March 5 <sup>th</sup> 2021	General election
Gong Hongjia	Director	Left the position after the expiry of his tenure	March 5 <sup>th</sup> 2021	Tenure expires
Cheng Tianzong	Independent Director	Left the position after the expiry of his tenure	March 5th 2021	Tenure expires
Lu Jianzhong	Independent Director	Left the position after the expiry of his tenure	March 5th 2021	Tenure expires
Wang Zhidong	Independent Director	Left the position after the expiry of his tenure	March 5th 2021	Tenure expires
Hong Tianfeng	Independent Director	Left the position after the expiry of his tenure	March 5 <sup>th</sup> 2021	Tenure expires
Cheng Huifang	Chairman of the Board of Supervisors	Left the position after the expiry of her tenure	March 5 <sup>th</sup> 2021	Tenure expires
Wang Qiuchao	Supervisor	Left the position after the expiry of his tenure	March 5 <sup>th</sup> 2021	Tenure expires
Xu Peng	Senior Deputy General Manager	Hired	March 12 <sup>th</sup> 2021	General appointment
Guo Xudong	Senior Deputy General Manager	Hired	March 12 <sup>th</sup> 2021	General appointment
Gong Hongjia	Vice Chairman	Left the position after the expiry of his tenure	March 12 <sup>th</sup> 2021	Tenure expires
Fu Baijun	Senior Deputy General Manager	Left the position after the expiry of his tenure	March 12 <sup>th</sup> 2021	Tenure expires
Jiang Yufeng	Senior Deputy General Manager	Left the position after the expiry of his tenure	March 12 <sup>th</sup> 2021	Tenure expires

## 2. Positions and Incumbency

#### 1) Directors

**Mr Chen Zongnian** (陈宗年): Born in 1965, Chen holds a PhD of business administration and has served as deputy general manager of Shenzhen Gao Ke Run Electronics, director and general manager of Zhejiang Haikang Information Technology Co., Ltd. and Zhejiang Haikang Group Co., Ltd. He also served as an assistant of the head, deputy head, and the head of 52<sup>nd</sup> Research Institute at China Electronics Technology Group Corporation (hereinafter referred to as "52<sup>nd</sup> Research Institute"). Chen currently serves as the Chairman of China Electronics Technology HIK Group Co., Ltd. (CETHIK), the Chairman of Phoenix Optics Co., Ltd. and the Chairman of the Company.

**Mr. Qu Liyang** (屈力扬): Born in 1964, bachelor degree of engineering, researcher-level senior engineer. He served as the director, deputy director, party secretary and deputy director of the 52<sup>nd</sup> Research Institute, and Chairman of the Board of Supervisors of CETHIK. He is currently a member of the Strategy Committee of China Electronic Technology Group Co., Ltd., director of the Science and Technology Innovation Committee of CETHIK, and a director of the Company.

Mr. Wang Qiuchao (王秋潮): Born in 1951, master degree in law. Wang served as director of Zhejiang T&C Law Firm (浙江天册律师事务所), Chairman of the Zhejiang Lawyers Association (浙江省律师协会), vice-president of the Zhejiang Law Society (浙江省法学会), and a supervisor of the Company. Wang currently serves as honorary partner of Zhejiang T&C Law Firm, arbitrator of the China International Economic and Trade Arbitration Commission (中国国际经济贸易仲裁委员会, "CIETAC"), an arbitrator of Shanghai International Arbitration Center (上海国际仲裁中心) and Shenzhen International Economic and Trade Arbitration Commission (常圳国际

**Mr. Hu Yangzhong** (胡扬忠): Born in 1965, master degree of engineering, senior research engineer. He served as an engineer of the 52<sup>nd</sup> Research Institute from June 1989 to December 2001. He has been appointed as a director of the Company and general manager of the Company since December 2001. Hu currently serves as a director and the general manager of the Company.

**Mr. Wu Weiqi** (邬伟琪): Born in 1964, bachelor degree of engineering, senior engineer. Wu held various positions at the 52<sup>nd</sup> Research Institute, including technician, engineer associate, engineer and senior engineer, from July 1986 to December 2001. Since November 2001, He has been appointed as a deputy general manager, a standing deputy general manager, and a director of Hikvision. Wu currently serves as a director and standing deputy general manager of the Company.

Mr. Wu Xiaobo (吴晓波): Born in 1960, a PhD of business administration, Professor, Ph.D. Tutor. In February 1982, he joined the Energy Saving Office of the Ministry of Forestry, Zhejiang Energy Conservation Technology Service Center, and joined the School of Management of Zhejiang University in July 1992, successively served as an executive vice dean and dean. He is currently the Director of the Department of Social Sciences of Zhejiang University, the director of the National Philosophy and Social Science Innovation Base - *Research on Innovation Management and Sustainable Competitiveness* of Zhejiang University, the Chinese director of the Joint Research Center for Global Manufacturing and Innovation Management of Zhejiang University-Cambridge University, the co-director of the Ruihua Institute of Innovation Management, and an independent director of the Company.

Mr. Hu Ruimin (胡瑞敏): Born in 1964, a PhD in engineering, Second-level Professor, doctoral tutor, Luojia distinguished scholar, recipient of Special Government Grants from the State Council, Senior Member of IEEE (Institute of Electrical and Electronics Engineers), fellow of China Institute of Communications, distinguished member of China Computer Federation. He has successively served as vice chairman of the Academic Committee of Wuhan University, director of the National Multimedia Software Engineering Technology Research Center, director of Hubei Provincial Key Laboratory of Multimedia Network Communication Engineering, First Executive Dean of National Cyber Security College and Dean of School of Computer Science of Wuhan University. From January 2010 to January 2016, he served as the first dean of Hikvision Research Institute. He is currently a professor of Wuhan University and an independent director of the Company.

Mr. Li Shuhua (李树华): Born in 1971, a PhD in accounting, non-practicing member of the China Institute of Certified Public Accountants, National-level candidates for the New Century Hundreds and Thousands of Talents Project, National Leading Talents in Accounting, and National Leading Talents in Shenzhen. He has successively served as deputy director of the Audit Division of the Accounting Department of the China Securities Regulatory

Commission (presiding), deputy director of the General Office (presiding), director of the Financial and Budget Management Department and director of the General Office, a member of the Executive Committee and Chief Financial Officer, Chief Risk Officer and Chief Compliance Officer of China Galaxy Securities Co., Ltd. He concurrently served as a PE professor and master's tutor at the National Accounting Institute (Xiamen), Peking University, Shanghai Institute of Advanced Finance, Shanghai Jiaotong University, and Tsinghua University. He is currently the managing partner of Shenzhen Oriental Fortune Capital Investment Management Co., Ltd. (OFC), Chairman of Changzhou NRB Corporation (常州光洋軸承股份有限公司), and an independent director of the Company.

**Mr. Guan Qingyou** (管清友): Born in 1977, a holder of Ph.D. in economics, Young Economist. He has successively served as the former vice president of Minsheng Securities and the president of the research institute; He is currently the President and Chief Economist of the Institute of Finance, Vice President of the China Private Economic Research Association, Professor of the School of Economics of Hainan University, Chief Economist of Zhongguancun Private Equity & Venture Capital Association (ZVCA) and Guangdong Province Venture Capital Association, and an independent director of the Company.

**Mr. Gong Hongjia** (龚虹嘉): Born in 1965, Hong Kong permanent resident. Gong holds a bachelor degree of engineering, technology entrepreneur, and angel investor. He has established and invested over 10 enterprises including TECSUN Co. Ltd., AsiaInfo Dekang, Funian Technology, and Woqi Data, and etc. He took part in the establishment of the Company in November 2001 and served as a director (left after the expiry of his tenure on March 5<sup>th</sup> 2021) and vice chairman (left after the expiry of his tenure on March 12<sup>th</sup> 2021) of the Company.

Mr. Cheng Tianzong (程天纵): Born in 1952, Taiwanese, master degree in business administration. Cheng served as president and a director of Hewlett-Packard Development Company, L.P. (China) from 1992 to 1997; served as the president of the Asia Pacific of Texas Instruments Incorporated (德州仪器) from 1997 to 2007; served as a vice-president of Hong Hai Corporation (湾海集团) from July 2007 to 2012, and the chief executive officer of FIH Mobile Limited, a subsidiary of Hong Hai Corporation (湾海集团), a company listed on the Hong Kong Stock Exchange in 2011. He retired in June 2012 and devoted himself to China Maker Campaign (中国创客运动) to help and guide those start-up companies in September 2013. Cheng served as an independent director of the Company



(left after the expiry of his tenure on March 5<sup>th</sup> 2021)

Mr. Wang Zhidong (王志东): Born in 1967, Hong Kong permanent resident, bachelor degree of science. He served as a deputy general manager and chief engineer of Beijing Haidian District Suntendy Electronic Technology Research Institute (北京海淀区新天地电子信息技术研究所) from April 1992 to August 1993; He served as a general manager of Beijing Richwin Information Technology Co., Ltd. (四通利方信息技术有限公司), and served as chief executive officer and a director of SINA Corporation (新浪网) from December 1993 to June 2001; He served as chairman and chief executive officer of Beijing Dianji Technology, Ltd. (北京点击科技有限公司) from December 2001 to July 2013. Mr. Wang has served as an independent director of the Company (left after the expiry of his tenure on March 5<sup>th</sup> 2021). He currently serves as chairman and chief executive officer of Beijing Yilianyisheng Technology Co. Ltd.(北京易连忆生科技有限公司).

#### 2) Supervisors

Mr. Hong Tianfeng (洪天峰): Born in 1966, master degree in engineering. Hong was an engineer in Nanjing University of Posts and Telecommunication (南京邮电大学) from July 1990 to June 1993; He served as an executive deputy general manager, chief executive of Operation and Delivery, chairman of investment decision committee, and vice chairman of Huawei Technologies Co., Ltd. (华为技术有限公司) from July 1993 to September 2011. Hong has served as an independent director of the Company. Hong currently serves as a managing partner of Suzhou Fangguang Venture Investment Management (Limited Partnership)(苏州方广创业投资管理合伙企业(有限合伙)), an executive director of Shanghai Fangguang Venture Investment Management Co., Ltd. (上海方广创业投资管理有限公司), and supervisor of the Company.

Mr. Lu Jianzhong (陆建忠): Born in 1954, holds bachelor degree in economics and CPA certificate. Lu served as a lecturer and an associate professor of finance and accounting department at Shanghai Maritime University (上海海事大学) from September 1986 to September 1997; he was a CPA and a partner of the auditing department of PricewaterhouseCoopers, from October 1997 to June 2012; he was a chartered accountant of Shanghai De'an Certified Public Accountants LLP (上海德安会计师事务所) from July 2012 to July 2013; he was a chartered accountant of the Shanghai branch of PKF Daxin Certified Public Accountants LLP (大信会计师事务所上海分所), from August 2013 to July 2014; he was a partner and a chartered accountant and a partner of Zhongxinghua

Certificated Public Accountants LLP (中兴华会计师事务所) from August 2014 to January 2016; he was a chartered accountant of Dahua Certificated Public Accountants LLP (大华会计师事务所) from January 2016 to December 2021. Lu has served as an independent director of Hikvision. Lu currently serves as a chartered accountant of Zhongxinghua Certificated Public Accountants LLP Shanghai Branch, MPAcc/Maud Enterprise Mentor of Antai College of Economics & Management, Shanghai Jiao Tong University (上海交通大学安泰管理学院), and a supervisor of the Company.

**Mr. Xu Lirong** (徐礼荣): Born in 1963, master degree of engineering, senior engineer. In January 2002, he joined Hikvision and served as manager of development division under the R&D center, secretary of the Board of Directors, the person in charge of internal audit, and a deputy general manager of the Company. He is currently the employee representative supervisor.

Ms. Cheng Huifang (程惠芳): Born in 1953, PhD in international finance. She was a member of the 8<sup>th</sup> and 9<sup>th</sup> Zhejiang CPPCC (浙江省政协). Cheng has served as a supervisor of the Company (left after the expiry of her tenure on March 5<sup>th</sup> 2021). Cheng currently serve as dean of the Global Development Research Institute of Zhejiang Businesses under Zhejiang University of Technology (浙江工业大学全球浙商发展研究院), professor (level II), president of Zhejiang Yangtze River Delta of the Institute of Innovation Management (浙江长三角创新管理研究 院), president of the Zhejiang Financial Engineering Society (浙江省金融工程学会).

### 3) Senior Management Personnel

Mr. Hu Yangzhong (胡扬忠): Please refer to his profile in preceding part of the report.

Mr. Wu Weiqi (邬伟琪): Please refer to his profile in preceding part of the report.

**Ms. He Hongli** (何虹丽): Born in 1973, master degree in business administration. She joined Hikvision in December 2001 and served as an assistant to the general manager and a deputy general manager. Ms. He currently serves as a senior deputy general manager of the Company.

**Mr. Cai Changyang** (蔡昶阳): Born in 1971, bachelor degree in engineering. He joined Hikvision in 2004, and held various positions of the Company, including general manager of Beijing branch, director for government and enterprise corporation department, director of investment department, director of strategy and marketing department, and a deputy general manager of the Company. Mr. Cai currently serves as senior deputy general manager of the Company.

**Mr. Xu Ximing** (徐习明): Born in 1973, bachelor degree in engineering. From July 1996 to September 2016, he held various positions in IBM, including engineer, department manager, director, partner of consulting service, senior partner of consulting service, and a vice president. He joined Hikvision in September 2016, and served as a deputy general manager of the Company. Mr. Xu currently serves as a senior deputy general manager of the Company.

**Ms. Bi Huijuan** (毕会娟): Born in 1971, PhD in engineering, senior research engineer. From April 1999 to August 2016, she held various positions in the 15<sup>th</sup> Research Institute at China Electronics Technology Group Corporation (CETC), including engineer, senior engineer, senior research engineer, head of R&D department, vice chief engineer, and deputy director. She joined Hikvision in August 2016, and served as a deputy general manager of the Company. Ms. Bi currently serves as a senior deputy general manager of the Company.

**Mr. Pu Shiliang** (浦世亮): Born in 1977, doctor of engineering, a senior engineer. He joined Hikvision in April 2006 and held various positions in the Company, including R&D engineer, R&D manager, R&D director, dean of the R&D institute, and chief expert. He currently serves as a senior deputy general manager of the Company.

Mr. Jin Duo (金铎): Born in 1965, bachelor degree in engineering, a senior engineer. He served as a technician, assistant to engineers, an engineer and a senior engineer of the 52<sup>nd</sup> Research Institute from July 1986 to June 2004. He joined Hikvision in July 2004 and served as general manager of Hangzhou Branch, and a deputy general manager of the Company. Mr. Jin currently serves as a senior deputy general manager of the Company.

Ms. Jin Yan (金艳): Born in 1979, master degree in management, an accountant. She joined Hikvision in 2004 and held various positions at the Company, including financial manager, the general manager of the Financial Management Center, and a deputy general manager and the person in charge of finance and accounting. Ms. Jin

currently serves as a senior deputy general manager and the person in charge of finance and accounting of the Company.

**Ms. Huang Fanghong** (黄方红): Born in 1982, bachelor degree in law. She joined Hikvision in June 2009 and held various positions at the Company including legal department manager, internal audit manager, internal control director, and a deputy general manager and the board secretary. Ms. Huang currently serves as a senior deputy general manager, and board secretary of the Company.

**Mr. Chen Junke** (陈军科): Born in 1971, bachelor degree in engineering, senior engineer. Chen held various positions in the 52<sup>nd</sup> Research Institute from 1994 to 2001, including assistant engineer, engineer and senior engineer. He joined the Company in 2001 and served as the technology director of the Digital Video Recorder (DVR) Division of the Technology Management Center, general manager of supply chain management center, employee representative supervisor. Chen currently serves as senior deputy general manager of the Company.

**Mr. Xu Peng** (徐鹏): Born in 1976, bachelor of engineering, senior engineer. From 1998 to 2004, he successively served as an assistant engineer and engineer of 52<sup>nd</sup> Research Institute, and in 2004, he joined Hikvision, where he served as camera research and development manager, research and development director, product director, general manager of front-end product business, and deputy general manager of the Company. He is currently the senior deputy general manager of the Company.

Mr. Guo Xudong (郭旭东): Born in 1972, bachelor of engineering. In July 2002, he joined Hikvision, and successively served as general manager of Shenzhen Branch, marketing director of domestic marketing center and deputy general manager of domestic marketing center. He is currently the senior deputy general manager of the Company.

Mr. Fu Baijun (傅柏军): Born in 1972, bachelor degree in economics, Chinese Certificated Public Accountant, professor-level senior accountant. He served as an accountant of the accounting division of the 52<sup>nd</sup> Research Institute and a deputy general manager of Zhejiang Haikang Information Technology Co. Ltd. (浙江海康信息技术股份有限公司) from July 1996 to December 2008. He joined Hikvision in January 2009, and served as a deputy

general manager and the person in charge of accounting department, a deputy general manager, and a senior deputy general manager of the Company (left after the expiry of his tenure on March 12<sup>th</sup> 2021).

**Mr. Jiang Yufeng** (蒋玉峰): Born in 1971, bachelor degree of engineering, an engineer. He joined Hikvision in January 2005 and held various positions in the Company, including general manager of Beijing branch, marketing director, assistant to general manager, deputy general manager and marketing director, a deputy general manager, and a senior deputy general manager of the Company (left after the expiry of his tenure on March 12<sup>th</sup> 2021).

## Position held in shareholders' entities

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Name	Shareholder's entity	Position in shareholders' entities	Commencement of the term	Termination of the term	Compensation and allowance from the shareholders' entity
Chen Zongnian	China Electronics Technology HIK Group Ltd.	Chairman, Secretary of Party Committee	November 2013		Y
Hu Yangzhong	China Electronics Technology HIK Group Ltd.	Director	December 2013		Ν
Xu Lirong	China Electronics Technology HIK Group Ltd.	Supervisor, Member of Commission for Discipline Inspection	December 2013		Ν

## Positions held in other entities

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
Cheng Zongnian	Zhejiang <i>AIoT Technology</i> Magazine	Legal Representative	February 2004		Ν
Cheng Zongnian	CETC Finance Ltd.	Director	December 2012	January 2021	Ν
Cheng Zongnian	Phoenix Optics Co., Ltd.	Chairman	December 2019		Ν
Wang Qiuchao	Zhejiang T&C Law Firm	Partner	August 1993		Y
Wang Qiuchao	KaiShan Group Co., Ltd.	Independent Director	May 2015	May 2021	Y
Wang Qiuchao	Botsy Technology Co., Ltd	Independent Director	May 2020		Y
Wu Weiqi	Xinjiang Pukang Investment Management Limited	Executive Partner	April 2011		Ν



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Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	Partnership				
Wu Weiqi	Wuhu Sensor Tech Intelligent Technology Ltd.	Director	January 2017		N
Wu Weiqi	Maxio Technology (Hangzhou) Co., Ltd.	Director	May 2017	December 2021	Ν
Wu Weiqi	Hangzhou Qianmo Tongzhou Enterprise Management Consulting Partnership (Limited Partnership)	Executive Partner	July 2021		Ν
Wu Xiaobo	Shanghai Yirui Management Consultants Co., Ltd	Director	April 2004		Ν
Wu Xiaobo	Hangzhou Co-Rui Enterprise Management Consulting Co., Ltd	Director	April 2011		Ν
Wu Xiaobo	Ningbo Industrial Internet Research Institute Co., Ltd	Independent director	May 2018		Y
Wu Xiaobo	Eddy Co., Ltd	Independent director	August 2018		Y
Wu Xiaobo	Zhongliang Holdings Group Co., Ltd	Independent director	June 2019		Y
Wu Xiaobo	Ruihua Innovation Management Research Institute (Hangzhou) Co., Ltd	Director	November 2019		Ν
Wu Xiaobo	UCloud Technology Co., Ltd	Independent director	June 2020		Y
Wu Xiaobo	Zhongtian Holding Group Co., Ltd.	Independent director	July 2021		Y
Li Shuhua	Xi'an ShaanGu Power Co., Ltd	Independent director	May 2018		Y
Li Shuhua	Shenzhen Dongfang Fuhai Investment Management Co., Ltd.	Managing Partner of Oriental Fortune M&A Fund	July 2018		Y
Li Shuhua	Shenzhen Yuanzhi Fuhai Investment Management Co., Ltd.	Chairman of the Board of Supervisors	July 2018		Ν
Li Shuhua	Luoyang Yuchuan Yuye	Independent	August 2018		Y



Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	Group Co., Ltd	director			
Li Shuhua	BOMESC Offshore Engineering Company Limited	Independent director	December 2018	December 2021	Y
Li Shuhua	Changzhou Guangyang Holdings Co., Ltd	Director & CEO	August 2019		Ν
Li Shuhua	Changzhou NRB Co., Ltd	Chairman	October 2019		Y
Li Shuhua V	Veihai Shiyi Electronics Co., Ltd	Legal representative and Chairman of the board	December 2020		N
Li Shuhua	Juzhengyuan Co., Ltd.	Independent director	December 2020		Y
Li Shuhua	Guangdong Shengyi Technology Co., Ltd.	Independent director	October 2021		Y
Guan Oingyou	Beijing Minjin Information Consulting Services Co., Ltd	Supervisor	September 2017		Ν
Guan Qingyou	Beijing Rushiwo Research Information Consulting Service Co., Ltd.	Executive Director&CEO	December 2017		Y
Guan Qingyou	Midea Group Co., Ltd.	Independent director	August 2018		Y
Guan Qingyou	Beijing Xincai Zhibei nformation Technology Co., Ltd	Supervisor	October 2018		Ν
Guan Qingyou S	South China Futures Co., Ltd	Independent director	March 2019		Y
Guan Qingyou	Beijing Film Spectrum Technology Co., Ltd	Independent director	March 2019		Y
Guan Qingyou	Shanxi International Trust Co., Ltd	Independent director	July 2019		Y
Guan Qingyou	Shandong Expressway Road and Bridge Group Co., Ltd	Independent director	January 2021		Y
Guan Qingyou	Beijing Rushi Chengjin Information Consulting Service Co., Ltd.	CEO	October 2016		N
Guan Qingyou	Beijing Rushiwo Research	Executive	May 2020		Ν



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Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	Institute of Science and Technology Co., Ltd.	Director&CEO			
Guan Qingyou	Beijing Rushi Wancheng Technology Development Co., Ltd.	Executive Director& CEO	June 2020		Ν
Guan Qingyou	Hainan Wuyongtang Information Technology Co., Ltd.	Executive Director& CEO	July 2020		Ν
Guan Qingyou	Beijing Yaocen Yuanmu Information Technology Co., Ltd.	Executive Director& CEO	July 2020		Ν
Guan Qingyou	Qingdao Rushiwo Research Investment Management Co., Ltd.	Executive Director& CEO	September 2020		Ν
Guan Qingyou	Beijing Ruoan Jiatai Technology Co., Ltd.	Executive Director& CEO	December 2020		Ν
Hong Tianfeng	Shanghai Fangguang Investment Management Ltd.	Executive Director	February 2012		Y
Hong Tianfeng	Shanghai Fangguang Venture Investment Management Partnership Enterprise (Limited Partnership)	Managing Partner	June 2012		N
Hong Tianfeng	Shanghai Fangguang Venture Investment Partnership Enterprise (Limited Partnership)	Managing Partner	August 2012		N
Hong Tianfeng	Shanghai Fangguang Erqi Venture Investment Partnership Enterprise (Limited Partnership)	Managing Partner	September 2016		N
Hong Tianfeng	Suzhou Fangguang Venture Investment Management Partnership Enterprise (Limited Partnership)	Managing Partner	September 2012		N
Hong Tianfeng	Suzhou Fangguang Venture Investment Partnership Enterprise (Limited Partnership)	Managing Partner	September 2012		N



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Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
Hong Tianfeng	Suzhou Fangguang Venture Investment Phase II Partnership Enterprise (Limited Partnership)	Managing Partner	July 2016		Ν
Hong Tianfeng	Shenzhen Pengfenghui Venture Investment Ltd.	Executive Director & CEO	June 2014	March 2021	Ν
Hong Tianfeng	Shenzhen Fangguang Enterprise Management Consulting Ltd.	Executive Director & CEO	May 2016		Ν
Hong Tianfeng	Sannuo Biology Sensor Co., Ltd.	Director	September 2013		Y
Hong Tianfeng	Shenzhen YunZhiXun Network Technology Ltd.	Director	May 2014		Ν
Hong Tianfeng	Jiangsu JiTaiKe Electrics Co., Ltd.	Director	July 2015	December 2021	Ν
Hong Tianfeng	Zhongwei Dahe Cloud Connection Network Technology Ltd.	Director	November 2016		Ν
Hong Tianfeng	Shenzhen DongFengMingTu Enterprise Management Ltd.	Supervisor	August 2016		N
Hong Tianfeng	Beijing ZhiZhangYi Sicence and Technology Ltd.	Director	December 2016		Ν
Hong Tianfeng	CETC Huayun Information Technology Ltd.	Director	March 2017		Ν
Hong Tianfeng	Shenzhen YingFeiYuan Technology Ltd.	Director	October 2017		Ν
Hong Tianfeng	Shenzhen Chip and Semi- conductor Technology Ltd.	Director	February 2018		Ν
Hong Tianfeng	Guangzhou Smart Software Ltd.	Director	March 2018		Ν
Hong Tianfeng	Shanghai Daxian Intelligent Science and Technology Ltd.	Director	June 2018		Ν
Hong Tianfeng	Quanzhi Technology (Hangzhou) Co., Ltd.	Director	July 2018		N
Hong Tianfeng	Shenzhen Zhongtu Instrument Co., Ltd.	Director	February 2021		Ν



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Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
Hong Tianfeng	Shanghai Fanglan Enterprise Management Center	Executive Director & CEO	March 2021		N
Lu Jianzhong	Antai College of Economics and Management, SJTU	Corporate mentor	December 2013		N
Lu Jianzhong	Dahua Certificated Public Accountants LLP	Chartered Accountant	January 2016	December 2021	Ν
Lu Jianzhong	Zhongxinghua Certified Public Accountants LLP (Shanghai Branch)	Chartered Accountant	January 2022		Ν
Lu Jianzhong	ChangShu FengFan Electric Power Equipment Co., Ltd.	Independent Director	September 2015	November 2021	Y
Lu Jianzhong	Ningbo Lehui International Construction Equipment Co., Ltd.	Independent Director	March 2016	December 2021	Y
Lu Jianzhong	COSCO Maritime Transport Development Co., Ltd.	Independent Director	January 2018		Y
Lu Jianzhong	Shanghai Xinnanyang Angli Education Technology Co., Ltd.	Independent Director	January 2019		Y
Lu Jianzhong	INESA (Group) Co., Ltd.	Director	December 2019		N
Lu Jianzhong	Huatai Baoxing Fund Management Co., Ltd.	Director	July 2016		Y
Lu Jianzhong	Shanghai Vico Precision Mold &Plastics Co,. Ltd.	Director	May 2021		Y
Lu Jianzhong	BOMESC Offshore Engineering Company Limited	Independent Director	December 2021		Y
Xu Ximing	Shenzhen Wangyu Security Service Science and Technology Co., Ltd.	Director	November 2019		Ν
Xu Ximing	Chengdu Guoshengtianfeng Network Technology Co., Ltd.	Director	August 2020		Ν
Xu Ximing	Hangzhou Confirmware Technology Co., Ltd.	Director	August 2021		N
Jin Duo	Zhejiang Haishi Huayue Digital Technology Co., Ltd	Legal representative &Chairman of the	January 2020		Ν



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Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
		board			
Xu Peng	Maxio Technology (Hangzhou) Co., Ltd.	Director	December 2021		N
Guo Xudong	Zhejiang Fast Line data fusion Information Technology Co., Ltd.	Director	January 2021		Ν
Gong Hongjia	Furong Technology Ltd.	Director	October 1999		Ν
Gong Hongjia	Funian Technology Ltd.	Chairman of the Board	April 2002		N
Gong Hongjia	Guangzhou Funian Electronic Technology Co., Ltd.	Chairman	July 2002		Ν
Gong Hongjia	Hangzhou FunVio Ltd.	Chairman	February 2004		Ν
Gong Hongjia	Beijing Funian Technology Ltd.	Legal Representative	November 2011		N
Gong Hongjia	Shanghai Fullhan Microelectronics Co., Ltd.	Director	April 2013		N
Gong Hongjia	Shenzhen Innovation Valley Investment Management Ltd.	Director	July 2014		Ν
Gong Hongjia	Shanghai Pukun Information Technology Ltd.	Director	September 2014	July 2021	Ν
Gong Hongjia	FuCe Holdings Ltd.	Director	October 2014		Ν
Gong Hongjia	Chuangjia Venture Capital Investment Ltd	Director	October 2014		N
Gong Hongjia	Shenzhen Jiadao Valley Investment Management Ltd.	Legal Representative & CEO	October 2014		Y
Gong Hongjia	Shenzhen Jiadao Gongcheng Equity Investment Fund (Limited Partnership)	Executive Partner Designated Representative	November 2014		Ν
Gong Hongjia	JiuBaYi Health Technology Ltd.	Director	November 2014		Ν
Gong Hongjia	Beijing JiaBoWen Biotechnology Ltd.	Director	March 2015		Ν
Gong Hongjia	Wuhan YouXin Technology Co., Ltd.	Director	January 2016		Ν
Gong Hongjia	QingKe Management	Director	February 2017		Ν
	•		•		



Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	Consulting Group Ltd.				
Gong Hongjia	Shenzhen JiadaoFangzhi Education Industry Investment Enterprise (Limited Partnership)	Executive Partner Designated Representative	June 2017		N
Gong Hongjia	Shenzhen Jiadao Successful Investment Enterprise (Limited Partnership)	Executive Partner Designated Representative	August 2017		Ν
Gong Hongjia	Shanghai AoYuan Medical Supplies Ltd.	Chairman	September 2017		N
Gong Hongjia	Sichuan JiaDao BoWen Ecological Technology Ltd.	Chairman	December 2017		Ν
Gong Hongjia	Beijing JiaDaoGu Management Consulting Ltd.	Supervisor	April 2018		Ν
Gong Hongjia	Shenzhen Zhongke Science and Technology Achievements Transformation Equity Investment Fund Management Ltd.	Director	December 2019		Ν
Gong Hongjia	ZhongYuan Concord Cell Genetic Engineering Co., Ltd.	Chairman	December 2018	December 2021	Ν
Gong Hongjia	Tianjin Deyuan Investment Development Ltd.	Director	July 2019		N
Gong Hongjia	Sichuan Huiyang Life Engineering Co., Ltd.	Director	September 2019		N
Gong Hongjia	Yong Tai Hong Kan Holding Group Ltd.	Vice Chairman	October 2019		N
Gong Hongjia	Shenzhen CSMAR Data Technology Co., Ltd.	Director	February 2020		N
Gong Hongjia	Beijing Nutshell Universe Education Technology Co., Ltd.	Director	February 2021		Ν
Cheng Tianzong	Aurotek Corporation	Director	June 2014		Y
Cheng Tianzong	Zuozhen Co., Ltd.	Director	January 2015		Y



Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities	
Cheng Tianzong	WT Microelectronics Co., Ltd.	Independent Director	June 2016		Y	
Wang Zhidong	Beijing Yilianyisheng Science and Technology Ltd.	Chairman and CEO	October 2013		Y	
Cheng Huifang	Zhejiang HuaCe Media Co., Ltd.	Independent Director	February 2016		Y	
Cheng Huifang	Zhejiang Commercial Bank Co., Ltd.	External Supervisor	June 2016		Y	
Cheng Huifang	Quzhou NanGaoFeng Chemical Co., Ltd.	Independent Director	March 2017	December 2021	Y	
Cheng Huifang	Ningbo Fujia Industrial Co., Ltd.	Independent Director	April 2020		Y	
Cheng Huifang	Zhejiang Youyi Medical Equipment Co., Ltd.	Independent Director	September 2020		Y	
Cheng Huifang	Zhejiang China Textile City Group Co., Ltd	Independent Director	November 2020		Y	
Fu Baijun	Shenzhen Hikvision Urban Service Operation Co., Ltd.	Chairman	July 2020		Ν	
	1) Gong Hongjia resigned as	a director of the Cor	npany at the end of	his tenure on M	March 5 <sup>th</sup> 2021, and resigned	
Description of	as vice Chairman of the C	ompany at the end of	his tenure on Marc	h 12 <sup>th</sup> 2021;		
the status of	2) Cheng Tianzong and Wang	g zhidong resigned as	independent directe	ors of the Comp	any at the end of their tenure	
employment in	on March 5 <sup>th</sup> 2021;					
other units	3) Cheng Huifang resigned as a supervisor of the Company at the end of her tenure on March 5 <sup>th</sup> 2021;					
	4) Fu Baijun resigned as a se	nior management of t	he Company at the	end of his tenu	re on March 12 <sup>th</sup> 2021;	

Incumbent and off-office directors, supervisors and senior management personnel during the reporting period that have been imposed administrative penalties by the CSRC during the last three years.  $\Box$  Applicable  $\sqrt{}$  Inapplicable

### 3. Remuneration of Directors, Supervisors and Senior Management Personnel

The decision-making program, determination basis and actual remuneration payment of directors, supervisors and senior management personnel:

The remuneration of directors, supervisors and senior management personnel will be received preliminarily by the Remuneration and Appraisal Committee of the Board, among them, remuneration of independent directors and external supervisors would be further reviewed and approved by general meeting of shareholders. As for those directors (exclude independent directors), supervisors (exclude external supervisors) and senior management personnel who receive remuneration from the Company directly, they will receive remuneration according to the Company's current Salary System and Performance Appraisal Schemes.



### Remuneration of directors, supervisors and senior management personnel

Unit: RMB 0.000 Total remuneration Remuneration Name Title Gender Tenure status from the Company from related Age (RMB'0,000) parties (Y/N) 0.00 Y Μ 57 Incumbent Chen Zongnian Chairman Incumbent 0.00 58 Y Μ Qu Liyang Director 71 Incumbent Wang Qiuchao Director Μ 28.33 Ν Hu Yangzhong Director, CEO Μ 57 Incumbent 312.73 Ν Director, Standing Deputy Incumbent 310.97 Wu Weiqi Μ 58 Ν General Manager Incumbent 25.00 Ν Wu Xiaobo Independent Director Μ 62 Hu Ruimin Independent Director Μ 58 Incumbent 25.00 Ν Li Shuhua Independent Director Μ 51 Incumbent 25.00 Ν 45 25.00 Μ Incumbent Ν Guan Qingyou Independent Director Μ 56 Incumbent 21.67 Ν Hong Tianfeng Supervisor Chairman 68 21.67 Ν Lu Jianzhong Supervisor Μ Incumbent Xu Lirong Supervisor Μ 59 Incumbent 162.09 Ν Senior Deputy General He Hongli F 49 Incumbent 290.77 Ν Manager Senior Deputy General Μ 51 Incumbent 262.27 Ν Cai Changyang Manager Senior Deputy General 420.88 Xu Ximing Μ 49 Incumbent Ν Manager Senior Deputy General F 51 410.20 Ν Bi Huijuan Incumbent Manager Senior Deputy General Pu Shiliang Μ 45 Incumbent 291.99 Ν Manager Senior Deputy General Jin duo Μ 57 Incumbent 287.14 Ν Manager Senior Deputy General Jin Yan Manager, person in charge of F 43 Incumbent 259.81 Ν finance and accounting Senior Deputy General Huang Fanghong F 40 Incumbent 259.52 Ν Manager Board Secretary Senior Deputy General Chen Junke Μ 51 Incumbent 259.68 Ν Manager Senior Deputy General 46 Incumbent 239.97 Ν Xu Peng М Manager



Name	Title		Gender	Age	Tenure status	Total remuneration from the Company (RMB'0,000)	Remuneration from related parties (Y/N)
Guo Xudong	Senior Deputy Ge Manager	М	50	Incumbent	196.49	Ν	
Gong Hongjia	Vice Chairma	n	М	57	Resigned	0.00	Y
Cheng Tianzong	Independent Dire	ector	М	70	Resigned	5.00	N
Wang Zhidong	Independent Director		М	55	Resigned	5.00	N
Cheng Huifang	Supervisor Chairman		F	69	Resigned	3.33	N
Fu Baijun	Senior Deputy Ge Manager	М	50	Resigned	28.21	N	
Jiang Yufeng	Senior Deputy Ge Manager	М	51	Resigned	29.23	N	
Total						4,206.95	
	on on positions and mbency	<ol> <li>On March 5<sup>th</sup> 2021, Gong Hongjia left as a director of the Company, Cheng Tianzong and Wang Zhidong left as independent directors of the Company, and Cheng Huifang left as a supervisor of the Company at the end of thier tenure. Wang Qiuchao was electer as a director of the Company's 5<sup>th</sup> session of the Board of Directors, and Hong Tianfeng and Lu Jianzhong were elected as supervisors of the Company's 5<sup>th</sup> session of the Board of Supervisors.</li> <li>On March 12<sup>th</sup> 2021, Gong Hongjia, Fu Baijun and Jiang Yufeng left their senior management positions after expires of their tenures, Xu Peng and Guo Xudong were appointed as senior management personnel of the Company.</li> </ol>					eng Huifang hao was elected Hong Tianfeng on of the Board heir senior

Note: During the reporting period, the remuneration of newcomers and directors, supervisors and senior management with adjusted positions are the remuneration for the period in which they held their positions.

## VI. Performance of Duties by Directors during the Reporting Period

## 1. The Board of Directors during the Reporting Period

Meeting Session	Convening Date	Disclosure Date	Meeting Resolutions
The 21 <sup>st</sup> meeting of the 4 <sup>th</sup> session of the Board	January 8 <sup>th</sup> 2021	January 9 <sup>th</sup> 2021	11 proposals were considered and approved at the meeting, including the <i>Proposal on Adjusting</i> <i>and Splitting the Board for Domestic Listing of</i> <i>the Subsidiary, Hangzhou EZVIZ Network Co.,</i> <i>Ltd.</i> For details, please refer to the Company's announcement: No. 2021-001.
The 22 <sup>nd</sup> meeting of the 4 <sup>th</sup>	February 5 <sup>th</sup> 2021	February 6 <sup>th</sup> 2021	3 proposals were considered and approved at the meeting, including the <i>Proposal on Nominating</i>



Meeting Session	Convening Date	Disclosure Date	Meeting Resolutions
session of the Board			<i>Candidates of Directors for the 5<sup>th</sup> session of the Board.</i> For details, please refer to the Company's announcement: No. 2021-006.
The 1 <sup>st</sup> meeting of the 5 <sup>th</sup> session of the Board	March 12 <sup>th</sup> 2021	March 13 <sup>th</sup> 2021	8 proposals were considered and approved at the meeting, including the <i>Proposal on Electing the Chairman of 5<sup>th</sup> session of the Board</i> . For details, please refer to the Company's announcement: No. 2021-021.
The 2 <sup>nd</sup> meeting of the 5 <sup>th</sup> session of the Board	April 15 <sup>th</sup> 2021	April 17 <sup>th</sup> 2021	35 proposals were considered and approved at the meeting, including the <i>2020 Annual Report</i> <i>and Its Summary</i> . For details, please refer to the Company's announcement: No. 2021-026.
The 3 <sup>rd</sup> meeting of the 5 <sup>th</sup> session of the Board	July 23 <sup>rd</sup> 2021	July 24 <sup>th</sup> 2021	3 proposals were considered and approved at the meeting, including the <i>2021 Half Year Report and Its Summary</i> . For details, please refer to the Company's announcement: No. 2021-044.
The 4 <sup>th</sup> meeting of the 5 <sup>th</sup> session of the Board	August 10 <sup>th</sup> 2021	August 11 <sup>th</sup> 2021	13 proposals were considered and approved at the meeting, including the <i>Proposal on the Spin-</i> off of the Company's Subsidiary, Hangzhou EZVIZ Network Co., Ltd. to be Listed on the STAR Market, in Compliance with Relevant Laws and Regulations. For details, please refer to the Company's announcement: No. 2021-049.
The 5 <sup>th</sup> meeting of the 5 <sup>th</sup> session of the Board	September 30 <sup>th</sup> 2021	October 8 <sup>th</sup> 2021	3 proposals were considered and approved at the meeting, including the 2021 Restricted Share Scheme (Draft) and Its Summary. For details, please refer to the Company's announcement: No. 2021-059.
The 6 <sup>th</sup> meeting of the 5 <sup>th</sup> session of the Board	October 22 <sup>nd</sup> 20201	October 23 <sup>rd</sup> 2021	2 proposals were considered and approved at the meeting, including the <i>2021 Q3 Report</i> . For details, please refer to the Company's announcement: No. 2021-061.
The 7 <sup>th</sup> meeting of the 5 <sup>th</sup> session of the Board	December 30 <sup>th</sup> 2021	December 31 <sup>st</sup> 2021	6 proposals were considered and approved at the meeting, including the <i>2021 Restricted Share Scheme (Revised Draft) and Its Summary.</i> For details, please refer to the Company's announcement: No. 2021-072.

## 2. Attendance of Directors in Board Meetings and General Meetings

	Attendance of directors in board meetings and general meetings						
Name of Director	Board meeting presence required in the reporting period (times)	Board meeting presence on site (times)	Board meeting presence by telecom- communication (times)	Board meeting presence through a proxy (times)	Board meeting absence (times)	Board meeting not attend in person for two consecutive times	Presence of independent directors in general meetings (times)
Chen Zongnian	9	1	8	0	0	N	0
Qu Liyang	9	1	8	0	0	N	1
Wang Qiuchao	7	1	6	0	0	Ν	2
Hu Yangzhong	9	1	8	0	0	Ν	3
Wu Weiqi	9	1	8	0	0	N	2
Wu Xiaobo	7	1	6	0	0	N	2
Hu Ruimin	7	1	6	0	0	N	2
Li Shuhua	7	1	6	0	0	N	1
Guan Qingyou	7	1	6	0	0	Ν	1
Gong Hongjia	2	0	2	0	0	Ν	1
Cheng Tianzong	2	0	2	0	0	Ν	0
Lu Jianzhong	2	0	2	0	0	Ν	2
Wang Zhidong	2	0	2	0	0	Ν	1
Hong Tianfeng	2	0	2	0	0	Ν	0
Other Information	<ul> <li>1) The Company held the first extraordinary general meeting of shareholders in 2021 on March 5<sup>th</sup> 2021 to complete the election of the Board of Directors. Gong Hongjia resigned as a director of the Company; Cheng Tianzong and Wang Zhidong resigned as independent directors of the Company; Wang Qiuchao was elected as a director of the 5<sup>th</sup> session of the Board of Directors of the Company; Hong Tianfeng and Lu Jianzhong were elected as supervisors of the 5<sup>th</sup> session of the Board of Supervisors of the Company.</li> <li>2) During the reporting period, the 4<sup>th</sup> session of the Board of Directors of the Company.</li> <li>3) During the reporting period, the 4<sup>th</sup> session of the Board of Directors of the Company.</li> </ul>						

## 3. Objections from Directors on Related Issues of the Company

Were there any objections on related issues of the Company from directors?

 $\Box$  Yes  $\sqrt{No}$ 

During the reporting period, there is no objections on related issues of the Company from directors.

### 4. Other Details about the Performance of Duties by Directors

Were there any suggestions from directors accepted by the Company?

 $\sqrt{\text{Yes}}$   $\square$  No

Details: During the Reporting Period, directors strictly followed related rules, regulations, including *Company Law, Rules Governing the Listing of Shares on Shenzhen Stock Exchange, Shenzhen Stock Exchange Listed Companies Self-Regulatory Supervision Guidelines No. 1 - Standardized Operation of Main Board Listed Companies* and *Articles of Association*. They focused on the Company operation, carefully review the Company's relevant meeting materials, reviewed and approved a number of board resolutions, and have no objection to all the proposals; At the same time, the directors of the Company put forward relevant constructive suggestions based on their professional abilities and the actual situation of the Company, which had a positive impact on the standardized operation of the Company and fulfilled their duties as directors.

The Company's independent directors strictly followed related rules, regulations, including *Rules for Independent Directors of Listed Companies* and *Regulations on Independent Directors*. They carried out their duties independently and imparted considerable professional advice on improving the Company's systems, daily operations and decision making. They provided fair advice during the reporting period and played an effective role in improving the Company supervisory systems and protecting the legal rights of the Company, the shareholders, especially public shareholders as a whole. For details, please refer to *Independent Directors' 2021 Debriefings* disclosed on <u>www.cninfo.com.cn</u>.

Committee Name	Members	Number of meetings held	Convening Date	Meeting Content	Important comments and suggestions
Strategy Committee of the 4 <sup>th</sup> seesion of the Board of Directors	Chen Zongnian (convener), Gong Hongjia, Cheng Tianzong, Hong Tianfeng	3	January 7 <sup>th</sup> 2021 to February 26 <sup>th</sup> 2021	Reviewed and approved 3 proposals including the Proposal on the Overall Change of the Holding Subsidiary Hangzhou EZVIZ Network Co., Ltd. to a incorporated company	All expressed concurring opinions
Nomination Committee of the 4 <sup>th</sup>	Wang Zhidong (convener), Hong	1	February 5 <sup>th</sup> 2021	Reviewed and approved 1 proposal of Nomination of	All expressed concurring

VII. The Special Committees under the Board during the Reporting Period	es under the Board during the Re	eporting Period
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Committee Name	Members	Number of meetings held	Convening Date	Meeting Content	Important comments and suggestions
session of the Board of Directors	Tianfeng, Qu Liyang			Candidates for Directors of the 5th Board of Directors of the Company	opinions
Remuneration and Appraisal Committee of the 4 <sup>th</sup> session of the Board of Directors	Hong Tianfeng (convener), Lu Jianzhong, Wu Weiqi	1	February 5 <sup>th</sup> 2021	Reviewed and approved 1 proposal of <i>Independent</i> Director Allowance of the 5th Board of Directors	All expressed concurring opinions
Strategy Committee of the 5 <sup>th</sup> session of the Board of Directors	Chen Zongnian (convener), Wu Xiaobo, Hu Ruimin	6	April 15 <sup>th</sup> 2021 to December 28 <sup>th</sup> 2021	Reviewed and approved 8 proposals including the 2020 Annual Work Report of the Strategy Committee of the Board of Directors	All expressed concurring opinions
Audit Committee of the 5 <sup>th</sup> session of the Board of Directors	Li Shuhua (convener), Wang Qiuchao, Guan Qingyou	4	March 12 <sup>th</sup> 2021 to April 15 <sup>th</sup> 2021	Reviewed and approved 10 proposals including Nomination of Person in Charge of Internal Audit	All expressed concurring opinions
Nomination Committee of the 5 <sup>th</sup> session of the Board of Directors	Hu Ruimin (convener), Qu Liyang, Li Shuhua	1	March 12 <sup>th</sup> 2021	Reviewed and approved 3 proposals including the Proposal on the Appointment of General Managers	All expressed concurring opinions
Remuneration and Appraisal Committee of the 5 <sup>th</sup> session of the Board of Directors	Guan Qingyou (convener), Wu Xiaobo, Wu Weiqi	5	March 26 <sup>th</sup> 2021 to December 30 <sup>th</sup> 2021	Reviewed and approved 12 proposals including the 2021 Restricted Stock Scheme (Draft) and Summary	All expressed concurring opinions
Other Information       The Company held the first extraordinary general meeting of shareholders in 2021 on March 5 <sup>th</sup> 2021 to complete the election of the Board of Directors. On March 12 <sup>th</sup> 2021, the 1 <sup>st</sup> meeting of the 5 <sup>th</sup> session of the Board of Directors reviewed and approved the Proposal on Appointing Members of Special Committees of the 5 <sup>th</sup> session of the Board of Directors.					

## VIII. Performance of Duties by the Supervisory Committee

Were there any risks to the Company identified by Board of Supervisors when performing its duties during the

reporting period?

 $\Box$  Yes  $\sqrt{No}$ 

The Board of Supervisors has no objection to the supervision matters during the reporting period.

## **IX. Staff in the Company**

### 1. Statistics of Employees, Professional Structure of the Staff, and Educational Background

Number of incumbent employees in the parent Company at the en	d of the reporting period	20,527	
Number of incumbent employees in major subsidiaries at the end	of the reporting period	32,225	
Number of incumbent employees at the end of the reporting period	d	52,752	
Number of employees receiving salaries in current period		52,752	
Number of retired employees requiring the parent Company and it	ts subsidiaries to bear costs	0	
Profession	al structure		
Tier	Number	of employees	
Managerial personnel		806	
Production staff	15,513		
Sales staff	9,296		
Technical staff		25,352	
Financial staff		382	
Administrative Staff	Administrative Staff		
Total		52,752	
Educational	background		
Education background	Number	of employees	
Master and/or doctor/or above	9,222		
Bachelor		26,834	
Junior College (professional training)		4,245	
Other	12,451		
Total	:	52,752	

#### 2. Staff Remuneration Policy

Hikvision applies scientific talent cultivation methods, effective talent incentive mechanisms and fair competition platforms to recruit talents, and continuously optimizes the talent structure. The Company provides employees with remuneration packages which are competitive in the industry. In addition to endowment insurance, medical insurance, unemployment insurance, employment injury insurance, maternity insurance and housing provident funds, the Company also provides employees with the supplementary commercial insurance, special allowances, and other benefits, and creates a fairer and more humanized working environment for each employee;

so that each employee is able to demonstrate his/her value, and create value to satisfy increasing demands for a good life.

#### 3. Staff Training Plans

The Company is focused on long-term development strategies and works for the goal of supporting business development and people development. The Company has planned and implemented a set of training programs and courses.

Because of the epidemic in early 2020, the Company's original training programs have been strongly impacted, and offline training is at risk of being cancelled at any time. Faced with such a dilemma, the Company's training programs have achieved rapid reconstruction and transformation, and accelerated the transformation from an online learning platform to a digital talent development platform to meet training demands from a multi-dimensional perspective. At the same time, the Company focused on several key positions for the implementation of the annual strategy, and carried out targeted ability improvement projects to help the talent pool and improve the ability of strategic transformation and key battles of business development.

In 2021, in the macro context of living with the COVID-19 Epidemic, businesses becoming more complex and the rise of a new breed of employees, the Company had to adapt itself to the higher requirements on learning management and operations. Therefore, the Company remained committed to the twin strategies of "system construction" and "resource construction". In order to adapt to the diversity of internal learning needs, the Company gradually strengthened the traction and design of talent training projects through deep online and offline integration, and promoted organizational experience accumulation and replication in a more orderly manner, with the aim of achieving online full-process operation and management of internal trainers and courses, and further improving the efficiency of resource management.

At the same time, the human resources department goes deep into the front line of the business, working with the business experts to jointly learn from the organization's experience and to complete the design and implementation of large-scale projects combining training and practice. Through empowering the business departments with training and operation capabilities, the daily organization of business training can become embedded in the business departments, which will better support the upgrade of skills at key positions during business transformation, thus enabling talent development "on demand and in a timely manner".

In 2022, in addition to continuing to strengthen the construction of talent development systems, the Company



will further strengthen the development of digital talent platform. Through shaping the branding of learning projects, sharing learning resources, extending promotion of platforms to lower levels and implementing closed loops on training data, the Company seeks to address the challenges posed by changeable training landscape and rapid knowledge iteration under VUCA, and better facilitate talent supply.

### 4. Labor Outsourcing

 $\Box$  Applicable  $\sqrt{$  Inapplicable

## X. Profit Distribution and Capitalization of Capital Reserves

Profit distribution policy in the reporting period, especially the formulation, implementation and adjustment of cash dividend policy

√Applicable □Inapplicable

Special explanation of cash dividend policy				
Whether it complies with the provisions of the Company's articles of association or the requirements of the resolution of the shareholders' meeting:	Yes			
Whether the dividend standard and dividend ratio are clear:	Yes			
Whether the relevant decision-making procedures and mechanisms are complete:	Yes			
Whether independent directors performed their duties and played their due roles:	Yes			
Whether minority shareholders have the opportunity to fully express their opinions and demands, and whether their legitimate rights and interests are fully protected:	Yes			
If the cash dividend policy is adjusted or changed, whether the conditions and procedures are compliant and transparent:	Inapplicable			

The 2<sup>nd</sup> meeting of the 5<sup>th</sup> session of the Board of Directors of the Company reviewed and approved the *2020 Annual Profit Distribution Proposal*, and was reviewed and approved by the Company's 2020 annual general meeting: based on the Company's current total share capital of 9,343,417,190 shares, the Company proposed to distribute cash dividend of RMB 8 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil. The date of record for this profit distribution is May 27<sup>th</sup> 2021, the exrights/ex-dividend date is May 28<sup>th</sup> 2021, and the total cash dividends (tax included) is RMB 7,474,733,752.00.

The above-mentioned profit distribution policy conforms to the provisions of the Company's articles of association and the review procedures, and fully protects the legitimate rights and interests of small and medium investors, and the independent directors have expressed their agreement.



During the reporting period, the Company was profitable and the distributable profits to shareholders of the parent company was positive, but the Company did not propose a cash dividend distribution plan.

 $\Box$  Applicable  $\sqrt{$  Inapplicable

## Profit distribution and capitalizing of capital reserves for the current reporting period

### $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

Bonus issue per 10 shares (share)	0
Cash dividend per 10 shares (RMB) (tax inclusive)	9.00
Additional shares converted from capital reserves for 10 shares (share)	0
Total capital shares as the basis for the distribution proposal (share)	9,433,208,719
Total cash dividend (RMB) (tax inclusive)	8,489,887,847.10
Amount of cash dividends in other methods (such as share repurchase) (RMB)	0
Total cash dividends (including other methods) (RMB)	8,489,887,847.10
Distributable profits (RMB)	37,958,561,319.89
Percentage of cash dividends in the total distributed profit (%)	22.37%

#### Cash dividend policy:

The Company is in the development stage and has a substantial plan of cash expenditure. In the current profit distribution, cash dividends shall account for at least 20%.

Details about the plan for profit distribution and capitalizing capital reserves into share capital

As audited by Deloitte Touche Tohmatsu Certified Public Accountants LLP, in 2021, the parent company of the Company realized net profit of RMB 14,088,727,668.02, the statutory surplus reserve is nil, adding the undistributed profit of the parent company at the beginning of the year of RMB 31,327,891,058.77 deducting the cash dividends of RMB 7,474,733,752.00 in 2020, adding back RMB 16,676,345.10 of the unpaid dividends for the repurchased restricted shares, as of December 31<sup>st</sup> 2021, the profits distributable to shareholders of the parent company amounted to RMB 37,958,561,319.89. As of December 31<sup>st</sup> 2021, the profits distributable to shareholders in the consolidated statement were RMB 45,148,877,451.52 (consolidated). To sum up, according to the principle of "whichever is lower", the profits distributable to shareholders this year was RMB 37,958,561,319.89.

Based on the Company's current total share capital of 9,433,208,719 shares, the Company proposed to distribute cash dividend of RMB 9 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil. The above scheme will distribute a total cash dividend of RMB 8,489,887,847.10, and the remaining undistributed profits will be transferred to the next year.

# XI. The Implementation of an Equity Incentive Plan, Employee Stock Incentive Plan, or other Incentive Plans

## √Applicable □Inapplicable

During the reporting period, the Company has completed the third vesting, repurchase and cancellation of the 2016 Restricted Share Incentive Scheme and the first vesting, repurchase and cancellation of the 2018 Restricted Share Incentive Scheme.

On December 25<sup>th</sup> 2020, the *Proposal on Vesting Conditional Achievements for the Third Vesting Period of the* 2016 Restricted Share Incentive Scheme, Proposal on the Third Repurchase and Cancellation of the Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2016, Proposal on Vesting Conditional Achievements for the First Vesting Period of the 2018 Restricted Share Incentive Scheme, and the Proposal on the First Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted but Unvested Restricted Shares under the Restricted Share Incentive Scheme, and the Proposal on the First Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2018 were deliberated and adopted by the 20<sup>th</sup> Meeting of the 4<sup>th</sup> session of the Board of Directors and the 17<sup>th</sup> Meeting of the 4<sup>th</sup>session of the Board of Supervisors of the Company. According to the authorization of the 2<sup>nd</sup> Extraordinary General Meeting of 2016 and the 2<sup>nd</sup> Extraordinary General Meeting of 2018 of the Company, The Company handled the vesting of a total of 66,796,439 restricted shares for 5,937 incentive grantees. The restricted shares were listed for circulation on January 20<sup>th</sup> 2021; at the same time, 7,611,076 granted but unvested shares that did not meet the incentive conditions were repurchased and cancelled, and the repurchase and cancellation procedures were completed as of June 30<sup>th</sup> 2021.

For details, please refer to the *Indicative Announcement on Vesting*, *Listing and Circulation of Shares in the Third Vesting Period of the 2016 Restricted Share Incentive Scheme* (No.: 2021-004), *Indicative Announcement on Vesting*, *Listing and Circulation of Shares in the First Vesting Period of the 2018 Restricted Share Incentive Scheme* (No. 2021-005), and *Announcement on the Completion of the Third Repurchase and Cancellation of the Granted but Unvested Restricted Shares under the 2016 Restricted Share Incentive Scheme and the First Repurchase and Cancellation of the Granted but Unvested Restricted Shares under the 2018 Restricted Share Incentive Scheme* (No.: 2021-042) issued by the Company on January 18<sup>th</sup> 2021 ad July 2<sup>nd</sup> 2021, respectively.

As of the end of the current reporting period, the Company has a total of 68,762,683 granted but unvested shares, accounting for 0.74% of the Company's total share capital.

The Company performs accounting treatments related to restricted share incentive plans in accordance with the requirements of *Accounting Standards for Business Enterprises No. 11-Share Payments* and other related



accounting standards. The cost of the shares granted by the 2018 Restricted Share Incentive Scheme is amortized during the vesting period.

During the reporting period, the amortization cost of the Company's 2018 Restricted Share Incentive Scheme had no significant impact on the Company's financial status and operating results. For details, please refer to Financial Statement Note (XI)-Share-based Payment.

## Equity incentives obtained by the directors and senior management of the Company

√Applicable □Inapplicable

Unit: Share

Name	Title	Restricted Shares held at the beginning of the period	Shares vested in the current period	Shares newly granted in the current period	Price for restricted shares granted (RMB per share)	Restricted Shares held at period-end
Hu Yangzhong	Director, CEO	48,150	48,150	-	-	0
Wu Weiqi	Director, Standing Deputy General Manager	44,550	44,550	-	-	0
He Hongli	Senior Deputy General Manager	41,400	41,400	-	-	0
Xu Lirong	Supervisor	32,850	32,850	-	-	0
Jin Duo	Senior Deputy General Manager	32,850	32,850	-	-	0
Jin Yan	Senior Deputy General Manager, person in charge of finance	162,200	96,200	-	-	66,000
Cai Changyang	Senior Deputy General Manager	32,850	32,850	-	-	0
Bi Huijuan	Senior Deputy General Manager	168,000	94,200	-	-	73,800
Pu Shiliang	Senior Deputy General Manager	144,820	84,820	-	-	60,000
Huang Fanghong	Senior Deputy General Manager, Secretary of the Board	110,000	44,000	-	-	66,000
Xu Ximing	Senior Deputy General Manager	197,000	78,800	-	-	118,200
Xu Peng	Senior Deputy General Manager	128,740	51,496	-	-	77,244



Name	Title	Restricted Shares held at the beginning of the period	Shares vested in the current period	Shares newly granted in the current period	Price for restricted shares granted (RMB per share)	Restricted Shares held at period-end
Guo Xudong	Senior Deputy General Manager	73,800	29,520	-	-	44,280
Fu Baijun	Senior Deputy General Manager (resigned)	163,950	100,950			63,000
Jiang Yufeng	Senior Deputy General Manager(resigned)	36,900	36,900			0
Total		1,418,060	849,536	-		568,524

Note:

(1) This personnel listed above is the Company's senior executives who were included in 2016 restricted shares incentive plan and 2018 restricted shares incentive plan.

(2) Fu Baijun and Jiang Yufeng left their positions at expires of their tenures on March 12th 2021.

Assessment and incentive mechanism for the senior management

The Company has established a fairly sophisticated mechanism on employees' evaluation and incentive restraint, and has established a fair and transparent appraisal and incentive mechanism on senior management personnel and other various level management personnel and employees. The Company's Board of Directors has carried out annual appraisals of senior management members mainly based on annual target achievement index. The Board is responsible for appraisals of the general manager on the general manager's duty, capacity and performance of operation; and the general manager carried out appraisals of other senior management members on their operational management and implementation of relevant assignments. In 2021, senior management personnel carried out their duties diligently with good performance, and fairly completed their objectives and missions set out at the beginning of the year.

#### XII. Construction and Implementation of Internal Control System during the Reporting Period

#### 1. Construction and Implementation of Internal Control

The Company shall establish, improve and effectively implement internal control, further improve the construction of internal control system and strengthen internal audit supervision in accordance with the *Basic Standard for Enterprise Internal Control*, its associated Guidelines and other internal control supervision requirements. The Board of Directors of the Company truthfully discloses the internal control evaluation report.

The Board of Supervisors supervises the establishment by the Board of Directors and its implementation of internal control. The management is responsible for organizing and leading the daily internal controls of the Company.

The Audit Committee of the Company under the Board of Directors inspects and supervises the scientificity, rationality, effectiveness and implementation of the Company's internal control system. At the same time, the Audit Committee has organized special work meetings to follow up on the implementation of major matters by the financial center and internal audit department, and puts forward relevant requirements on the internal control compliance of the Company. The Company has set up an internal audit department under the Audit Committee of the Board of Directors, which is equipped with full-time personnel to independently carry out internal audits, supervise and inspect the effectiveness and rationality of internal control. The internal audit department is accountable and reports to the Audit Committee and reports on their work regularly. The internal audit department audits the risk profiles of the Company's business areas according to an annual audit plan. It highlights internal control defects and gives rational suggestions, and standardizes and supervises the operation and management of the Company.

During the reporting period, the Company continuously strengthened its self-evaluation and self-improvement on internal control. It continued to improve and thoroughly implement internal control in its departments and strengthened the awareness of compliance management, to ensure the effective implementation of the internal control system, improve the standard of the Company's operations, and promote the healthy and sustainable development of the Company. For more details, please refer to the 2021 Internal Control Self-Evaluation Report disclosed by the Company on CNINFO website (www.cninfo.com.cn).

#### 2. Any Significant Internal Control Deficiencies during the Reporting Period

 $\Box$  Yes  $\sqrt{No}$ 

### XIII. The Company's Management and Control of Subsidiaries during the Reporting Period

In strict adherence to the relevant laws and regulations such as the Authorization Management System and the regulations and normative documents of regulatory authorities, the Company considers and approves proposals on the establishment of new subsidiaries, and exercises management powers over major matters of the subsidiaries in accordance with the requirements regarding assets control over the subsidiaries and the standard operations of the Company. At the same time, subsidiaries shall provide timely, complete and accurate information to the Company


such as operating results, financial position and operating prospects, so that the Company can conduct scientific decision-making, supervision and coordination.

During the reporting period, the Company established one new wholly-owned subsidiary and four subsidiaries with a controlling stake. Also the Company acquired two subsidiaries, had one additional subsidiary due to changes in voting rights, and liquidated and cancelled the registration of four subsidiaries. The Company lost one subsidiary due to the termination of management trust agreement. All of this result in changes in the scope of its consolidated financial statement. For details, please refer to changes in the consolidation scope in Note (6) to the financial statements.

#### XIV. Self-evaluation Report on Internal Control or Internal Control Audit Report

# 1. Self-evaluation Report on Internal Control

Disclosure date of full t	ext of self-evaluation report on internal control	April 16 <sup>th</sup> 2022
Disclosure index of full	text of self-evaluation report on internal control	www.cninfo.com.cn
Proportion of assets eva	aluated in total assets	100.00%
Proportion of revenue e	valuated in total revenue per consolidated financial statement	100.00%
	Recognition standard of deficiencies	
Nature	Financial report level	Non-financial report level
Qualitative criteria	<ul> <li>Significant deficiency:</li> <li>A deficiency or a combination of deficiencies in internal control may prevent significant errors in financial reports from being identified or prevented, e.g.:</li> <li>A. Invalid internal control environment;</li> <li>B. Fraud of directors, supervisors and senior management personnel on the financial report ;</li> <li>C. Significant errors identified by external auditors but not identified during the Company is operating;</li> <li>D. Invalid supervision of audit committee and internal audit system;</li> <li>E. Other deficiencies that may lead to the wrong judgement of financial statement reporter.</li> <li>Important deficiency:</li> <li>A deficiency or a combination of deficiencies in internal control may prevent errors in financial report from being identified or prevented, although such deficiency is not significant, but require attention of the Board and Management, e.g.:</li> <li>A. Application of accounting policies does not follow the enterprise accounting standard;</li> <li>B. No internal control systems for fraud;</li> <li>C. No control systems or system not effective for unusual or special transactions or no compensatory relevant control;</li> <li>D. One or more deficiencies which prevent the preparation of</li> </ul>	financial report level are mainly identified by the likelihood of occurrence and the extent of impacts on operating effective in business. Significant deficiency: the high likelihood leading to significant reduction of working efficiency, or significant increase of uncertainty, or significant deviation from the expected target; Important deficiency: a higher likelihood leading to remarkable reduction of



#### Hikvision 2021 Annual Report

	true and fair financial statements. Normal deficiency: Not significant and not important	
	deficiency.	
Quantitative criteria	<ul> <li>Significant deficiency: potential errors 5% or more of total profits</li> <li>Important deficiency: potential errors 2% or more but below 5% of total profits</li> <li>Normal deficiency: potential errors is 2% or less of total profits</li> </ul>	Significant deficiency: direct losses of assets is 5% or more of total profits Important deficiency: direct losses of assets is2% or more but below 5% of total profits Normal deficiency: direct losses of assets is below 2% of total profits
Number of significant of	leficiencies in financial report level	0
Number of significant of	leficiencies in non-financial report level	0
Number of important de	eficiencies in financial report level	0
Number of important de	eficiencies in non-financial report level	0

#### 2. Internal Control Audit Report

√Applicable □Inapplicable

De	Deliberation Opinion Paragraph in Internal Control Audit Report									
We believe that Hangzhou Hikvision Digital Technology Co., Ltd. maintained effective internal control over financial reporting in all material aspects as of December 31 <sup>st</sup> 2021 in accordance with the <i>Basic Standard for Enterprise Internal Control</i> and other related regulations.										
Disclosure of internal control audit report Disclose										
Disclosure date of the full text of the internal control audit report	April 16 <sup>th</sup> 2022									
Disclosure index of full text of internal control audit report	www.cninfo.com.cn 2021 Internal Control Audit Report									
Internal control audit opinion	Standard unqualified audit opinion									
Whether there are material weakness of non-financial report	No									

Whether the accounting firm issued an internal control audit report with a non-standard opinion

 $\square \ Yes \ \sqrt{\ No}$ 

### XV. Special Rectification Actions for Self-inspected Problems of Listed Companies

□Applicable √Inapplicable



### Section V Environmental and Social Responsibility

#### I. Significant Environmental Issues

Whether the Company or any of its subsidiaries should be categorized as a critical pollutant enterprises published by environmental protection department

□Yes √No.

#### **II. Social Responsibilities**

For details, please refer to the Company's 2021 Social Responsibility Report disclosed on CNINFO (www.cninfo.com.cn).

#### III. The Achievements of Poverty Alleviation and Rural Revitalization

During the reporting period, the Company did not conduct any targeted poverty alleviation and rural revitalization work.

### Section VI Significant Events

### I. Performance of Commitments

1. Complete and incomplete commitments of the Company and its actual controller, shareholders, related parties, acquirers, and other related

#### parties for the commitments by the end of the reporting period.

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Commitments	Giver of commitments	Commitment type	Details of commitments	Date of commitments	Term of commitments	Performance
Commitments in offering documents or shareholding alterations	CETHIK Group Co., Ltd.	Commitments regarding horizontal competition and related party transactions	<ol> <li>Commitments in non-competition within the industry: In the period as controlling shareholders of the Hikvision, CETHIK and its controlling subsidiaries (excluding Hikvision and its subsidiaries, the same below) will not be engaged in such business that is competitive to Hikvision and its subsidiaries directly or indirectly.</li> <li>Commitments in decrease and regulation of transactions with related party: Zhejiang Haikang Group Co., Ltd. (hereinafter referred to as Haikang Group or actual controller) as the controlling shareholders of Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as "Hikvision" or "Listed Company") are committed as below for the transactions with Hikvision: (1) Haikang Group will not make use of the controlling power to offer more favorable conditions to Hikvision than those to any independent third party in any fair market transactions in the cooperation with Hikvision.</li> <li>Haikang Group will not make use of the controlling power to obtain the prior right to complete the transaction with Hikvision.</li> <li>Haikang Group will not deal with Hikvision in not fair terms comparing to the market prices to prejudice the Company's interests.</li> <li>For unavoidable related transactions, the Company will observe the principles of justice and fairness to determine prices according to the market on the basis of equality, voluntarily. The Company will obsy the Articles of Association and other regulatory documents related to the avoiding of issues</li> </ol>	October 29 <sup>th</sup> 2013	Long-term	Strict performance

Commitments	Giver of commitments	Commitment type	Details of commitments	Date of commitments	Term of commitments	Performance
			about related transactions. The related transactions will go through approval procedures in accordance with related rules and complete legal procedures, fulfilling the information disclosure obligations in respect to the related transactions			
			3. Commitment to the maintenance of the independence of the listed Company			
			3.1 Commitment to Personnel Independence of the listed Company			
			(1) Commitment that our general manager, deputy general manager, chief financial officer, secretary of the board and other members of senior management shall not assume any positions other than directors and supervisors or get any remuneration in CETHIK and/or any of its controlled entities; (2) Commitment in keeping the management of labor, human resources and issues related to remuneration of the listed Company independent from that of CETHIK;			
			3.2 Commitment to the independence of the asset of the listed Company			
			(1) Commitment to independent and complete asset of the listed Company			
			(2) Commitment free of unlawful use of cash and asset of the listed Company by the controlling shareholders			
			3.3 Commitment to financial independence of the listed Company			
			(1) Commitment to an independent finance department with a team and accounting system;			
			(2) Commitment to a regulated, independent accounting system and financial management system of the branches and subsidiaries			
			(3) Commitment to maintaining accounts with banks independently of and not sharing any bank account with our controlling shareholders			
			(4) Commitment that the financial staff shall not assume any positions in CETHIK			
			(5) Commitment to paying taxes independently according to the law;			
			(6) Commitment to implementing financial decisions independently			
			3.4 The Company has set up an independent organizational structure which maintains its independent operations which is independent from that of CETHIK.			
			3.5 Commitment to business Independence of the listed Company			
			(1) The Company has the asset, personnel, aptitude and management capability			

Hikvision 2021 Annual Report

Commitments	Giver of commitments	Commitment type	Details of commitments	Date of commitments	Term of commitments	Performance
			for independent and complete business operation. The Company has the ability to operate independently in the market.			
			(2) Commitment in independence in both business and operations			
			4. Regarding plans for the development and relevant commitment for the listed			
			Company, Haikang Group has committed as below for the subsequent			
			development of Hikvsion according to the Securities Acts and relevant laws			
			and rules,			
			4.1 Currently the Company has no plan to change or make significant			
			adjustments for principal business in the next 12 months;			
			4.2 Currently the Company has no plan to sell, merge or operate with another			
			Company for the assets and business of the listed Company or its subsidiaries			
			in the next 12 months.			
			4.3 Currently the Company has no plan to alter the Board of the Directors and			
			senior management and no agreement with other shareholders about the			
			appointment and removal of the directors or senior management. The team of			
			Board of Directors and senior management will remain unchanged for the			
			foreseeable future.			
			4.4 Currently the Company has no plan to make significant changes to the			
			Articles of Association for the listed Company.			
			4.5 Currently the Company has no plan to make significant changes to the			
			existing employee recruitment for the listed Company.			
			4.6 Currently the Company has no plan to make significant changes for the			
			dividend distribution plan for the listed Company.			
			4.7 Currently the Company has no plan to make significant changes for business and organizational structure for the listed Company.			
Commitments in	Hangzhou Weixun		During Hu Yangzhong, Wu Weiqi, Jiang Haiqing, Zhou Zhiping, Xu Lirong,	May 17 <sup>th</sup>	_	Strict
	Investment Management		Cai Dingguo, He Hongli, Zheng Yibo, Hu Dan, Jiang Yufeng, Liu Xiang,	2010	Long term	performance

Commitments	Giver of commitments	Commitment type	Details of commitments	Date of commitments	Term of commitments	Performance
Offering or re- financing	Limited Partnership (later renamed as Xinjiang Weixun Investment Management Limited Partnership)	Share restriction commitment	Wang Ruihong, Chen Junke's tenure of the Company's Board of Directors, supervisors and senior management personnel, the annual transfer of Hikvision's total shares should not exceed 25% of total number of shares held under Weixun; within 6 months after abovementioned personnel's demission, should not transfer Hikvision's shares held under Weixun.			
	Hangzhou KangpuShare restrictionInvestment LimitedcommitmentPartnership (later renamedas Xinjiang PukangInvestment LimitedPartnership)The Company's directors, supervisors and executive:Share restrictionHu Yangzhong, Wu Weiqi, Jiang Haiqing, ZhouShare restrictionZhiping, Xu Lirong, CaiShare restrictionDingguo, He Hongli, Zheng Yubo, Hu Dan, Jiang Yufeng, Liu Xiang, Wang Ruihong, Chen JunkeShare restrictionDirectors, executive officers of the Company: Hu Yangzhong, Wu WeiqiShare restriction		During Hu Yangzhong, Wu Weiqi, Gong Hongjia's tenure of the Company's Board of Directors, supervisors and senior management personnel, the annual transfer of Hikvision's total shares should not exceed 25% of total number of shares held under Pukang; within 6 months after abovementioned personnel's demission, should not transfer Hikvision's shares held under Pukang.	May 17 <sup>th</sup> 2010	Long term	Strict performance
				May 17 <sup>th</sup> 2010	Long term	Strict performance
			During their tenure of the Company's Board of Directors, supervisors and senior management personnel, the annual shares transfer should not exceed 25% of total number of shares held under Kangpu; within 6 months after their demission, they should not transfer their shares held under Kangpu.	May 17 <sup>th</sup> 2010	Long term	Strict performance
	The Company's director Gong Hongjia's spouse,		During Gong Hongjia's tenure of the Company's Board of Directors, supervisors and senior management personnel, Chen's annual shares transfer	May 17 <sup>th</sup>	Long-term	Strict performance

Commitments	Giver of commitments	Commitment type	Details of commitments	Date of commitments	Term of commitments	Performance
	Chen Chunmei	Share restriction commitment	should not exceed 25% of total number of shares held under Kangpu; within 6 months after the demission of Gong Hongjia, Chen should not transfer her shares held under Kangpu.	2010		
	China Electronics Technology Group Corporation (later renamed as China Electronics Technology Group Co., Ltd.)	Commitment to avoid horizontal competition	To avoid any loss of the Company and other shareholders arising from any competing business, China Electronics Technology Group Corporation, the actual controller of the Company, issued Letters of non-competition on 18 September, 2008.	September 18 <sup>th</sup> 2008	Long term	Strict performance
	Gong Hongjia; Hangzhou Weixun Investment Management Limited Partnership (later renamed as Xinjiang Weixun Investment Management Limited Partnership); Hangzhou Kangpu Investment Limited Partnership (later renamed as Xinjiang Pukang Investment Limited Partnership); ZheJiang Orient Holdings Co., Ltd.	Commitment to avoid horizontal competition	To avoid any loss of the Company and other shareholders arising from any competing business, Gong Hongjia, Hangzhou WeiXun Investment Management Limited Partnership, ZheJiang Orient Holdings Co., Ltd. and Hangzhou KangPu Investment Management Limited Partnership, the promoters of the Company, issued <i>Commitment Letters of non-competition in</i> <i>the same industry</i> on 10 July, 2008.	July 10 <sup>th</sup> 2008	Long term	Strict performance
Whether the commitments is fulfilled in time			Yes			



2. Where any profit forecast was made for any of the Company's assets or projects and the current reporting period is still within the forecast period, the Company shall explain whether the performance of the asset or project reaches the profit forecast and why:

 $\Box$  Applicable  $\sqrt{$  Inapplicable

Commitments made by the Company's shareholders and counterparties in the operating performance of the reporting year  $\Box$  Applicable  $\sqrt{$  Inapplicable

# **II.** The Company's Funds Used by the Controlling Shareholder or Other Related Parties for Non-operating Purposes

 $\Box$  Applicable  $\sqrt{$  Inapplicable No such case during the current reporting period.

#### **III. Illegal Provision of Guarantees for External Parties**

 $\Box$  Applicable  $\sqrt{1}$  Inapplicable No such case in the current reporting period.

# IV. Explanation Given by the Board of Directors regarding the Latest "Non-standard Auditor's Report"

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### V. Explanation Given by the Board of Directors, Supervisory Committee and Independent Directors (if applicable) regarding the "Non-standard Auditor's Report" Issued by the CPA Firm for the Current Reporting Period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### VI. For Changes in Accounting Policies, Accounting Estimates or Correction of Significant Accounting Errors Compared with the Financial Report for the Prior Year

 $\sqrt{\text{Applicable}}$   $\Box$ Inapplicable

Since January 1st 2021 (the "First Adoption Date"), the Company has implemented the Accounting Standards

for Business Enterprises No. 21 - Leases revised by the Ministry of Finance in 2018 (hereinafter referred to as the

"New Lease Standards," and the Lease Standards before the revision referred to as the "Original Lease Standards"). The New Lease Standards refine the definition of a lease, and add content on the identification, splitting and merger of leases; eliminate the classification of leases by lessees as an operating lease or financing lease, and require the recognition of right-to-use assets and lease liabilities of all leases on the starting date of the lease term (excluding short-term leases and leases of low-value assets), with depreciation and interest expenses recognized separately; and improve the subsequent measurement of leases by lessees, add an accounting method in the instance of option revaluation and lease modification, and increase related disclosure requirements. In addition, they also widen the scope of disclosure of lessors. Please refer to Note (III) 30 for the revised accounting policies of the Company on the recognition and measurement of leases as lessee and lessor. For contracts that existed prior to the First Adoption Date, the Group adjusted the amount of retained earnings and other related items in the financial statements as at the First Adoption Date, the Group has elected to apply one or more simplifications based on each lease option.

Since January 1<sup>st</sup> 2021 (the "First Adoption Date"), the Company implemented the *Interpretation No. 14 of the Accounting Standards for Business Enterprises* (hereinafter referred to as "Interpretation No. 14") promulgated by the Ministry of Finance on February 2<sup>nd</sup> 2021. Interpretation No. 14 standardizes the accounting treatment for Public-Private Partnership (PPP) projects by private capital parties. According to Interpretation No. 14, the Group will handle the accounting of new PPP projects from January 1<sup>st</sup> 2021 to the promulgation date in accordance with the provisions of Interpretation No. 14. The Group made retrospective adjustments to the relevant PPP project contracts implemented prior to December 31<sup>st</sup> 2020 that were yet to be completed as of the promulgation date of Interpretation No. 14. The Group adjusted the amount of retained earnings and other related items in the financial statements as of January 1<sup>st</sup> 2021 based on the cumulative impact, without adjusting data for the comparative period.

The New Lease Standards and Interpretation No. 14 did not have a significant impact on the accounting recognition of the Company's various businesses. Please see Note (III), 32 for details on the impact of adoption of the New Lease Standards and Interpretation No. 14 by the Group on January 1<sup>st</sup> 2021.

# VII. Explanation for Changes in Scope of the Consolidated Financial Statements as Compared to the Financial Report for the Prior Year

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

During the reporting period, the Company has newly set up one wholly-owned subsidiaries and four holding subsidiaries, acquired two subsidiaries, added a new subsidiary due to the change in voting rights, liquidated and cancelled four subsidiaries, reduced one subsidiary due to the cancellation of the entrusted management agreement, which have caused the change in consolidation scope. For more details, please refer to Financial Report Note (VI) "Changes in consolidation scope" of the financial statement.

#### VIII. Engagement and Disengagement of the CPA firm

CPA firm engaged at present

Name of the domestic CPA firm	Deloitte Touche Tohmatsu Certified Public Accountants LLP
Remuneration for the domestic CPA firm (RMB'0000)	400
Consecutive years of the audit service provided by the domestic CPA firm	6
Name of the certified public accountants from the domestic CPA firm	Tang Lianjiong, Gao Sunchao
Consecutive years of the audit service provided by the certified public accountants from the domestic CPA firm	Tang Lianjiong has provided audit service for 3 consecutive years; Gao Sunchao has provided audit service for 1 consecutive year.

Whether the CPA firm was changed in the current period

 $\Box$  Yes  $\sqrt{No}$ 

Whether to reappoint a CPA firm during the audit

□ Yes √ No

Engagement of internal control audit CPA firm, financial advisor or sponsor

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

During the reporting period, the Company hired Deloitte Touche Tohmatsu Certified Public Accountants LLP as the internal control audit accounting firm, and paid a total of RMB 600,000 of financial consulting fees during the period.

#### IX. Delisting after Disclosure of this Annual Report

 $\Box$  Applicable  $\sqrt{$  Inapplicable

#### X. Bankruptcy and Restructuring

 $\Box$  Applicable  $\sqrt{$  Inapplicable

No such case during the reporting period.



### XI. Material Litigations and Arbitration

 $\Box$  Applicable  $\sqrt{$  Inapplicable

The Company had no material litigation or arbitration during the current reporting period.

#### **XII.** Punishments and Rectifications

### XIII. Integrity of the Company and its Controlling Shareholders and Actual Controllers

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### XIV. Significant Related-party Transaction

#### 1. Related-party Transactions Arising from Routine Daily Operations

### $\sqrt{\text{Applicable}}$ $\Box$ Inapplicable

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
Subsidiaries or research institutes of CETC	Under the common control of the Company's actual controller	Procurement			199,600.06	4.03%	270,000	No	Payment on delivery		Added Announcement
Shanghai Fullhan Micro Co., Ltd. and its subsidiaries	The Company's shareholder who holds more than 5% of the Company's shares, Gong Hongjia, former director of the Company, is the director of the related party	Procurement	Procurement, receiving services	Reference market price; Agreed on	107,344.71	2.17%	150,000	No	Payment on delivery	August 11 <sup>th</sup> 2021	on the forecast of daily related-party transactions in 2021 (No. 2021-053)
Wuhu Sensor Technology Co., Ltd. and its subsidiaries	An associated company held by the Company, Wu Weiqi, director of the Company, served as director of this company	Procurement		price	12,015.40	0.24%	15,000	No	Payment on delivery	March 13 <sup>th</sup> 2021	Announcement on the forecast of daily related-party transactions in 2021 (No. 2021-024)

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
Shenzhen Hikvision Urban Service Operation Co., Ltd.and its subsidiaries	A joint venture company held by the Company	Procurement			3.10	0.00%	500	No	Payment on delivery		
Zhiguang Hailian Big Data Technology Co., Ltd. and its subsidiaries	An associated company held by the Company	Procurement			-	0.00%	500	No	Payment on delivery		
Zhejiang Haishi Huayue Digital Technology Co., Ltd.	A joint venture company held by the Company; The Company's senior management is appointed as this company's Chairman	Procurement			-	0.00%	500	No	Payment on delivery		
Maxio Technology (Hangzhou) Co., Ltd. and its subsidiaries	An associated company held by the Company, Wu Weiqi, director of the Company, served as director of this company	Procurement			25,917.10	0.52%	27,000	No	Payment on delivery		
Aurotek Corporation. and its subsidiaries		Procurement			327.79	0.01%	500	No	Payment on delivery		

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
	served as a director of this company. Cheng Tianzong resigned as an independent director on March 5 <sup>th</sup> 2021. Within 12 months after his resignation, Aurotek Corporation is still recognized as a related										
Yunnan Yinghai Parking Service	party of the Company. A joint venture company held by the Company	Procurement			9.43	0.00%	50	No	Payment on delivery		
Network Technology Co.,	Senior management of the Company is appointed as directors of this company	Procurement			7.47	0.00%	100	No	Payment on delivery		
Management Research Institute (Hangzhou) Co	Wu Xiaobo, an independent director of the Company, serves as a director of this company	Procurement			0.36	0.00%	50	No	Payment on delivery		

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
Zhejiang City Digital Technology Co., Ltd.	A joint venture company held by the Company	Procurement			0.18	0.00%	50	No	Payment on delivery		
Subsidiaries or research institutes of CETC	Under the common control of the Company's actual controller.	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	43,471.00	0.53%	70,000	No	Payment on delivery		
Jiaxin Haishi JiaAn Zhicheng Technology Co., Ltd.	An associated company held by the Company	Sales			5,322.96	0.07%	7,000	No	Payment on delivery		Announcement on the forecast of daily
Zhejiang City Digital Technology Co., Ltd.	A joint venture company held by the Company	Sales			2,275.20	0.03%	6,000	No	Payment on delivery	March 13 <sup>th</sup> 2021	related-party transactions in 2021 (No.
	A joint venture company held by the Company	Sales			2,097.52	0.03%	6,000	No	Payment on delivery		2021-024)
Daishan Hailai Yunzhi Technology Co., Ltd.	From January to June 2021, it is still a joint venture held by the Company	Sales			1,685.88	0.02%	5,000	No	Payment on delivery		

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
Guangxi Haishi	A joint venture company										
-	held by the Company								Payment on		
Management Co.,		Sales			1,149.40	0.01%	2,000	No	delivery		
Ltd. and its											
subsidiaries										-	
	A joint venture company							No			
Zhejiang Haishi	held by the Company; The										
Huayue Digital	Company's senior	Sales			1,097.64	0.01%	5,000		Payment on		
Technology Co.,	management is appointed	Sules			1,097.04	0.01/0	5,000	delivery	delivery		
Ltd.	as this company's										
	Chairman									-	
Wuhu Sensor	An associated company							No			
Technology Co.,	held by the Company, Wu								Payment on		
Ltd. and its	Weiqi, director of the	Sales			84.13	0.00%	1,000		delivery		
subsidiaries	Company, served as								uclively		
subsidiaries	director of this company										
Qinghai Qingtang	An associated company	Sales			54.02	0.00%	1,000	No	Payment on		
Big Data Co., Ltd.	held by the Company	Sales			54.02	0.00%	1,000	INU	delivery		
Xuzhou Kangbo											
Urban Operation	A joint venture company	Sales			16.58	0.00%	1,000	No	Payment on		
Management	held by the Company	Sales			16.58	0.00%	1,000	INO	delivery		
Service Co., Ltd.											
Maxio Technology	An associated company	G 1			11.00	0.000/	1.000	N	Payment on		
(Hangzhou) Co.,	held by the Company, Wu	Sales			11.83	0.00%	1,000	No	delivery		

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
Ltd. and its	Weiqi, director of the										
	Company, served as director of this company										
Vision Technology	An associated company held by the Company	Sales			0.57	0.00%	1,000	No	Payment on delivery		
_	A joint venture company held by the Company	Sales			-	0.00%	4,000	No	Payment on delivery		
Technology Co., Ltd. and its	The Company's senior management is appointed as directors of this company	Sales			-	0.00%	500	No	Payment on delivery		
	An associated company held by the Company	Sales			3,412.21	0.04%	15,000	No	Payment on delivery	August 11 <sup>th</sup> 2021	Added Announcement on the forecast of daily related-party transactions in 2021 (No. 2021-053)

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
INESA (Group) Co., Ltd. and its subsidiaries	The Company's Supervisor is appointed as directors of the Company	Sales			831.52	0.01%	1,500	No	Payment on delivery		
Chengdu Guoshengtianfeng Network Technology Co., Ltd. and its subsidiaries	Senior management of the Company is appointed as directors of this company	Sales			700.61	0.01%	1,500	No	Payment on delivery		
Hangzhou Confirmware Technology Co., Ltd. and its subsidiaries	Senior management of the Company is appointed as directors of this company	Sales			121.74	0.00%	300	No	Payment on delivery		
Zhejiang Fast Line data fusion Information Technology Co.,Ltd. and its subsidiaries	Senior management of the Company is appointed as directors of this company	Sales			29.32	0.00%	100	No	Payment on delivery		
	Total				407,587.73		593,150	-	-	-	-
Details on significan	Details on significant sales return None										

Related party	Relationship	Type of related transaction	Content of related transaction	Pricing principles for related party transactions	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether exceed the approved quota	Settlement method	Disclosure date	Disclosure reference
different categories,	Total amount of related transactions projected based on different categories, and the actual performance during the current reporting period (if any)			es, Yunnan Y Ruihua Innov related transa Co., Ltd. and formation Te	rocurement with Ma ringhai Parking Serv ation Management F ction of sales with II its subsidiaries, Han chnology Co.,Ltd. ar action Management	ice Co., Ltd., Research Instit NESA (Group gzhou Confir nd its subsidia	Chengdu Guos tute (Hangzhou) )) Co., Ltd. and i mware Technolo	hengtianfeng Co., Ltd. and its subsidiarie ogy Co., Ltd.	y Network Te d Zhejiang Ci es, Chengdu ( and its subsi	cchnology C ity Digital T Guoshengtia diaries, Zhe	o., Ltd. and its echnology Co., nfeng Network jiang Fast Line
Reasons on significant difference between trading price and market referencing price (if applicable)			Not applicabl	e							



#### 2. Related-party Transactions regarding Purchase and Disposal of Assets or Equity

□Applicable √Inapplicable

No such case in the reporting period.

#### 3. Significant Related-party Transactions Arising from Joint Investments on External Parties

□Applicable √Inapplicable No such case in the reporting period.

#### 4. Related Credit and Debt Transactions

#### □ Applicable √Inapplicable

No related-parties' creditor's rights or debts during the reporting period.

#### 5. Transactions with Related Financial Companies

√Applicable □Inapplicable

#### **Deposit business**

	Relationship	Maximum	Onoming	Amount incurre	Closing		
Related Party		Deposit interest rate range	Opening Balance (0,000 RMB)	Total deposit amount for the current period (0,000 RMB)	Total withdrawal amount for the current period (0,000 RMB)	Balance(0,000 RMB)	
CETC Finance Co., Ltd.	Under the common control of the Company's ultimate controller	1,307,892.85	0.3%-2%	400,000.00	450,000.67	400,000.00	450,000.67

#### Credit or other financial services

Related Party	Relationship	Business Type	Total Amount (0,000 RMB)	Actual amount incurred (0,000 RMB)
CETC Finance Co., Ltd.	Under the common control of			
	the Company's ultimate	Credit	300,000.00	0
	controller			

### 6. Transactions between the Financial Company Controlled by the Company and Related Parties

□ Applicable √Inapplicable

There is no deposit, loan, credit or other financial business between the financial company controlled by the Company and its related parties.

#### 7. Other Significant Related Party Transactions

#### √Applicable □Inapplicable

On April 18<sup>th</sup> 2019, the *Proposal on Entering into the Entrusted Management Agreement and Related-Party Transaction with the Controlling Shareholder* was deliberated and adopted by the 10<sup>th</sup> Meeting of the fourth session of the Board of Directors of the Company. On April 19<sup>th</sup> 2019, the Company entered into the *Entrusted Management Agreement* with CETHIK and Hangzhou EZVIZ Technology Co., Ltd. (hereinafter referred to as "EZVIZ Technology"), agreeing that CETHIK shall entrust EZVIZ Network to enforce the actual operation and management rights over its wholly-owned subsidiary EZVIZ Technology. On March 27<sup>th</sup> 2021, to further optimize the business process of EZVIZ Network, based on the actual production and operation needs of EZVIZ Network, and upon consensus of the three parties through amicable and full negotiation, EZVIZ Technology. EZVIZ Network will no longer exercise the actual operation and management rights over EZVIZ Technology or be responsible for the production, operation and management of EZVIZ Technology.

On October 22<sup>nd</sup> 2021, the 6<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors of the Company reviewed and approved the *Proposal on Investing in the Establishment of Entrepreneurship Investment Partnerships and Related Transactions*, agreeing that the Company, CETHIK Group Co., Ltd., Hangzhou High-tech Venture Capital Management Co., Ltd. and CETHIK (Hangzhou) Equity Investment Management Co., Ltd. jointly invested and established Hangzhou Haina Yuzhi Entrepreneurship Investment Partnership Co,. Ltd. (hereinafter referred to as "Haina Yuzhi Fund"). The scale of Haina Yuzhi Fund is RMB 600 million, of which Hikvision, as a limited partner, invested RMB 400 million yuan in currency, holding 66.66666% of the total shares. During the reporting period, Haina Yuzhi Fund completed the industrial and commercial registration procedures and fundraising work, raised a total of RMB 600 million of funds.

Disclosure website for provisional reports on significant related-party transactions:

Title of provisional reports	Disclosure date	Disclosure website
Announcement on the Signing of the "Entrusted Management Agreement"	April 20 <sup>th</sup> 2019	www.cninfo.com.cn
and Related Party Transactions with the Controlling Shareholders	ripin 20 2019	www.eninto.com.en



Title of provisional reports	Disclosure date	Disclosure website
(Announcement No. 2019-026)		
Announcement on the Signing of the "Entrusted Management Agreement" Termination Agreement and Related Party Transactions Progress (Announcement No. 2021-025)	March 30 <sup>th</sup> 2021	www.cninfo.com.cn
Announcement on Investing in the Establishment of Entrepreneurship Investment Partnerships and Related Transactions (Announcement No. 2021-064)	October 23 <sup>rd</sup> 2021	www.cninfo.com.cn
Announcement on the Completion of the Industrial and Commercial Registration of the Entrepreneurship Investment Partnership Enterprise Co-established by the Company (Announcement No. 2021-067)	December 10 <sup>th</sup> 2021	www.cninfo.com.cn
Announcement on the Completion of the Fundraising of the Entrepreneurship Investment Partnership Enterprise Co-established by the Company (Announcement No. 2021-077)	December 31 <sup>st</sup> 2021	www.cninfo.com.cn

#### **XV. Significant Contracts and Their Execution**

#### 1. Trusteeship, Contracting and Leasing

#### (1) Trusteeship

 $\Box$  Applicable  $\sqrt{$  Inapplicable No such case in the reporting period.

#### (2) Contracting

 $\Box$  Applicable  $\sqrt{$  Inapplicable No such case in the reporting period.

#### (3) Leasing

#### $\sqrt{\text{Applicable}}$ $\Box$ Inapplicable

On December 3<sup>rd</sup> 2018, the *Proposal on Carrying out Financial Leasing Related Party Transactions between the Holding Innovative Business Subsidiary and China Electronics Technology Leasing Co. Ltd.* was approved at the 7<sup>th</sup> meeting of the 4<sup>th</sup> Board of Directors of the Company. In 2019, the Company's holding subsidiary Hangzhou Hikmicro Sensing Technology Co., Ltd. and China Electronics Technology Leasing Co. Ltd. signed the Financial Leasing Contract, where HikMicro used some of its own equipment to start leaseback business with China Electronics Technology Leasing Co. Ltd.; the financing amount was RMB 70 million, term of lease 48 months and annual lease rate 3.80%. For details, please refer to Note (X) 5, (4) other related party transactions to the financial statements.

#### 2. Significant Guarantees

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Unit: RMB'0000

	Guarantees provided by the Company to its subsidiaries											
Guaranteed party	Disclosure date of announcement of the guarantee cap	Guarantee Cap	Actual occurrence date	Actual guaranteed amount	Type of guarantee	Term of guarantee	Fulfilled or not	Guarantee for a related party or not				
Hangzhou Hikvision Technology Co., Ltd.	April 17 <sup>th</sup> 2021	1,010,000	December 1 <sup>st</sup> 2019	409,072.80	Joint guarantee	2019.12.01-2025.09.25	No	Yes				
Chongqing Hikvision Technology Co., Ltd.	April 17 <sup>th</sup> 2021	82,250	March 23 <sup>rd</sup> 2020	1,275.00	Joint guarantee	2020.03.23-2022.03 22	No	Yes				
Hikvision Singapore Pte. Ltd.	April 17 <sup>th</sup> 2021	78,900	July 15th 2021	44,777.21	Joint guarantee	2021.07.15-2029.01.07	No	Yes				
Hangzhou Hikvision System Technology Co., Ltd.	April 17 <sup>th</sup> 2021	46,000	March 23 <sup>rd</sup> 2021	13,086.36	Joint guarantee	2021.03.23-2023.12.31	No	Yes				
Urumqi HaiShi Xin'An Electronic Technology Co., Ltd.	April 17 <sup>th</sup> 2021	40,000	March 29 <sup>th</sup> 2019	24,550.43	Joint guarantee	2019.03.26-2028.06.20	No	Yes				
Pi Shan HaiShi Yong An Electronic Technology Co., Ltd.	April 17 <sup>th</sup> 2021	30,000	March 26 <sup>th</sup> 2019	21,578.00	Joint guarantee	2019.03.26-2040.06.26	No	Yes				
Luo Pu HaiShi Ding Xin Electronic Technology Co., Ltd.	April 17 <sup>th</sup> 2021	30,000	March 26 <sup>th</sup> 2019	22,160.00	Joint guarantee	2019.03.26-2035.06.26	No	Yes				
Yu Tian HaiShi Mei Tian Electronic Technology Co., Ltd.	April 17 <sup>th</sup> 2021	30,000	March 26 <sup>th</sup> 2019	9,560.00	Joint guarantee	2019.03.26-2034.03.26	No	Yes				
Hangzhou Hikvision Electronics Co., Ltd.	April 17 <sup>th</sup> 2021	25,000	March 6 <sup>th</sup> 2021	403.63	Joint guarantee	2021.03.06-2022.03.05	No	Yes				
Mo Yu HaiShi Electronic Technology Co., Ltd.	April 17 <sup>th</sup> 2021	25,000	March 26 <sup>th</sup> 2019	17,680.00	Joint guarantee	2019.03.26-2035.03.26	No	Yes				

Hikvision Europe B.V.	April 17 <sup>th</sup> 2021	2,000	August 9 <sup>th</sup> 2021	2,000.00	Joint guarantee	2021.08.09-2022.03.31	No	Yes	
Hikvision International Co., Ltd.	April 17th 2021	33,000		N	lot happened during	g the reporting period			
Xi'an Hikvision Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	20,000	Not happened during the reporting period						
Chengdu Hikvision Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	20,000		Ν	lot happened during	g the reporting period			
Shijiazhuang Hikvision Technology Co., Ltd.	April 17 <sup>th</sup> 2021	20,000		Ν	lot happened during	g the reporting period			
Wuhan Hikvision Technology Co., Ltd.	April 17 <sup>th</sup> 2021	20,000		Ν	lot happened during	g the reporting period			
Shanghe Smart City Technology Co., Ltd.	April 17 <sup>th</sup> 2021	20,000		Ν	lot happened during	g the reporting period			
Zhenping Haikang Juxin Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	18,000		Ν	lot happened during	g the reporting period			
Chongqing Hikvision System Technology Co., Ltd.	April 17th 2021	10,000		Ν	lot happened during	g the reporting period			
Nanjing Hikvision Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	10,000		Ν	lot happened during	g the reporting period			
Nanchang Hikvision Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	10,000		Ν	lot happened during	g the reporting period			
Zhengzhou Hikvision Digital Technology Co., Ltd.	April 17 <sup>th</sup> 2021	10,000	Not happened during the reporting period						
Hefei Hikvision Digital Technology Co., Ltd	April 17 <sup>th</sup> 2021	10,000	Not happened during the reporting period						
.Prama Hikvision India Private	April 17th 2021	6,000	Not happened during the reporting period						

Limited								
Hikvision USA Inc.	April 17 <sup>th</sup> 2021	2,100		Ν	lot happened during	g the reporting perio	d	
PT. Hikvision Technology Indonesia	April 17 <sup>th</sup> 2021	1,400		Ν	lot happened during	g the reporting period	d	
Hikvision Turkey Technology And Security Systems Commerce JSC	April 17 <sup>th</sup> 2021	350		Ν	lot happened during	g the reporting period	d	
Total guarantee cap for subsidiaries a period(B1)	approved during the reporting		Total actual guarantee amount 1,610,000.00 for subsidiaries during the reporting period(B2)			630,940.81		
Total approved guarantee cap for sub period(B3)			Total actual guarantee balance 1,610,000.00 for subsidiaries at the end of the reporting period(B4)			566,143.4		
	Guarantees pr	vided by the Company's subsidiary to another subsidiary						
Guaranteed party	Disclosure date of announcement of the guarantee cap	Guarantee Cap	Actual occurrence date	Actual guaranteed amount	Type of guarantee	Term of guarantee	Fulfilled or not	Guarantee for a related party or not
Hangzhou Haikang Intelligent Technology Co., Ltd.	April 17 <sup>th</sup> 2021	50,000	June 25 <sup>th</sup> 2021	934.60	Joint guarantee	2021.06.25- 2023.06.24	No	Yes
Hangzhou Hikmicro Intelligent Technology Co., Ltd.	April 17 <sup>th</sup> 2021	30,000	June 15 <sup>th</sup> 2021	878.40	Joint guarantee	2021.06.15- 2023.06.13	No	Yes
Hangzhou Hikstorage Technology Co., Ltd.	April 17 <sup>th</sup> 2021	10,000		Ν	lot happened during	g the reporting period	d	
Total guarantee cap for subsidiaries a (C1)	approved during the reporting period		90,000.00	Total actual g for subsidiaric reporting peri	-			1,836.76
Total approved guarantee cap for sub period (C3)	sidiaries at the end of the reporting		90,000.00	-	uarantee balance es at the end of the			1,813.00

Hikvision 2021 Annual Report

		reporting period(C4)				
The total amount of Company's guarantees (that is, the total of the first three items)						
Total guarantee cap approved during the reporting period (A1+B1+C1)	1,700,000.00	Total actual guarantee amount during the reporting period (A2+B2+C2)	632,777.57			
Total approved guarantee cap at the end of reporting period (A3+B3+C3)	1,700,000.00	Total actual guarantee balance at the end of the reporting period (A4+B4+C4)	567,956.43			
Portion of the total actual guarantee (A4+B4+C4) amount in net assets of the Company			8.95%			
Of which:						
The balance of guarantee for shareholders, actual controllers and their affiliates. (D)			0			
Amount of debt guarantees provided directly or indirectly for entities with a liability-to-asset ratio over 70% (E)			544,906.44			
Total amount of guarantee exceeding 50% of net assets (F)			0			
Total guarantee amount of the above-mentioned 3 kinds of guarantees (D+E+F)			544,906.44			

### 3. Entrusted Others to Manage Cash Assets

(1) Entrusted financial management

 $\Box$  Applicable  $\sqrt{$  Inapplicable

No such case during the reporting period

(2) Entrusted loan management

#### $\Box$ Applicable $\sqrt{$ Inapplicable No such case during the reporting period

#### 4. Other Significant Contracts

 $\Box$  Applicable  $\sqrt{$  Inapplicable No such case during the reporting period

#### **XVI. Other Significant Events**

#### $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

On January 8<sup>th</sup> 2021, the *Proposal on Adjustment of Domestic Listing Board for the Spin-off of the Company's Subsidiary Hangzhou EZVIZ Network Co., Ltd.*, the *Proposal on the Spin-off of the Subsidiary Hangzhou EZVIZ Network Co., Ltd. to be Listed on the Science and Technology Innovation Board* and other related proposals were deliberated and adopted by the 21<sup>st</sup> Meeting of the fourth session of the Board of Directors and the 18<sup>th</sup> Meeting of the fourth session of the Board of Supervisors of the Company, agreeing the initial public offering of ordinary shares (A shares) in RMB of EZVIZ Network after the shareholding reform and listing of EZVIZ Network on the science and technology innovation board of Shanghai Stock Exchange. For details, please refer to the *Proposal of Hangzhou Hikvision Digital Technology Co., Ltd. on the Spin-off of its Subsidiary Hangzhou EZVIZ Network Co., Ltd. to be Listed on the Science and Technology Innovation Board issued by the Company on January 9<sup>th</sup> 2021. On August 10<sup>th</sup> 2021, the 4<sup>th</sup> meeting of the fifth session of the Board of Directors and the 4<sup>th</sup> meeting of the fifth session of the Board of Supervisors of the Company deliberated on and approved relevant proposals including the <i>Proposal for Deliberation on the Proposal of Hangzhou Hikvision Digital Technology Co., Ltd. to Split Off and List Subsidiary Hangzhou EZVIZ Network Co., Ltd. on the Science and Technology Innovation Board (Revised).* Please see the

*Proposal of Hangzhou Hikvision Digital Technology Co., Ltd. to Split Off and List Subsidiary Hangzhou EZVIZ Network Co., Ltd. on the Science and Technology Innovation Board (Revised)* published by the Company on August 11<sup>th</sup> 2021 for details. On September 27<sup>th</sup> 2021, the second extraordinary general meeting of the Company in 2021 deliberated on and approved the proposal to spin off and list Hangzhou EZVIZ Network Co., Ltd. on the Science and Technology Innovation Board. Please see the Announcement on *Resolutions of the Second Extraordinary General Meeting of 2021* (Announcement No.: 2021-058) published by the Company on September 28<sup>th</sup> 2021 for details.

On December 30<sup>th</sup> 2021, the 7<sup>th</sup> meeting of the fifth session of the Board of Directors of the Company deliberated on and approved the Proposal on Authorizing Company Management to Begin Preparatory Work for the Split-off and Domestic Listing of Subsidiary Hangzhou Hikrobot Technology Co., Ltd., which authorized the management of the Company to begin preparatory work for the Split-off and domestic listing of subsidiary Hangzhou Hikrobot Technology Co., Ltd. (hereinafter referred to as "HikRobot"). After the completion of the Split-off and listing, the Company will maintain control over HikRobot. Please see the *Announcement on Authorizing Company Management to Begin Preparatory Work for the Split-off and Domestic Listing of Subsidiary Hangzhou Hikrobot Technology Co., Ltd.* (Announcement No.: 2021-074) published by the Company on December 31<sup>st</sup> 2021 for details.

#### XVII. Significant Events of the Company's Subsidiaries

#### $\sqrt{\text{Applicable}}$ $\Box$ Inapplicable

During the reporting period, the Company steadily promoted the spin-off of EZVIZ Network to be listed on the Science and Technology Innovation Board of Shanghai Stock Exchange. On January 8<sup>th</sup> 2021, the *Proposal on the Spin-off of the Company's Subsidiary Hangzhou EZVIZ Network Co., Ltd. to be Listed on the Science and Technology Innovation Board* was deliberated and adopted by the 21<sup>st</sup> Meeting of the fourth session of the Board of Directors and the 18<sup>th</sup> Meeting of the fourth session of the Board of Supervisors of the Company. On June 23<sup>rd</sup> 2021, the *Proposal on the Overall Restructuring of the the Company's Holding Subsidiary Hangzhou EZVIZ Network Co., Ltd. as Limited Liability Company by Shares* was deliberated and adopted by the 3<sup>rd</sup> Meeting of the Strategy Committee in 2021 of the

fifth session of the Board of Directors of the Company. On June 24<sup>th</sup> 2021, EZVIZ Network as a whole was restructured and changed to a limited liability company by shares. On July 2<sup>nd</sup> 2021, Zhejjang Securities Regulatory Bureau of China Securities Regulatory Commission accepted the application filed by EZVIZ Network for initial public offering of A shares and pre-listing counseling for listing on the Science and Technology Innovation Board. On August 10<sup>th</sup> 2021, the 4<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors and the 4<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors and the 4<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Supervisors reviewed and approved the *Proposal on the Initial Public Share Offering and Listing on the STAR Market of the Shanghai Stock Exchange of the Subsidiary, Hangzhou EZVIZ Network Co., Ltd. (revised draft)*. On September 27<sup>th</sup> 2021, the Company's second extraordinary general meeting in 2021 reviewed and approved the proposal to spin-off EZVIZ Network to be listed on the Science and Technology Innovation Board. On December 13<sup>th</sup> 2021, EZVIZ Network submitted the application materials for the initial public shares offering and listing on the Science and Technology Innovation Board (Shang Zheng Ke Shen (Review) [2022] No. 11), decided to accept the application and review it in accordance with the law. EZVIZ Network has submitted the *Reply to the Inquiry Letter on the Review of Hangzhou EZVIZ Network Co., Ltd.'s Application Documents for Initial Public Share Offering and Listing on the Science and Technology Innovation Board on March 15<sup>th</sup> 2022, and is currently updating the 2021 financial statements. The above spin-off matters are subject to (including but not limited to) the approval of the Shanghai Stock Exchange and the implementation of the issuance registration procedures of the China Securities Regulatory Commission.* 

Unit: Share

### Section VII Changes in Shares and Information about Shareholders

#### I. Changes in Share Capital

#### 1. Table of Changes in Share Capital

Changes in the period (+, -) After the change Before the change Share New Bonus transferred Shares Others Sub-total Shares Ratio Shares Ratio from share Issued capital reserve 1. Shares subject to conditional 1,248,025,260 13.36% -1,032,710,690 -1,032,710,690 215,314,570 2.31% restriction(s) 1)State holdings 2)Shares held by State-owned corporate -91,288,265 3) Other domestic shares 306,488,295 3.28% -91,288,265 215,200,030 2.31% Including: held by domestic corporates held by domestic 306,488,295 3.28% -91,288,265 -91,288,265 215,200,030 2.31% natural person 4) Foreign shares 941,536,965 10.08% -941,422,425 -941,422,425 114,540 0.00%

Hikvision 2021 Annual Report

	Before the change				(	Changes in the period (+, -	After the change		
	Shares	Ratio	New Shares Issued	chara	Share transferred from capital reserve	Others	Sub-total	Shares	Ratio
Including: held by overseas corporates									
held by overseas natural person	941,536,965	10.08%				-941,422,425	-941,422,425	114,540	0.00%
2. Shares without restriction	8,095,391,930	86.64%				1,025,099,614	1,025,099,614	9,120,491,544	97.69%
1) RMB ordinary shares	8,095,391,930	86.64%				1,025,099,614	1,025,099,614	9,120,491,544	97.69%
2) Domestically listed foreign shares									
3) Foreign shares listed overseas									
4) Others									
3. Total	9,343,417,190	100.00%				-7,611,076	-7,611,076	9,335,806,114	100.00%

#### Reason for the changes in share capital

√Applicable □Inapplicable

#### Partial Repurchase and Cancellation of the Restricted Share Scheme

On December 25<sup>th</sup> 2020, the *Proposal on the Third Repurchase and Cancellation of the Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2016* and the *Proposal on the First Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share*  *Incentive Scheme of 2018* were deliberated and adopted by the 20<sup>th</sup> Meeting of the fourth session of the Board of Directors and the 17<sup>th</sup> Meeting of the fourth session of the Board of Supervisors of the Company. According to the authorization of the 2<sup>nd</sup> Extraordinary General Meeting of 2016 and the 2<sup>nd</sup> Extraordinary General Meeting of 2018 of the Company, the Board of Directors agreed to repurchase and cancel some of the granted but unvested restricted share that did not meet the conditions for share incentive. On March 5<sup>th</sup> 2021, the *Proposal on the Third Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2018* were deliberated and adopted by the 1<sup>st</sup> Extraordinary General Meeting in 2021. On June 30<sup>th</sup> 2021, the Company has completed the repurchase and cancellation procedures for the above 7,611,076 restricted shares. The total share capital of the Company was reduced by 7,611,076 shares from 9,343,417,190 shares to 9,335,806,114 shares.

#### Approval for changes in share capital

#### $\sqrt{\text{Applicable}}$ $\square$ Inapplicable

On December 25<sup>th</sup> 2020, the *Proposal on the Third Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2016* and the *Proposal on the First Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2018* were deliberated and adopted by the 20<sup>th</sup> Meeting of the fourth session of the Board of Directors and the 17<sup>th</sup> Meeting of the fourth session of the Board of Supervisors of the Company. According to the authorization of the 2<sup>nd</sup> Extraordinary General Meeting of 2016 and the 2<sup>nd</sup> Extraordinary General Meeting of 2018 of the Company, the Board of Directors agreed to repurchase and cancel 7,611,076 shares of the granted but unvested restricted shares that did not meet the conditions for share incentive. On March 5<sup>th</sup> 2021, the *Proposal on the Third Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2016* and the *Proposal on the First Repurchase and Cancellation of Granted but Unvested Restricted Shares under the Restricted Share Incentive Scheme of 2018* were deliberated and adopted by the 1<sup>st</sup> Extraordinary General Meeting in 2021.

#### Transfer for changes in share capital

#### $\sqrt{\text{Applicable}}$ $\Box$ Inapplicable

On June 30<sup>th</sup> 2021, the third repurchase and cancellation under the Restricted Share Incentive Scheme of 2016 and the first repurchase and cancellation under the Restricted Share Incentive Scheme of 2018 were completed, and the total share capital of the Company was reduced by 7,611,076 shares from 9,343,417,190 shares to 9,335,806,114 shares.

Effects of changes in share capital on the basic earnings per share ("EPS"), diluted EPS, net assets per share attributable to common shareholders of the

Company, and other financial indexes over the last year and last period

□Applicable √Inapplicable

#### Other contents that the Company considers necessary or required by the securities regulatory authorities to disclose

 $\Box$  Applicable  $\sqrt{$  Inapplicable

#### 2. Changes in Restricted Shares

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
Hu Yangzhong	136,591,708	48,150	0	136,639,858	unlocked restricted shares turning into restricted	According to the relevant regulations on the management of executive shares
Grantees of restricted share incentive plan	143,170,198		66,796,439	68,762,683	Equity Incentive Restricted Shares	January 20 <sup>th</sup> 2021

Unit: Share

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
(consolidated)						
Wu Weiqi	8,483,992	44,550	0	8,528,542	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Huang Fanghong	191,875	44,000	0		Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	According to the
Xu Lirong	194,400	32,850	0		Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	relevant regulations on the management of executive shares
He Hongli	207,225	41,400	0	248,625	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Pu Shiliang	77,105	84,820	0	161,925	Restricted shares for senior	

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
					executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Jin Yan	50,800	96,200	0	147.000	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Bi Huijuan	36,750	94,200	0		Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Jin Duo	49,275	32,850	0	82,125	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Cai Changyang	49,275	32,850	0	82,125	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted	
Hikvision 2021 Annual Report

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
					shares for senior executives	
Xu Ximing	0	29,550	0	29.550	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Wang Qiuchao	26,250	0	0	26,250	Restricted shares for senior executives	
Qu Liyang	11,812	0	0	11,812	Restricted shares for senior executives	
Gong Hongjia	762,461,110	200,043,704	962,504,814	0	Restricted shares for senior executives	September 7 <sup>th</sup> 2021
Jiang Haiqing	7,718,761	36,900	7,755,661	0	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	Surtan has 201
Jia Yonghua	3,303,858	32,850	3,336,708	0	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	September 22 <sup>nd</sup> 2021

Hikvision 2021 Annual Report

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
Li Pan	3,184,688	32,850	3,217,538	0	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Fu Baijun	266,250	165,750	432,000		Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Jiang Yufeng	207,225	118,275	325,500	0	Restricted shares for senior executives + partial of the unlocked restricted shares turning into restricted shares for senior executives	
Total	1,066,282,557	201,011,749	1,044,368,660	215,314,570		

Note:

1. Executives who are grantees under incentive restricted shares scheme, his/her holding incentive restricted shares are counted within the total incentive restricted shares (consolidated statistics) on the second row.

2. The difference of 7,611,076 shares between ending balance of restricted shares of *total incentive restricted shares (consolidated) for grantees* and the *calculated balance (opening balance + increased restricted shares - unlocked shares)* was due to repurchasing and cancelling of 7,611,076 shares on June 30<sup>th</sup> 2021.

3. The three executives Jiang Haiqing, Jia Yonghua and Li Pan have left office on October 25<sup>th</sup> 2019. The original term of office expires on March 21<sup>st</sup> 2021, and the shares held by them were released from restriction in accordance with the relevant regulations.

4. Gong Hongjia left the position as a director of the Company on March 5<sup>th</sup> 2021 as his term of office expires, and Fu Baijun and Jiang Yufeng left the position as senior executives of the Company on March 12<sup>th</sup> 2021 as their terms of office expires. The shares held by them were released from restriction in accordance with relevant regulations.

### **II. Issuance and Listing of Securities**

### 1. Securities (exclude Preferred Share) Issued during the Reporting Period

□Applicable √Inapplicable

### 2. Explanation on Changes in Share Capital & the Structure of Shareholders, the Structure of Assets and Liabilities

 $\sqrt{\text{Applicable}}$   $\square$  Inapplicable

On June 30<sup>th</sup> 2021, the Company completed the third repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme and the first repurchasing and cancelling shares for 2018 Restricted Share Incentive Scheme, a total of 7,611,076 shares. The total capital shares were decreased by 7,611,076 shares from 9,343,417,190 shares to 9,335,806,114 shares. The shareholder structure, assets and liabilities of the Company did not change significantly after completing the above mentioned items.

### 3. Existent Shares Held by Internal Staff of the Company

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### III. Particulars about the Shareholders and Actual Controller

### 1. Total Number of Shareholders and Their Shareholdings

Unit: Share

Total number of common shareholders at the end of the reporting period	276,009	The total number of ordinary shareholders at the end of the previous month before the disclosure date of the annual report	308,098		
Particulars about shares held by shareholders with a shareholding percentage over 5% or the Top 10 of them					

Hikvision 2021 Annual Report

			<b>T</b> 1		TT1 1			
Name of shareholder	Nature of shareholder	Share-holding percentage (%)	Total common shares held at the end of the reporting period	Increase/decreas e during the reporting period	The number of shares held with trading restrictions	The number of shares held without trading restrictions	Pledged Status	or marked or frozen Amount
China Electronics Technology HIK Group Co., Ltd.	State-owned corporation	36.46%	3, 403,879,509	229,017,747	0	3, 403,879,509	Pledged	50,000,000
Gong Hongjia	Overseas individual	10.31%	962,504,814	-54,110,000	0	962,504,814	Pledged	117,220,000
Xinjiang Weixun Investment Management Limited Partnership	Domestic non- state-owned corporation	4.83%	450,795,176	0	0	450,795,176	Pledged	17,810,000
CETC Investment Holdings Co., Ltd.	State-owned corporation	2.49%	232,307,903	225,210,747	0	232,307,903	-	-
Shanghai Gaoyi Asset Management Partnership (Limited Partnership) - Gaoyi Adjacent Mountain 1 Yuanwang Fund	Other	2.18%	203,800,000	-46,200,000	0	203,800,000	-	-
Xinjiang Pukang Investment Limited Partnership	Domestic non- state-owned corporation	1.95%	182,510,174	0	0	182,510,174	Pledged	75,880,000
The 52nd Research Institute at China Electronics Technology Group Corporation	State-owned corporation	1.94%	180,775,044	0	0	180,775,044	-	-
Hu Yangzhong	Domestic Individual	1.66%	155,246,477	-26,940,000	136,639,858	18,606,619	-	-
Bank of China Co., Ltd Efunds Blue Chip Select	Other	1.36%	127,000,036	57,000,011	0	127,000,036	-	-



										2021 Milluar Report	
Hybrid Securities Investment Fund											
CITIC Securities Co., Ltd.	State-owned corporation	0.97%	90,242,182	2	-13,400,429	0		90,242,182	-	-	
		China Electroni	cs Technology HI	K Group	Co., Ltd., China	Electronics	Techn	ology Investment Holdin	gs Co., Ltd. a	nd The 52nd Research	
	Institute at Chin	a Electronics Tec	hnology (	Group Co., Ltd. a	are all subjec	t to co	ontrol of China Electronic	s Technology	Group Co. Ltd Ms.		
Explanation on associated	relationship or	Chen Chunmei,	limited partner of	f Xinjiang	, Pukang Investn	nent Limited	Partn	ership, is the spouse of M	lr. Gong Hong	gjia, foreign individual	
concerted actions among the	he above-mentioned	shareholder of t	he Company. Hu	Yangzhon	g, domestic indi	vidual, is ho	lding	shares in both Xinjiang V	Veixun Investr	nent Management	
shareholders:		Limited Partner	ship and Xinjiang	Pukang I	nvestment Limi	ted Partnersh	nip.				
		Except for these	e, the Company de	oes not kn	low whether the	other shareh	olders	are related parties or wh	ether they are	acting-in-concert partie	
		in accordance w	vith the Measures	for Mana	gement of the D	isclosure of t	he She	areholding Changes of Sl	hareholders of	the Listed Company.	
	Particulars	about shares held	by the Top 10 sha	reholders	holding shares	that are not s	subject	t to trading restriction(s)			
			N	Number of shares without trading		-	Type of shares				
	Name of shareholder		r	restrictions held at the period-end			Туре		Number		
China Electronics Technol	ogy HIK Group Co., L	.td.		3, 403,879,509		I	RMB common shares	3	, 403,879,509		
Gong Hongjia				962,504,814		I	RMB common shares		962,504,814		
Xinjiang Weixun Investme	ent Management Limit	ed Partnership		450,795,176		I	RMB common shares		450,795,176		
CETC Investment Holding	gs Co., Ltd.			232,307,903		I	RMB common shares		232,307,903		
Shanghai Gaoyi Asset Mar Gaoyi Adjacent Mountain	0	(Limited Partnersh	iip) -	203,800,000		Ι	RMB common shares		203,800,000		
Xinjiang Pukang Investme	-	)		182,510,174		I	RMB common shares		182,510,174		
The 52nd Research Institu			p Co.								
Ltd.			1		180,775,044		RMB common shares			180,775,044	
Bank of China Co., Ltd Efunds Blue Chip Select Hybrid Securities			es	127,000,036					127.000.026		
Investment Fund							RMB common shares		127,000,036		
CITIC Securities Company	y Limited			90,242,182			I	RMB common shares		90,242,182	
Hong Kong Securities Cle	aring Company Ltd.(H	IKSCC)			86,131,607		Ι	RMB common shares		86,131,607	

	China Electronics Technology HIK Group Co., Ltd., China Electronics Technology Investment Holdings Co., Ltd. and The 52nd Research
Explanation on associated relationship and	Institute at China Electronics Technology Group Co., Ltd. are all subject to control of China Electronics Technology Group Co. Ltd. Ms.
concerted actions among top ten shareholders	Chen Chunmei, limited partner of Xinjiang Pukang Investment Limited Partnership, is the spouse of Mr. Gong Hongjia, foreign individual
holding shares without trading restrictions, and	shareholder of the Company. Hu Yangzhong, domestic individual, is holding shares in both Xinjiang Weixun Investment Management
among top ten shareholders and top ten	Limited Partnership and Xinjiang Pukang Investment Limited Partnership.
shareholders holding shares without trading	Except for these, the Company does not know whether the other shareholders are related parties or whether they are acting-in-concert
restrictions	parties in accordance with the Measures for Management of the Disclosure of the Shareholding Changes of Shareholders of the Listed
	Company.

Any of the Company's top 10 common shareholders or top 10 non-restricted common shareholders conducted any agreed buy-back in the reporting period?

 $\square$  Yes  $\sqrt{No}$ 

No such case during the current reporting period.

### 2. Particulars about Controlling Shareholder of the Company

Nature of the controlling shareholder: Central State-owned

Type of the actual controller: Corporation

Name of controlling shareholder	Legal Representative /People in charge	Date of establishment	Organization code	Business scope
China Electronics Technology HIK Group Co., Ltd.	Chen Zongnian	November 29 <sup>th</sup> 2002	9133000014306073XD	Industrial investment; R&D of environmental protection products, network products, intelligent products and electronic products; technology transfer, technical services, manufacturing and sales; business consulting services, rental services of self-owned real estate; import and export businesses.
Shares held by the controlling shareholder in other listed companies through controlling or holding during the reporting period				Indirect control of domestic listed company Phoenix Optical Co. Ltd.,

Change of the controlling shareholder during the reporting period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

The Company's controlling shareholder has not changed during the reporting period.

### 3. Particulars about the Company's Actual Controller & Concerted Parties

Nature of the actual controller: Central state-owned assets management agency Type of the actual controller: Corporation

Name of the actual controller	Legal Representative /People in charge	Date of establishment	Organization code	Business scope		
China Electronics Technology Group Ltd.	Chen Zhaoxiong	February 25 <sup>th</sup> 2002	91110000710929498G	The Company is responsible for the development and manufacturing of military electronic equipment and systems integration, electronic equipment for weapon platform, military software and electronic basic products; and the construction of national defense electronic information infrastructure and safeguard conditions; construction of national major electronic information system; the research, development, production and sales of civil electronic information software, materials, components, equipment and system integration and related common technology; self- operated and agent import and export business of various commodities and technologies (except for goods and technologies that are restricted or restricted by the state- limited company); operating feed processing and "three comes one supplement" business; operating counter trade and entrepot trade; Industrial investment; asset management; engaged in e-commerce information services; organization of enterprises in the industry to go abroad, participate in exhibitions. (Market entities independently choose business projects and carry out business activities in accordance with the law; for projects subject to approval according to law, business activities are carried out according to the approved content after approval by relevant departments; the Company cannot engage in business activities of projects prohibited or restricted by national and municipal industrial policies.)		
Shares held by the	actual	China Electronics Technology Group Ltd. is the actual controller of fourteen domestic listed companies including Sun Create Electronic Co., Ltd, CETC Digital Technology Co., Ltd, Chengdu Westone				
controlling shareh		Information Ind	lustry Co., Ltd., GCI Scie	nce & Technology Co., Ltd., Tai'ji Computer Corporation		
other listed compa				, Phoenix Optics Co., Ltd., Chengdu Tianao Electronic Co.,		
controlling or hold reporting period	ling during the	Eastern Comr	nunications Co.,Ltd.,	nnology Inc., Hebei Sinopack Electronic Technology Co.,Ltd., Eastcompeace Technology Co.,Ltd., Nanjing Putian Putian Telecommunications Cable Company Limited and etc.		

Whether there are shareholders with a shareholding proportion of more than 10% at the final control level of the Company

 $\square$  Yes  $\sqrt{No}$ 

Change of the actual controller during the reporting period

 $\Box$  Applicable  $\sqrt{$  Inapplicable

No such change during the reporting period.

The ownership and controlling relationship between the actual controller of the Company and the Company is detailed as follows:



The actual controller controls the Company through trust or other asset management methods  $\Box$  Applicable  $\sqrt{N}$  Not applicable

# 4. The Company's Controlling Shareholder or the Largest Shareholder and its Concerted Action Person's Cumulative Pledged Shares Account for 80% of the Company's Shares Held by Them

 $\Box$  Applicable  $\sqrt{Not}$  applicable

### 5. Particulars about Other Corporate Shareholders with Shareholding Proportion over 10%

 $\Box$  Applicable  $\sqrt{$  Inapplicable

# 6. Particulars on Shareholding Decrease Restrictions for the Controlling Shareholders, Actual Controller, Restructurer or Other Committing Parties

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### **IV. The Specific Implementation of Share Repurchase during the Reporting Period** Implementation progress of share repurchase

 $\Box$  Applicable  $\sqrt{\text{Inapplicable}}$ 



### **Section VIII Information of Preferred Shares**

 $\Box$  Applicable  $\sqrt{}$  Inapplicable There is no preferred share existed for the Company during the current reporting period.



## **Section IX Bonds**

 $\Box$  Applicable  $\sqrt{$  Inapplicable

### **Section X Financial Report**

### **Audit Report**

Audit Opinion	Standard unqualified audit opinion		
Audit Report sign-off Date	April 14 <sup>th</sup> 2022		
Audit Institution Name	Deloitte Touche Tohmatsu Certified Public Accountants LLP		
Audit Report Number	Deloitte Auditors' Report (Audit) No. 22- P02724		
Certified Public Accounts Name	Tang Lianjiong, Gao Sunchao		

To all shareholders of Hangzhou Hikvision Digital Technology Co., Ltd.:

#### 1. Audit Opinion

We have audited the accompanying financial statements of Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as "Hikvision" or "The Group"), including consolidated and parent company's balance sheet as of December 31<sup>st</sup> 2021, consolidated and parent company's income statement, cash flow statement and statement of changes in owners' equity of 2021 as well as relevant financial notes to financial statements.

In our opinion, the financial statements annexed have been prepared in accordance with Accounting Standards for Business Enterprises in all material respects and they present fairly the consolidated and parent company's financial position of Hikvision as of December 31<sup>st</sup> 2021 and consolidated and parent company's financial performance and cash flows of 2021.

#### 2. Basis of Opinion

We have conducted our audit in accordance with the Auditing Standards for Chinese Certified Public Accountants. "Responsibilities of Certified Public Accountants for Financial Statements Audit" in the audit report further states our responsibilities under the standards. As per the code of ethics of Chinese certified public accountants, we are independent from Hikvision and have implemented other responsibilities as required by the code of ethics. We believe that the audit evidence we have acquired is sufficient and appropriate to provide a basis for our audit opinion.

### 3. Key Matters

Key matters are matters we deem the most significant to the financial statements audit for the current period based on our professional judgment. These matters are handled based on the financial statements audit as a whole and the audit opinion formed accordingly. We don't present opinions separately on these matters. We confirm that the following matters are key matters to be communicated through in the audit report.

### 1) Recognition of Sales Revenues

#### Description:

As shown in Note (V) 45, the operating revenue in 2021 in the consolidated financial statements of the Group for the year ended December 31<sup>st</sup> 2021 is RMB 81,420,053,539.27. The product sales revenue, a key performance indicator, reaches RMB 75,532,012,528.94, accounting for 92.77% of the operating revenue, which is a significant indicator and has a significant influence on results of operations. The product sales revenue models include product domestic sales and product export sales by domestic companies and the overseas sales of overseas subsidiaries; the domestic sales of products by domestic companies and the overseas sales of overseas subsidiaries; the domestic sales of products by domestic companies and the overseas sales of overseas subsidiaries are completed when the control of the goods is transferred, i.e. when the products are delivered to the other party's designated location, or the other party completed acceptance; while for the export of products of domestic companies, the delivery of the goods to the carrier designated by the other party at the port of shipment specified in the contract within the specified time limit is the time point for the transfer of control of the goods. The timing of the transfer of control rights under each revenue model is different, and improper determination of the timing of completion of performance obligations may result in a material misstatement of revenue recognition. Therefore, we regard the occurrence of sales revenue as a key audit matter.

### Audit Measures:

Main audit procedures that we perform for the aforesaid key audit matters include:

- Understanding and evaluating design and implementation of key internal control in relation to revenue recognition, and testing the effectiveness of its operation;
- (2) For revenues under different sales models, selecting a sample to check the sales contract, reviewing its main transaction terms, evaluating whether revenue recognition complies with requirements of accounting policies of the Group and the Accounting Standards for Business Enterprises;
- (3) Analyzing revenues and gross profits based on product types, to understand whether there are abnormal fluctuations in the revenues and gross profits for the year, and conducting a test of details for identified specific transactions, through systematic analysis of revenue data, and reviewing relevant supporting documents;
- (4) Selecting sample(s) from product sales revenues recorded for the year, checking invoices, sales contracts or orders, shipping orders, signature forms, and other supporting documents; for the sample(s) of income under the export model of the selected domestic companies, additional inspections will be made to the customs declaration record and shipment record.

### 2) Provision for Credit Loss of Accounts Receivable

### Description:

As disclosed in Note (V) 4 to the consolidated financial statements of the Group, as of December 31<sup>st</sup> 2021, the balance of accounts receivable amounted to RMB 28,201,432,058.17, and the balance of provision for credit losses of accounts receivable amounted to RMB 2,026,658,957.75. The book value of the Group's accounts receivable is relatively high, and the provision for credit loss of accounts receivable has a significant impact on the financial statements. As shown in Note (III) 10.2 and Note (III) 31 of the financial statements, the Group makes provisions for credit losses for accounts receivable at an amount equivalent to expected credit losses during the entire duration. For accounts receivable with significant individual amount and when the debtor has major financial difficulties, etc., the Group recognizes its credit losses based

on individual assets, and classifies other accounts receivable into different combinations based on common credit risk characteristics and calculates expected credit losses on a portfolio basis.

For accounts receivable classified into portfolios, the Group uses impairment matrix to determine the expected credit loss provision for accounts receivable. The expected credit loss provision ratio for each portfolio by using impairment matrix is determined based on the Group's historical overdue ratio and default and with reference to the forward-looking information of the industry. In measuring expected credit loss, the Group is required to classify the customers with similar credit risk characteristics into a same portfolio, and classify them by appropriate overdue stage and comparable expected credit loss rate. The accounting estimates above are subject to a high level of uncertainties. Therefore, we identify the recognition of credit loss provision for accounts receivable on a portfolio basis as a key audit matter.

#### Audit Measures:

Main audit procedures that we perform for the aforesaid key audit matters include:

- (1) Understanding and evaluating design and implementation of key internal control in relation to expected credit loss provision for accounts receivable by the Group's management, and testing the effectiveness of its operation;
- (2) Understanding the Group's accounting policies for expected credit loss on accounts receivable; for the model where the Group's management estimates expected credit loss provision for accounts receivable on a portfolio basis, we mainly performed the following procedures;

-Assessing the rationality of measurement method by using impairment matrix model, and the rationality of the key parameters and assumptions used in the impairment matrix model, including classification of different portfolios, classification of stage, forward-looking adjustment, etc.;

- Obtaining the historical default data used by the Group's management in determining the historical loss rate of accounts receivable, and evaluating the accuracy thereof;

- Selecting samples to test the accuracy of the classification of portfolio and stage by the Group's management;

- Recalculating the expected credit loss provision based on default loss percentage.

#### 4. Other Information

Management of Hikvision shall be responsible for other information. Other information includes the information covered in the annual report, excluding the financial statements and our audit report.

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

In connection with our audit of the financial statements, our responsibility is to read other information and to consider whether other information is significantly misstated or materially inconsistent with the financial statements or the information we learned during the audit.

Based on the works we have performed, if we determine that there is a material misstatement in other information, we should report the fact. In this respect, we have nothing to report.

#### 5. Responsibility of the Management and Governance for the Financial Statements

The management of Hikvision is responsible for the preparation of financial statements in accordance with Accounting Standards for Business Enterprises to achieve fair presentation, and design, implementation and maintenance

of necessary internal control to enable the financial statements are free from material misstatement, whether due to fraud or error.

When preparing the financial statements, the management is responsible for assessing the going-concern ability of Hikvision, disclosing issues related to going-concern as applicable, and applying going-concern assumptions, unless the management plans to liquidate Hikvision, terminate operation or has no other realistic choice.

The governance is responsible for supervising financial reporting processes of Hikvision.

#### 6. Responsibility of Certified Public Accountants on Audit of the Financial Statements

Our objective is to obtain reasonable assurance as to whether the overall financial statements are free from material misstatement, whether due to fraud or error, and to issue audit report that contain audit opinions. Reasonable assurance is a high level of assurance, but could not guarantee that an audit performed in accordance with the Auditing Standards can always figure out any existing material misstatements. Misstatements may be caused by fraud or error. Misstatement is generally considered to be material if it is reasonably expected that the misstatement, alone or aggregated, may affect the users' financial decisions based on the financial statements.

In performing the audit in accordance with the Auditing Standards, we applied professional judgment and maintained professional skepticism. Meanwhile, we also perform the following duties:

- (1) Identify and evaluate the risk of material misstatement of financial statements due to fraud or error; design and implement audit procedures to cope with these risks, and obtain adequate and appropriate audit evidence as the basis for expressing audit opinions. As fraud may involve collusion, forgery, willful omission, misrepresentation or override of internal control, the risk of not discovering a material misstatement due to fraud is higher than the risk of not discovering a material misstatement due to error.
- (2) Understand the internal control related to auditing as a way to design appropriate audit procedures.
- (3) Evaluate the properness of accounting policy selected by the management and the rationality of accounting estimate and related disclosure.
- (4) Reach a conclusion on whether the going concern assumption adopted by the management is appropriate. Meanwhile, based on the audit evidence obtained, reach a conclusion on whether there are material uncertainties in the events or conditions that may cast significant doubts on Hikvision's ability to continue as a going concern. If we reach a conclusion that there is a material uncertainty, the Auditing Standards require us to call the attention of the users of the report to the relevant disclosures in the financial statements in the audit report. If the disclosure is insufficient, we should issue modified audit opinions. Our conclusion is based on the information available up to the date of the audit report. However, future events or conditions may result in the failure of Hikvision to continue as a going concern.
- (5) Evaluate the overall presentation (including the disclosure), structure and content of the financial statements and evaluate whether the financial statements fairly reflect the related transactions and events.
- (6) Obtain adequate and appropriate audit evidence on the financial information of entity or business activities of Hikvision so as to express audit opinions on the financial statements. We are responsible for directing, supervising and executing the audit on the Group, and assume full responsibility for the audit opinions.

We communicated with the governance about the scope of the audit, the schedule and major audit findings, including the notable shortcomings of internal control identified during the auditing.

We also provide statement to the governance on the independence-related work ethics we follow, and communicate with the governance on all relations and other matters that might be reasonably deemed to influence our independence as

well as relevant precautionary measures (as applicable).

We determine which of the matters we communicated with the governance are of the greatest importance to the audit of financial statements of the current period so as to make them key matters. We describe the matters in the audit report. We decide not to communicate on such matters in the audit report unless the laws and regulations forbid the public disclosure of such matters, or, in rare circumstances, if the negative consequence of communication of matters in the audit report is reasonably expected to exceed the benefit of the public interest.



### **Consolidated Balance Sheet**

Unit: RMB						
Item	Notes	On December 31 <sup>st</sup> 2021	On December 31 <sup>st</sup> 2020			
Current Assets:						
Cash and bank balances	(V)1	34,721,870,931.36	35,459,729,108.27			
Held-for-trading financial assets	(V)2	34,320,010.83	22,679,846.77			
Notes receivable	(V)3	1,522,760,905.30	1,303,252,705.19			
Accounts receivable	(V)4	26,174,773,100.42	21,979,380,716.86			
Receivables for financing	(V)5	1,316,035,122.06	1,959,601,195.25			
Prepayments	(V)6	505,798,253.35	296,334,689.86			
Other receivables	(V)7	359,620,445.88	519,143,350.82			
Inventories	(V)8	17,974,112,407.60	11,477,906,040.70			
Contract assets	(V)9	1,411,372,624.91	245,754,510.98			
Non-current assets due within one year	(V)10	975,960,437.14	1,001,208,813.83			
Other current assets	(V)11	1,022,600,377.78	497,914,506.64			
Total Current Assets		86,019,224,616.63	74,762,905,485.17			
Non-current Assets:						
Long-term receivables	(V)12	613,067,944.97	2,105,570,004.53			
Long-term equity investment	(V)13	982,165,546.45	864,026,710.23			
Other non-current financial assets	(V)14	438,724,172.22	491,939,067.27			
Fixed assets	(V)15	6,695,590,671.27	5,876,007,536.60			
Construction in progress	(V)16	2,323,336,098.68	1,425,235,193.72			
Right-of-use assets	(V)17	566,393,672.75	-			
Intangible assets	(V)18	1,304,247,415.07	1,251,317,923.69			
Goodwill	(V)19	202,381,895.37	274,203,665.20			
Long-term deferred expenses	(V)20	158,007,174.90	108,584,686.85			
Deferred tax assets	(V)21	1,210,877,575.24	820,380,954.86			
Other non-current assets	(V)22	3,350,526,411.63	721,511,156.08			
Total Non-current Assets		17,845,318,578.55	13,938,776,899.03			
Total Assets		103,864,543,195.18	88,701,682,384.20			



On December 31st 2021

### **Consolidated Balance Sheet-continued**

Unit: RMB						
Item	Notes	On December 31 <sup>st</sup> 2021	On December 31 <sup>st</sup> 2020			
Current Liabilities:						
Short-term borrowings	(V)23	4,074,962,469.97	3,999,246,634.59			
Held-for-trading financial liabilities	(V)24	4,062,317.57	7,405,771.15			
Notes payable	(V)25	1,339,998,383.34	1,036,920,229.85			
Accounts payable	(V)26	15,889,694,981.12	13,593,884,790.19			
Contract liabilities	(V)27	2,580,894,226.59	2,161,166,671.26			
Payroll payable	(V)28	4,595,552,073.12	2,877,786,430.71			
Taxes payable	(V)29	1,461,470,029.69	1,770,057,908.62			
Other payables	(V)30	1,830,626,583.03	1,525,053,355.95			
Non-current liabilities due within one year	(V)31	596,915,360.58	3,507,680,339.78			
Other current liabilities	(V)32	917,479,922.61	745,711,579.57			
Total Current Liabilities		33,291,656,347.62	31,224,913,711.67			
Non-current Liabilities:						
Long-term borrowings	(V)33	3,284,371,642.52	1,961,167,761.30			
Lease liabilities	(V)34	317,951,879.21	-			
Long-term payables	(V)35	9,009,331.50	39,595,459.35			
Provisions	(V)36	200,675,950.96	151,443,871.02			
Deferred income	(V)37	738,586,458.05	190,878,987.69			
Deferred tax liabilities	(V)21	93,315,151.17	92,979,823.89			
Other non-current liabilities	(V)38	534,334,158.27	560,959,368.74			
Total non-current liabilities		5,178,244,571.68	2,997,025,271.99			
Total liabilities		38,469,900,919.30	34,221,938,983.66			
Owners' Equity						
Share capital	(V)39	9,335,806,114.00	9,343,417,190.00			
Capital reserves	(V)40	5,404,070,600.07	5,178,777,462.09			
Less: Treasury shares	(V)41	1,023,188,723.04	1,121,918,737.47			
Other comprehensive income	(V)42	(77,184,125.29)	(84,993,926.94)			
Surplus reserves	(V)43	4,672,505,348.00	4,672,505,348.00			
Retained earnings	(V)44	45,148,877,451.52	35,806,523,826.37			
Total owners' equity attributable to owner of the Company		63,460,886,665.26	53,794,311,162.05			
Minority equity		1,933,755,610.62	685,432,238.49			
Total owners' equity		65,394,642,275.88	54,479,743,400.54			
Total liabilities and owners' equity		103,864,543,195.18	88,701,682,384.20			

The accompanying notes form part of the financial statements.

The financial statements were signed by the following:

Legal Representative: Chen Zongnian; Person in charge of the accounting work: Jin Yan; Person in Charge of the Accounting Department: Zhan Junhua



Unit: RMI						
Item	Notes	On December 31 <sup>st</sup> 2021	On December 31 <sup>st</sup> 2020			
Current Assets:						
Cash and bank balances		26,656,489,813.38	23,476,606,330.08			
Held-for-trading financial assets		4,489,098.88	-			
Notes receivable		254,830,140.51	107,411,912.35			
Accounts receivable	(XV)1	23,878,118,071.42	24,193,392,179.36			
Receivables for financing		3,116,794.78	12,216,215.65			
Prepayments		116,908,227.97	62,946,087.75			
Other receivables	(XV)2	1,514,142,364.05	726,703,133.65			
Inventories		346,835,446.94	204,216,250.73			
Contract assets		2,627,800.33	3,311,250.08			
Non-current assets due within one year		123,112,934.70	71,208,685.76			
Other current assets		46,183,195.94	10,110,869.86			
Total Current Assets		52,946,853,888.90	48,868,122,915.27			
Non-current Assets:						
Long-term accounts receivable		237,682,275.59	47,762,348.01			
Long-term equity investment	(XV)3	7,785,916,631.88	6,727,373,453.97			
Other non-current financial assets		435,839,952.22	489,054,847.27			
Fixed assets		2,834,983,102.39	2,762,700,997.83			
Construction in progress		450,957,191.99	388,903,828.81			
Right-of-use assets		67,592,195.40	-			
Intangible assets		134,626,963.77	158,917,438.86			
Long-term deferred expenses		61,162,816.25	43,264,691.73			
Deferred tax assets		281,893,463.93	110,066,596.99			
Other non-current assets		21,042,856.65	2,740,576.47			
Total Non-current Assets		12,311,697,450.07	10,730,784,779.94			
Total Assets		65,258,551,338.97	59,598,907,695.21			



On December 31<sup>st</sup> 2021

### **Balance Sheet of the Parent Company - continued**

Item	Notes	On December 31 <sup>st</sup> 2021	On December 31 <sup>st</sup> 2020
Current Liabilities:			
Short-term borrowings		361,117,361.14	1,431,233,375.00
Accounts payable		713,263,324.12	540,664,512.60
Contract liabilities		368,945,242.08	240,629,015.92
Payroll payable		2,838,109,439.40	1,618,357,135.99
Taxes payable		861,102,872.06	1,539,095,196.97
Other payables		1,334,246,256.62	659,214,959.62
Non-current liabilities due within one year		66,524,298.83	3,219,794,958.37
Other current liabilities		561,225,504.26	589,167,743.26
Total Current Liabilities		7,104,534,298.51	9,838,156,897.73
Non-current Liabilities:			
Long-term borrowings		1,254,076,200.00	-
Lease liabilities		27,440,248.49	-
Provisions		113,998,912.05	85,230,299.84
Deferred Income		365,699,705.71	122,455,935.44
Other non-current liabilities		511,594,361.52	560,959,368.74
Total non-current liabilities		2,272,809,427.77	768,645,604.02
Total liabilities		9,377,343,726.28	10,606,802,501.75
Owners' Equity			
Share capital		9,335,806,114.00	9,343,417,190.00
Capital reserves		4,937,523,553.84	4,770,210,334.16
Less: Treasury shares		1,023,188,723.04	1,121,918,737.47
Surplus reserves		4,672,505,348.00	4,672,505,348.00
Retained earnings		37,958,561,319.89	31,327,891,058.77
Total owners' equity		55,881,207,612.69	48,992,105,193.46
Total liabilities and owners' equity		65,258,551,338.97	59,598,907,695.21

### For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### **Consolidated Income Statement**

Item	Notes	Amount for the current period	Unit: RME Amount for the prior period
I. Total operating income	(V)45	81,420,053,539.27	63,503,450,891.78
Less: Total operating costs	(V)45	45,329,400,332.65	33,957,697,857.73
Business taxes and surcharges	(V)46	560,980,007.52	416,263,349.55
Selling expenses	(V)47	8,586,443,668.02	7,377,790,744.58
Administrative expenses	(V)48	2,132,250,463.96	1,790,013,088.76
Research and Development (R&D) expenses	(V)49	8,251,645,101.39	6,378,651,762.42
Financial expenses	(V)50	(133,343,257.84)	396,254,772.56
Including: Interest expenses		229,950,217.93	202,415,502.10
Interest income		885,545,988.62	719,662,082.74
Add: Other Income	(V)51	2,628,560,820.46	2,303,581,705.81
Investment income	(V)52	174,205,547.82	169,277,048.95
Including: Investment gains in associated enterprise and joint-venture enterprise		114,137,281.18	6,361,388.74
Gains (losses) from changes in fair values	(V)53	(38,200,024.47)	85,458,209.54
Credit impairment losses	(V)54	(569,758,165.50)	(185,940,325.74)
Impairment losses of assets	(V)55	(447,689,406.60)	(363,109,513.99)
Asset disposal income		34,225,603.81	628,505.02
II. Operating profit		18,474,021,599.09	15,196,674,945.77
Add: Non-operating income	(V)56	75,744,369.29	99,273,303.50
Less: Non-operating expenses	(V)57	81,554,105.75	22,976,971.41
III. Total profit		18,468,211,862.63	15,272,971,277.86
Less: Income tax expenses	(V)58	957,490,652.16	1,594,651,805.69
IV. Net profit		17,510,721,210.47	13,678,319,472.17
4.1 Classification by continuous operation			
(a) Net profit on continuous operation		17,510,721,210.47	13,678,319,472.17
(b) Net loss on terminated operation		-	-
4.2 Classification by attribution of ownership		-	-
(a) Profit or loss attributable to minority shareholders		710,310,178.42	292,792,758.02
(b) Net profit attributable to owners of parent company		16,800,411,032.05	13,385,526,714.15
V. Other comprehensive income, net of income tax	(V)42	4,631,122.68	(34,145,243.17)
Other comprehensive income attributable to owners of the Company, net of tax		7,809,801.65	(31,452,779.95)
(I) Items that will not be reclassified subsequently to profit or loss		-	-
(II) Other comprehensive income to be reclassified to profit or loss in subsequent periods		7,809,801.65	(31,452,779.95)
1. Exchange differences arising on conversion of financial statements denominated in foreign currencies		7,809,801.65	(31,452,779.95)
Other comprehensive income attributable to minority interests, net of tax		(3,178,678.97)	(2,692,463.22)
VI. Total comprehensive income		17,515,352,333.15	13,644,174,229.00

### Hikvision 2021 Annual Report

Item	Notes	Amount for the current period	Amount for the prior period
Total comprehensive income attributable to owners of the parent company		16,808,220,833.70	13,354,073,934.20
Total comprehensive income attributable to minority shareholders		707,131,499.45	290,100,294.80
VII. Earnings per share			
(I) Basic earnings per share	(XVI)2	1.810	1.445
(II) Diluted earnings per share	(XVI)2	1.806	1.444

### For the reporting period from January 1st 2021 to December 31st 2021

### **Income Statement of the Parent Company**

			Unit: RMB
Item	Notes	Amount for the current period	Amount for the prior period
I. Total operating income	(XV)4	28,072,593,261.87	26,311,987,347.40
Less: Total operating Cost	(XV)4	5,240,788,874.32	7,177,407,215.45
Business taxes and surcharges		327,853,515.36	293,578,888.80
Selling expenses		3,578,887,952.72	2,854,822,255.21
Administrative expenses		767,812,041.04	783,395,117.26
Research and Development (R&D) expenses		6,049,343,480.30	4,554,003,406.39
Financial expenses		(740,196,978.65)	(278,380,172.69)
Including : Interest expenses		104,266,342.46	85,828,434.69
Interest income		701,176,190.67	527,732,109.92
Add: Other income		1,889,775,429.25	1,847,575,953.90
Investment income	(XV)5	237,198,739.71	1,095,486,482.55
Including: Investment gains in associated enterprise and joint-venture enterprise		109,087,538.20	13,424,897.92
Gains (losses) from changes in fair values		(48,725,796.17)	69,478,784.83
Credit impairment losses		(119,440,900.17)	(35,765,705.73)
Gains (losses) on asset impairment		(2,669,913.88)	2,397,952.77
Asset disposal income		30,917,301.16	16,966.03
II. Operating profit		14,835,159,236.68	13,906,351,071.33
Add: Non-operating income		9,542,292.17	18,924,477.37
Less: Non-operating expenses		61,845,120.19	4,678,775.95
III. Total profit		14,782,856,408.66	13,920,596,772.75
Less: Income tax expenses		694,128,740.64	1,249,208,332.25
IV. Net profit		14,088,727,668.02	12,671,388,440.50
V. Other comprehensive income, net of income tax		-	-
VI. Total comprehensive income		14,088,727,668.02	12,671,388,440.50

### For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### **Consolidated Cash Flow Statement**

Consolidated Cash Flow	v Statemen	l	Unit: RME
Item	Notes	Amount for the current period	Amount for the prior period
I. Cash flows from operating activities:			
Cash received from sale of goods or rendering of services		83,503,340,788.69	68,169,017,614.45
Receipts of tax refunds		4,683,092,023.52	3,274,552,890.75
Other cash receipts relating to operating activities	(V)59(1)	2,798,426,938.05	1,427,590,353.65
Sub-total of cash inflows from operating activities		90,984,859,750.26	72,871,160,858.85
Cash payments for goods purchased and services received		53,662,747,197.88	37,257,220,824.09
Cash paid to and on behalf of employees		12,868,949,235.34	10,247,824,582.96
Payments of various types of taxes		6,447,300,353.27	4,901,863,280.18
Other cash payments relating to operating activities	(V)59(2)	5,297,338,276.78	4,376,095,604.95
Sub-total of cash outflows from operating activities		78,276,335,063.27	56,783,004,292.18
Net Cash flows from Operating Activities	(V)60(1)	12,708,524,686.99	16,088,156,566.67
II. Cash flows from Investing Activities:			
Cash receipts from recovery of investments		6,189,975,412.80	1,693,378,691.26
Cash receipts from investment income		115,644,801.97	150,000,000.00
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		64,430,953.56	14,793,178.49
Other cash receipts relating to investing activities	(V)59(3)	-	46,196,873.80
Sub-total of cash inflows from investing activities		6,370,051,168.33	1,904,368,743.55
Net cash paid for obtaining subsidiaries and other business units	(V)60(2)	323,604,530.74	48,918,168.58
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		3,098,310,855.39	2,003,628,270.01
Cash paid to acquire investments		6,094,268,306.70	2,405,456,262.23
Other cash payments relating to investment activities	(V)59(4)	10,196,658.79	1,000,000.00
Sub-total of cash outflows from investing activities		9,526,380,351.62	4,459,002,700.82
Net cash flows from Investing Activities		(3,156,329,183.29)	(2,554,633,957.27)
III. Cash flows from financing activities:			
Cash receipts from capital contributions		207,702,900.00	173,897,986.67
Including: cash receipts from capital contributions from minority owners of subsidiaries		207,702,900.00	173,897,986.67
Cash receipts from borrowings		5,915,784,932.52	5,883,973,583.25
Cash receipts from issuance of bonds and SCP		-	999,500,000.00
Sub-total of cash inflows from financing activities		6,123,487,832.52	7,057,371,569.92
Cash repayments of borrowings		7,758,027,348.85	4,834,813,277.12
Cash payments for distribution of dividends or profits or settlement of interest expenses		7,844,017,257.76	6,704,954,160.69
Including : Dividends and profits paid by subsidiaries to minority shareholders		4,704,000.00	40,000,000.00
Other cash payments relating to financing activities	(V)59(5)	312,940,867.51	77,707,417.35
Sub-total of cash outflows from financing activities		15,914,985,474.12	11,617,474,855.16
Net cash flows from Financing Activities		(9,791,497,641.60)	(4,560,103,285.24)
IV. Effect of foreign exchange rate changes on Cash and Cash Equivalents		(181,591,311.21)	(464,249,454.25)
V. Net Increase (decrease) in Cash and Cash Equivalents	(V)60(1)	(420,893,449.11)	8,509,169,869.91
Add: Opening balance of Cash and Cash Equivalents	(V)60(1)	35,024,837,878.31	26,515,668,008.40
VI. Closing Balance of Cash and Cash Equivalents	(V)60(3)	34,603,944,429.20	35,024,837,878.31

### For the reporting period from January 1st 2021 to December 31st 2021

<b>Cash Flow Statements</b>	of the Parent	Company
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Unit: RM						
Item	Notes	Amount for the current period	Amount for the prior period			
I. Cash flows from Operating Activities::						
Cash receipts from the sale of goods and the rendering of services		34,148,655,237.57	30,589,118,989.08			
Receipts of tax refunds		1,726,725,329.46	1,609,506,273.14			
Other cash receipts relating to operating activities		976,326,567.89	728,754,897.93			
Sub-total of cash inflows from operating activities		36,851,707,134.92	32,927,380,160.15			
Cash payments for goods acquired and services received		8,696,110,952.82	8,265,995,701.20			
Cash payments to and on behalf of employees		6,188,349,496.37	5,227,053,043.52			
Payments of various types of taxes		4,406,691,364.91	3,096,614,910.29			
Other cash payments relating to operating activities		1,765,753,448.19	1,827,804,822.26			
Sub-total of cash outflows from operating activities		21,056,905,262.29	18,417,468,477.27			
Net Cash flows from Operating Activities	(XV)8(1)	15,794,801,872.63	14,509,911,682.88			
II. Cash flows from Investing Activities:						
Cash receipts from recovery of investments		33,398,189.82	6,450,064.33			
Cash receipts from investment income		131,960,801.97	210,000,000.00			
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		84,321,638.76	22,605,893.13			
Cash receipts from disposals of subsidiaries and other business units		-	848,151,116.16			
Other cash receipts relating to investing activities		82,668,322,959.43	44,165,378,335.06			
Sub-total of cash inflows from investing activities		82,918,003,589.98	45,252,585,408.68			
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		650,844,109.04	446,640,144.49			
Cash payments to acquire investments		942,402,941.96	1,572,003,054.15			
Other cash payments relating to investing activities		83,113,418,266.33	43,940,319,202.39			
Sub-total of cash outflows from investing activities		84,706,665,317.33	45,958,962,401.03			
Net Cash flows from Investing Activities		(1,788,661,727.35)	(706,376,992.35)			
III. Cash flows from Financing Activities						
Cash receipts from borrowings		1,644,388,055.69	2,480,000,000.00			
Cash receipts from issuance of bonds and SCP		-	999,500,000.00			
Other cash receipts relating to financing activities		15,606,213,712.04	6,971,777,752.17			
Sub-total of cash inflows from financing activities		17,250,601,767.73	10,451,277,752.17			
Cash repayments of borrowings		4,572,909,918.72	4,049,244,293.61			
Cash payments for distribution of dividends or profits or settlement of interest expenses		7,516,599,420.29	6,547,520,501.67			
Other cash payments relating to financing activities		15,775,258,476.27	6,910,848,212.28			
Sub-total of cash outflows from financing activities		27,864,767,815.28	17,507,613,007.56			
Net Cash flows from Financing Activities		(10,614,166,047.55)	(7,056,335,255.39)			
IV. Effect of foreign exchange rate changes on Cash and Cash Equivalents		(17,084,979.94)	(138,534,267.16)			
V. Net increase in cash and cash equivalents	(XV)8(1)	3,374,889,117.79	6,608,665,167.98			
Add: Opening balance of cash and cash equivalents	(XV)8(1)	23,264,693,578.70	16,656,028,410.72			
VI. Closing Balance of Cash and Cash Equivalents	(XV)8(2)	26,639,582,696.49	23,264,693,578.70			

For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### **Consolidated Statement of Changes in Owners' Equity**

Unit:	RMI

	2021							
		Owr	er's equity attributa	ble to the parent con	npany		Minority interests	
Items	Share capital	Capital reserves	Less: Treasury share	Other comprehensive income	Surplus reserve	Retained profits		Total owners' equity
I. Opening balance of the current period	9,343,417,190.00	5,178,777,462.09	1,121,918,737.47	(84,993,926.94)	4,672,505,348.00	35,806,523,826.37	685,432,238.49	54,479,743,400.54
II. Increase or decrease in the current period	(7,611,076.00)	225,293,137.98	(98,730,014.43)	7,809,801.65	-	9,342,353,625.15	1,248,323,372.1 3	10,914,898,875.34
(I) Total comprehensive income	-	-	-	7,809,801.65	-	16,800,411,032.05	707,131,499.45	17,515,352,333.15
(II) Owners' contributions and reduction in capital	(7,611,076.00)	225,293,137.98	(37,631,007.23)	-	-	-	545,895,872.68	801,208,941.89
1. Capital contribution from shareholders	-	-	-	-	-	-	207,702,900.00	207,702,900.00
2. Share-based payment recognized in owners' equity	-	340,326,119.26	-	-	-	-	29,003,130.85	369,329,250.11
3. Business combination of enterprises not under the same control	-	-	-	-	-	-	317,436,910.79	317,436,910.79
4. Others	(7,611,076.00)	(115,032,981.28)	(37,631,007.23)	-	-	-	(8,247,068.96)	(93,260,119.01)
(III) Profit distribution	-	-	(61,099,007.20)	-	-	(7,458,057,406.90)	(4,704,000.00)	(7,401,662,399.70)
1. Transfer to surplus reserves	-	-	-	-	-	-	-	-
2. Distributions to shareholders	-	-	(61,099,007.20)	-	-	(7,458,057,406.90)	(4,704,000.00)	(7,401,662,399.70)
III. Closing balance of the current period	9,335,806,114.00	5,404,070,600.07	1,023,188,723.04	(77,184,125.29)	4,672,505,348.00	45,148,877,451.52	1,933,755,610.6 2	65,394,642,275.88



For the reporting period from January 1<sup>st</sup> 2020 to December 31<sup>st</sup> 2020

### Consolidated Statement of Changes in Owners' Equity-continued

		2020							
	Owner's equity attributable to the parent company								
Items	Share capital	Capital reserves	Less: Treasury share	Other comprehensive income	Surplus reserve	Retained profits	Minority interests	Total owners' equity	
I. Opening balance of the current period	9,345,010,696.00	4,126,943,698.96	2,148,273,864.36	(53,541,146.99)	4,672,505,348.00	28,961,389,145.22	568,825,008.31	45,472,858,885.14	
II. Increase or decrease in the current period	(1,593,506.00)	1,051,833,763.13	(1,026,355,126.89)	(31,452,779.95)	-	6,845,134,681.15	116,607,230.18	9,006,884,515.40	
(I) Total comprehensive income	-	-	-	(31,452,779.95)	-	13,385,526,714.15	290,100,294.80	13,644,174,229.00	
(II) Owners' contributions and reduction in capital	(1,593,506.00)	1,051,833,763.13	(925,020,534.09)	-	-	-	(135,943,064.62)	1,839,317,726.60	
1. Capital contribution from shareholders	-	-	-	-	-	-	173,897,986.67	173,897,986.67	
2. Share-based payment recognized in owners' equity	-	752,504,023.39	-	-	-	-	65,602,599.80	818,106,623.19	
3.Others	(1,593,506.00)	299,329,739.74	(925,020,534.09)	-	-	-	(375,443,651.09)	847,313,116.74	
(III) Profit distribution	-	-	(101,334,592.80)	-	-	(6,540,392,033.00)	(37,550,000.00)	(6,476,607,440.20)	
1. Transfer to surplus reserves	-	-	-	-	-	-	-	-	
2. Distributions to shareholders	-	-	(101,334,592.80)	-	-	(6,540,392,033.00)	(37,550,000.00)	(6,476,607,440.20)	
III. Closing balance of the current period	9,343,417,190.00	5,178,777,462.09	1,121,918,737.47	(84,993,926.94)	4,672,505,348.00	35,806,523,826.37	685,432,238.49	54,479,743,400.54	

For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### **Statement of Changes in Owners' Equity of the Parent Company**

Unit: RMB

Item	2021					
	Share capital	Capital reserves	Less: Treasury share	Surplus reserve	<b>Retained profits</b>	Total owners' equity
I. Closing balance of the prior year	9,343,417,190.00	4,770,210,334.16	1,121,918,737.47	4,672,505,348.00	31,327,891,058.77	48,992,105,193.46
II. Increase or decrease in the current period	(7,611,076.00)	167,313,219.68	(98,730,014.43)	-	6,630,670,261.12	6,889,102,419.23
(I) Total comprehensive income	-	-	-	-	14,088,727,668.02	14,088,727,668.02
(II) Owners' contributions and reduction in capital	(7,611,076.00)	167,313,219.68	(37,631,007.23)	-	-	197,333,150.91
1. Share-based payment recognized in owners' equity	-	282,346,200.96	-	-	-	282,346,200.96
2. Others	(7,611,076.00)	(115,032,981.28)	(37,631,007.23)	-	-	(85,013,050.05)
(III) Profit distribution	-	-	(61,099,007.20)	-	(7,458,057,406.90)	(7,396,958,399.70)
1.Distributions to shareholders	-	-	(61,099,007.20)	-	(7,458,057,406.90)	(7,396,958,399.70)
III. Closing balance of the current period	9,335,806,114.00	4,937,523,553.84	1,023,188,723.04	4,672,505,348.00	37,958,561,319.89	55,881,207,612.69
Item	2020					
	Share capital	Capital reserves	Less: Treasury share	Surplus reserve	<b>Retained profits</b>	Total owners' equity
I. Closing balance of the prior year	9,345,010,696.00	4,064,833,739.52	2,148,273,864.36	4,672,505,348.00	25,196,894,651.27	41,130,970,570.43
II. Increase or decrease in the current period	(1,593,506.00)	705,376,594.64	(1,026,355,126.89)	-	6,130,996,407.50	7,861,134,623.03
(I) Total comprehensive income	-	-	-	-	12,671,388,440.50	12,671,388,440.50
(II) Owners' contributions and reduction in capital	(1,593,506.00)	705,376,594.64	(925,020,534.09)	-	-	1,628,803,622.73
1. Share-based payment recognized in owners' equity	-	717,200,505.99	-	-	-	717,200,505.99
2. Others	(1,593,506.00)	(11,823,911.35)	(925,020,534.09)	-	-	911,603,116.74
(III) Profit distribution	-	-	(101,334,592.80)	-	(6,540,392,033.00)	(6,439,057,440.20)
1.Distributions to shareholders	-	-	(101,334,592.80)	-	(6,540,392,033.00)	(6,439,057,440.20)
III. Closing balance of the current period	9,343,417,190.00	4,770,210,334.16	1,121,918,737.47	4,672,505,348.00	31,327,891,058.77	48,992,105,193.46

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

### I. Basic Information about the Company

Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as "Company" or "the Company" or "Hikvision"), is a Sino-foreign equity joint venture company, formerly known as "Hangzhou Hikvision Digital Technology Ltd", established on November 30<sup>th</sup> 2001 in Hangzhou upon the approval letter of Hangzhou High-tech No. 604 [2001] issued by Hangzhou High-tech Industrial Development Zone Management Committee. On June 25th 2008, with approval of document No. 598 [2008] issued by the MOFCOM (The Ministry of Commerce of the People's Republic of China), the Company was renamed as "Hangzhou Hikvision Digital Technology Co., Ltd.", headquartered in Hangzhou, and obtained the business license of enterprise No.91330000733796106P. On May 28<sup>th</sup> 2010, the Company was listed on the Shenzhen Stock Exchange.

On December 17<sup>th</sup> 2020, authorized by the Company's second Extraordinary General Meeting in 2016, the Company completed procedures of repurchase and cancellation of some of the 1,593,506 restricted stocks that did not meet the incentive conditions, and the total share capital of the Company was adjusted to 9,343,417,190 shares.

On July 2<sup>nd</sup> 2021, authorized by the Company's second Extraordinary General Meeting in 2016 and the second Extraordinary General Meeting in 2018, the Company completed procedures of repurchase and cancellation of some of the 7,611,076 restricted stocks that did not meet the incentive conditions, and the total share capital of the Company was adjusted to 9,335,806,114 shares. For details of the share capital, please refer to Note (V) 39.

As of December 31<sup>st</sup> 2021, the Company's total registered capital is RMB 9,335,806,114, with total capital shares of 9,335,806,114 shares (face value RMB 1 per share), of which restricted A-shares were 1,192,886,791 shares, A-shares without restriction are 8,142,919,323 shares.

The Company is involved in the sector of other electronic equipment manufacturing of the electronic industry. Business scope of the Company includes development and production of electronic products (including explosion-proof electrical products, tele-communication equipments and its ancillary equipments, multimedia equipments, transmission and display equipments), fire protection and control products, big data and IoT software and hardware products, aerial vehicles, robots, intelligent equipments and intelligent systems, real-time communication systems, auto parts and accessories, electrical signal equipments for vehicle, servers and supporting hardware and software products; sales of self-manufactured products; technical service, electronic technology consulting service, training service (excluding class training), electronic equipment installation, design, construction and maintenance of electronic engineering and intelligent system engineering. For details about business scope of the Company and its subsidiaries, please refer to Note (VII) 1.

The Company's consolidated financial reports were approved for issuance by the 9<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors of the Company on April 14<sup>th</sup> 2022.

For consolidation scope of the financial statements of the current reporting period, please refer to Note (VII) "Interest in other entities". For changes in consolidation scope of the financial statements during the current reporting period, please refer to "changes in the consolidation scope" in Note (VI). Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

### **II.** Basis of Preparation of Financial Statements

### **Basis of preparation of financial statements**

The Company and its subsidiaries (hereinafter referred to as "the Group") have adopted the Accounting Standards for Business Enterprises ("ASBE") and relevant provisions issued by the Ministry of Finance ("MoF"). In addition, the Group has disclosed relevant financial information in accordance with *Information Disclosure and Presentation Rules for Companies Offering Securities to the Public No.* 15 - General Provisions on Financial Reporting (revised in 2014).

### **Going concern**

The Group has evaluated its going concern for 12 months going forward starting from December 31<sup>st</sup> 2021, and there is no factor that may cast significant doubt on the entity's ability to continue as a going concern. Therefore, the financial statements have been prepared on a going concern basis.

### Bookkeeping base and valuation principles

The Group measures the accounting elements in accordance with the accrual accounting basis. Except certain financial instruments are measured by fair value, these financial statements are prepared in accordance with the measurements basis of historical costs. If the asset decreases in value, the provision for impairment of assets should be made according to relevant regulations.

According to the historical cost measurement, the assets shall be measured as per the amount of cash or cash equivalent paid at the time of purchase, or the fair value of consideration paid for the purchase of such assets. The liabilities shall be measured in accordance with the amount of funds or assets actually received when undertaking current obligations, or the contract amount when undertaking the current obligations, or the amount of cash or cash equivalents required for paying back the debts in daily activities.

The fair value is a price received by the market participants from selling asset or transferring liability during orderly transaction at the measurement date. No matter the fair value is observable or estimated by using valuation technique, the measured and disclosed fair value in the financial statement shall be determined on this basis.

When measuring non-financial assets at fair value, the assets shall be measured considering the ability of market participants to use the assets for optimal use to generate economic benefits, or to sell the assets to other market participants to use the assets for optimal use to generate economic benefits.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

For the financial assets measured with transaction price at the initial recognition, and the use of valuation techniques involving unobservable inputs in the subsequent fair value measurement, the valuation technique is corrected in the valuation process in order to make the initial recognition results confirmed by valuation techniques equal to the transaction price.

Based on the observable extent of the input value of the fair value, and the importance of such input value to the fair value measurement, the fair value measurement is divided into three levels:

• Level 1: The input value is the unadjusted offer of the same assets or liabilities on active market acquired on measurement date;

• Level 2: The input value is the input value of relevant assets or liabilities observable directly or indirectly in addition to level 1 input value;

• Level 3: The input value is the non-observable input value of relevant assets or liabilities.

### **III. Significant Accounting Policies and Accounting Estimates**

### 1. Statement for Compliance with Accounting Standards for Business Enterprises (ASBE)

The financial statements of the Company have been prepared in accordance with ASBE, and present truly and completely, the Company's and consolidated financial position as of December 31<sup>st</sup> 2021; and the Company's consolidated results of operations, the Company's and consolidated changes in shareholders' equity, and the Company's and consolidated cash flows for 2021.

### 2. Accounting Period

The Group has adopted the calendar year as its accounting year from January 1st to December 31st each year.

### 3. Business Cycle

The business cycle refers to the period from purchase of assets used for processing to realization of cash or cash equivalents. The Group business cycle is usually 12 months.

### 4. Functional Currency

Renminbi ("RMB") is the currency in the primary economic environments in which the Company and its domestic subsidiaries are operated. The Company and its domestic subsidiaries take RMB as their functional currency. Overseas subsidiaries of the Company determine their functional currency on the basis of the primary economic environment in which it operates. For functional currency of overseas subsidiaries of the Company, see Note (V) 62. The Group adopts RMB to prepare its financial statements.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

### 5. The Accounting Treatment of Business Combinations Involving Enterprises under Common Control and Business Combinations Not Involving Enterprises under Common Control

Business combinations are classified into business combinations involving enterprises under common control and business combinations not involving enterprises under common control.

### 5.1 Business combinations involving enterprises under common control

A business combination involving enterprises under common control is a business combination in which all of the combining enterprises are ultimately controlled by the same party or parties both before and after the combination, and that control is not transitory.

Assets and liabilities obtained shall be measured at their respective carrying amounts as recorded by the combining entities at the date of the combination. The difference between the carrying amount of the net assets obtained and the carrying amount of the consideration paid for the combination is adjusted to the share premium in capital reserve. If the share premium is not sufficient to absorb the difference, any excess shall be adjusted against retained earnings.

Costs that are directly attributable to the combination are charged to profit or loss in the period in which they are incurred.

### 5.2 Business combinations not involving enterprises under common control and goodwill

A business combination not involving enterprises under common control is a business combination in which all of the combining enterprises are not ultimately controlled by the same party or parties before and after the combination.

The cost of combination is the aggregate of the fair values, at the acquisition date, of the assets given, liabilities incurred or assumed, and equity securities issued by the acquirer in exchange for control of the acquiree. If a business combination not under the common control is realized step by step through multiple transactions, the cost of the combination is the sum of the consideration paid on the purchase date and the fair value of the equity of the purchase already held before the purchase date on the purchase date. The intermediary expenses incurred by the acquirer in respect of auditing, legal services, valuation and consultancy services, etc. and other associated administrative expenses attributable to the business combination are recognized in profit or loss when they are incurred.

The acquiree's identifiable assets, liabilities and contingent liabilities, acquired by the acquirer in a business combination, that meet the recognition criteria shall be measured at fair value at the acquisition date.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

Where the cost of combination exceeds the acquirer's interest in the fair value of the acquiree's identifiable net assets, the difference is treated as an asset and recognized as goodwill, which is measured at cost on initial recognition. Where the cost of combination is less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer firstly reassesses the measurement of the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquiree's identifiable net assets, the acquirer's interest in the fair value of the acquiree's identifiable net assets and contingent liabilities and measurement of the cost of combination. If after that reassessment, the cost of combination is still less than the acquirer's interest in the fair value of the acquiree's identifiable net assets, the remaining difference immediately into profit or loss for the current period.

Goodwill arising on a business combination is measured at cost less accumulated impairment losses, and is presented separately in the consolidated financial statements.

### 6. Preparation Method of Consolidated Financial Statements

### 6.1 Preparation method of consolidated financial statements

The scope of consolidated financial statements shall be confirmed based on the control. Control right means that an investor may control an investee; the investor may participate in relevant activities of the investee to obtain variable rewards and also be able to use the control rights for the investee to influence its amount of returns. The Group will re-evaluate, if the change of the relevant facts and circumstances leading to the change of the relevant elements involved in the above definition of control.

The merger of subsidiary starts from the Group obtaining the control power of the subsidiary, and terminates when the Group loses the control power of the subsidiary.

As for subsidiaries disposed by the Group, operating results and cash flows prior to the disposal date (the date of losing control right) have been properly included in the consolidated profit statement and consolidated cash flow statement.

For a subsidiary acquired through a business combination not involving enterprises under common control, the operating results and cash flows from the acquisition date (the date when control is obtained) are included in the consolidated income statement and consolidated statement of cash flows.

No matter when the business combination occurs in the reporting period, subsidiaries acquired through a business combination involving enterprises under common control are included in the Group's scope of consolidation as if they had been included in the scope of consolidation from the date when they first came under the common control of the ultimate

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

controlling party. Their operating results and cash flows from the beginning of the earliest reporting period are included in the consolidated income statement and consolidated statement of cash flows, as appropriate.

The significant accounting policies and accounting periods adopted by the subsidiaries are determined based on the uniform accounting policies and accounting periods set out by the Company.

All significant intra-group balances and transactions are eliminated on consolidation.

The portion of subsidiaries' equity that is not attributable to the Company is treated as minority interests and presented as "minority equity" in the consolidated balance sheet. The portion of net profits or losses of subsidiaries for the period attributable to minority interests is presented as "minority interests" in the consolidated income statement below the "net profit" line item.

When the amount of loss for the period attributable to the minority shareholders of a subsidiary exceeds the minority shareholders' portion of the opening balance of owners' equity of the subsidiary, the excess amount are still allocated against minority interests.

Acquisition of minority interests or disposal of interest in a subsidiary that does not result in the loss of control over the subsidiary is accounted for as equity transactions. The carrying amounts of the total owners' equity attributable to owner of the Company and minority equity are adjusted to reflect the changes in their relative interests in the subsidiary. The difference between the amount by which the minority interests are adjusted and the fair value of the consideration paid or received is adjusted to capital reserve under owners' equity. If the capital reserve is not sufficient to absorb the difference, the excess is adjusted against retained earnings.

In the case that the equity of the acquiree is obtained through multiple deals step by step to finally form the business combination not under the common control, the business combination shall be handled differently based on whether it is "package deal": where it is package deal, the Company accounts each deal as a deal to obtain the control. If the deal is not a "package deal", a deal where the control is obtained on the acquisition date will be subject to accounting. The acquiree's equity held before the acquisition date will be remeasured based on the fair value of the equity on the acquisition date and the difference between the fair value and book value will be included in the profit or loss in the current period. If the acquiree's equity accounted by the equity method, such equity changes will be converted into the profit or loss in the current period on the acquisition date.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

### 7. Joint Arrangement Classification and Joint Operation Accounting

Joint arrangements include joint operation and joint ventures. Such classification is defined based on the rights and obligations of the joint parties in the joint arrangement, taking into account the structure and legal form of such arrangement and also the contractual provisions. Joint operation refers to a joint arrangement where the joint venture is entitled to assets related to this arrangement and bear liabilities related to this arrangement. Joint ventures mean that joint venture parties are merely entitled to joint venture arrangements of net assets of such arrangements.

The Groups investment in any joint venture is accounted by the equity method. See the details in Note (III) "15.3.2 Long-term equity investment accounted under the equity method".

The Group confirms its assets held separately according to the arrangement of joint operation and those held jointly in proportion to the Group's share; confirms its liabilities held separately and those held jointly in proportion to the Group's share ; confirms its revenue from the sale of its share of the output arising from the joint operation; confirms its share of the revenue from the sale of the output by the joint operation; confirms the expenses incurred by the Group alone and the expenses incurred by the joint operation corresponding to the share of the Group therein. The assets, liabilities, revenues and expenses related to the joint operation are accounted and confirmed by the Group in accordance with the regulations applicable to specific assets, liabilities, revenues, and expenses.

### 8. Recognition Criteria of Cash and Cash Equivalents

Cash comprises cash on hand and deposits that can be readily withdrawn on demand. Cash equivalents are the Group's short-term (Generally refers to due within three months from the purchase date), highly liquid investments that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

### 9. Conversion of Transactions and Financial Statements Denominated in Foreign Currencies.

#### 9.1 Transactions denominated in foreign currencies

A foreign currency transaction is recorded, on initial recognition, by applying an exchange rate that approximates the actual spot exchange rate on the date of transaction; The exchange rate that approximates the actual spot exchange rate on the date of transaction is calculated according to the middle price of market exchange rate at the beginning of the month in which the transaction happened.

At the balance sheet date, foreign currency monetary items are translated into [RMB] using the spot exchange rates at the balance sheet date. Exchange differences arising from the differences between the spot exchange rates prevailing at the balance sheet date and those on initial recognition or at the previous balance sheet date are recognized in profit or loss for the period, except for exchange differences related to a specific-purpose borrowing denominated in foreign currency that qualify for capitalization are capitalized as part of the cost of the qualifying asset during the capitalization period.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

When the consolidated financial statements include foreign operation(s), if there is foreign currency monetary item constituting a net investment in a foreign operation, exchange difference arising from changes in exchange rates are recognized as "exchange differences arising on conversion of financial statements denominated in foreign currencies " in other comprehensive income, and in profit and loss for the period upon disposal of the foreign operation.

Foreign currency non-monetary items measured at historical cost are converted to the amounts in functional currency at the spot exchange rates on the dates of the transactions. Foreign currency non-monetary items measured at fair value are re-converted at the spot exchange rate on the date the fair value is determined. Difference between the re-converted functional currency amount and the original functional currency amount is treated as changes in fair value (including changes of exchange rate) and is recognized in profit and loss or as other comprehensive income.

### 9.2 Conversion of financial statements denominated in foreign currencies

For the purpose of preparing the consolidated financial statements, financial statements of a foreign operation are converted from the foreign currency into RMB using the following method: assets and liabilities on the balance sheet are translated at the spot exchange rate prevailing at the balance sheet date; shareholders' equity items are converted at the spot exchange rates at the dates on which such items arose; all items in the income statement as well as items reflecting the distribution of profits are translated at exchange rates that approximate the actual spot exchange rates on the dates of the transactions; The difference between the converted assets and the aggregate of liabilities and shareholders' equity items is recognized into other comprehensive income and shareholders' equity.

The foreign currency cash flows and cash flows of overseas subsidiaries adopt the exchange rate similar to the spot rate at the date of cash flows for conversion. The affected amount of cash and cash equivalents due to the change of exchange rate, as an adjustment item, shall be separately listed as "the impact of cash and cash equivalents due to the change of exchange rate" in the cash flow statement.

The closing balances of the prior year and the actual amount of the prior year are presented at the converted amounts of the prior year's financial statements.

On disposal of the Group's entire interest in a foreign operation, or upon a loss of control over a foreign operation due to disposal of certain interest in it or other reasons, the Group transfers the accumulated exchange differences arising on conversion of financial statements of this foreign operation attributable to the owners' equity of the Company and presented under shareholders' equity, to profit or loss in the period in which the disposal occurs.

In case of a disposal or other reason that does not result in the Group losing control over a foreign operation, but only a decrease in proportion of overseas business interests, the proportionate share of accumulated exchange differences arising

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

on conversion of financial statements are re-attributed to minority interests and are not recognized in profit and loss under current period. For partial disposals of equity interests in foreign operations, which are associates or joint ventures, the proportionate shares of the accumulated exchange differences arising on conversion of financial statements of foreign operations is reclassified to profit or loss under current period.

### **10. Financial Instruments**

The Group recognizes a financial asset or a financial liability when it becomes a party to a contract of financial instrument.

For the purchase or sale of a financial asset in conventional manner, the asset to be received and the liability to be assumed will be recognized on the trading day, or the asset sold will be derecognized on the trading day.

Financial assets and financial liabilities are measured by fair value upon initial recognition. For financial assets and financial liabilities at fair value through profit and loss, the relevant trading costs will be directly charged to profit and loss of the current period. For other types of financial assets and financial liabilities, the relevant trading costs will be booked into the initial recognition amount. Upon initial recognition of accounts receivable which have no material financing components or have not taken into consideration the financing components in contracts with a term not exceeding one year according to Accounting Standards for Business Enterprise No. 14 – Revenue ("Revenue Standard"), such initial amount is measured by the transaction price as defined under the Revenue Standard.

Effective interest rate method refers to the method of calculating the amortized cost of financial asset or financial liability and apportioning interest income or interest expenses to each accounting period.

Effective interest rate refers to the interest rate used for discounting the estimated future cash flows of a financial asset or a financial liability for an expected subsisting period into the balance of book value of the financial asset or the amortized cost of the financial liability. When determining the effective interest rate, the expected cash flows are estimated on the basis of considering all contractual terms of the financial asset or financial liability (such as early repayment, extended term, call option or other similar option) but without considering the expected credit loss.

The amortized cost of a financial asset or a financial liability refers to the initial recognition amount of such financial asset or financial liability, less the repaid amount of principal, plus or minus the accrued amortized amount calculated by amortization of the difference between the initial recognition amount and the amount on maturity by using the effective interest rate method, and then deducts the accrued provision for losses (only applicable to financial assets).

10.1 Classification, Confirmation and Measurement of Financial Assets
Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

After initial recognition, the Group will adopt amortized cost, fair value through other comprehensive income, or fair value through profit and loss for subsequent measurement depending on different categories of financial assets.

The Group will classify a financial asset into a financial asset measured at amortized cost if the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding and the financial asset is held within a business model whose objective is to hold financial assets in order to collect contractual cash flows. Financial assets classified by the Group as financial asset measured by amortized cost include cash and cash equivalents, notes receivables and accounts receivable, other receivables and long-term receivables.

The Group will classify a financial asset into a financial asset measured by fair value through other comprehensive income if the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding, and the financial asset is held within a business model whose objective is achieved by both collecting contractual cash flows and selling the financial assets. This category of financial assets mainly includes financial assets with a maturity of more than one year from the date of acquisition and which are presented under other debt investments, financial assets maturing within one year (inclusive) from the balance sheet date and which are presented under non-current assets maturing within one year, as well as the accounts receivable and notes receivable classified as fair value at the time of acquisition and their changes are included in other comprehensive income are listed in the receivables for financing, and for those have acquisition period within one year (including one year) are listed in other current assets.

At the time of initial recognition, the Group may, on the basis of a single financial asset, irrevocably designate an investment in an equity instrument held for non-trading purpose recognized or without consideration in a business combination of enterprises not under the same control as a financial asset at fair value through other comprehensive income. This type of financial assets is presented as investment in other equity instruments.

Financial assets which have satisfied one of the following conditions indicate that such financial assets are held for trading purpose by the Group:

• The purpose of acquiring the relevant financial asset is mainly for sale in recent period.

• At the time of initial recognition, the relevant financial asset is a part of an identifiable portfolio of financial instruments under collective management, and there is objective evidence showing a recent and actual existence of short-term profitable mode.

• The relevant financial assets are derivatives, excluding derivatives which satisfy the definition under financial guarantee contracts and derivatives which are designated as effective hedging instruments.

Financial assets at fair value through profit and loss include financial assets which are classified as financial assets at fair value through profit and loss and financial assets designated at fair value through profit and loss:

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

• Financial assets which do not satisfy the conditions of being classified as financial assets measured at amortized cost or as financial assets at fair value through other comprehensive income, they will be classified as financial assets at fair value through profit and loss.

• At the time of initial recognition, in order to eliminate or substantially reduce mismatch in accounting, the Group may irrevocably designate a financial asset as a financial asset measured at fair value with changes through profit and loss.

Financial assets at fair value through profit and loss will be presented as held-for-trading financial assets. If such financial assets have a maturity of more than one year from the balance sheet date (or without a fixed maturity) and which are expected to be held for more than one year, they will be presented under other non-current financial assets.

#### 10.1.1 Financial assets measured at amortized cost

Financial assets measured at amortized cost adopt the effective interest rate method for subsequent measurement according to amortized cost, the profit or loss when impairment occurs or upon derecognition will be accounted in profit and loss of the current period.

The Group recognizes interest income by using effective interest rate method for financial assets measured at amortized cost. The Group determines interest income by multiplying the balance of book value of financial assets with the effective interest rate except under the following circumstances:

• For acquired or generated financial assets which incurred credit impairment already, their interest income will be determined by using the amortized cost of such financial asset calculated with the credit adjusted effective interest rate.

• For acquired or generated financial assets which have not incurred credit impairment but incur credit impairment in the subsequent period, the Group will determine their interest income by using the amortized cost of such financial assets multiplied with the effective interest rate in the subsequent period. If such financial asset ceases to have credit impairment due to improvement in credit risk in the subsequent period, then the Group should change to multiply the effective interest rate with the balance of book value of such financial asset instead to determine the interest income.

#### 10.1.2 Financial asset at fair value through other comprehensive income

The impairment loss or profit, or interest income calculated by using the effective interest rate method, relating to financial asset at fair value through other comprehensive income should be accounted in the profit and loss of the current period, and other changes in fair value of such financial assets will be accounted in other comprehensive income. The amount charged by such financial asset to the profit and loss of each period is deemed to be equal to the amount which has been measured by amortized cost and charged to the profit and loss of each period. Upon derecognition of such financial asset, the accumulated profit or loss previously charged to other comprehensive income will be reversed from other comprehensive income and charged to profit and loss of the current period.

For non-trading equity instrument investment designated at fair value through other comprehensive income, its changes in fair value will be recognized in other comprehensive income. Upon derecognition of such financial asset, the

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

accumulated profit or loss charged to other comprehensive income will be reversed from other comprehensive income and charged to retained earnings. During the period when such investment in equity instruments for non-trading purpose are held by the Group, the right to receive dividends by the Group has been established, and economic benefits related to dividends are likely to flow into the Group, and if the amount of dividends may be measured reliably, the dividend income is recognized and accounted in the profit and loss of the current period.

#### 10.1.3 Financial asset at fair value through profit and loss

For financial asset at fair value through profit and loss, subsequent measurement will be calculated at fair value, the profit or loss arising from changes in fair value and the dividend and interest income relating to such financial asset will be accounted in the profit and loss of the current period.

#### 10.2 Impairment of Financial Assets

For financial assets measured at amortized cost, financial assets that are classified as financial asset at fair value through other comprehensive income, contract assets, lease receivables, and financial guarantee contracts that do not meet the conditions for termination of recognition due to the transfer of financial assets or continue to be involved in financial liabilities formed by the transferred financial assets, the Group will handle impairment on the basis of expected credit loss and recognize loss provision.

The Group's consideration of contract assets, notes receivable and accounts receivable that are generated by transactions regulated by revenue standards and do not contain significant financing components or that do not consider financing components in contracts that are not more than one year old, as well as those operating lease receivables formed from transactions that are defined by the *Accounting Standards for Business Enterprises No. 21-Leasing*, the loss reserve shall be measured based on the amount of the expected credit loss during the entire duration.

For other financial instruments, other than acquired or generated financial assets which have incurred credit impairment already, the Group will assess on each balance sheet date the changes in credit risk of the relevant financial instruments since initial recognition. If the credit risk of such financial asset has significantly increased after initial recognition, the Group will calculate its loss provision based on the amount equivalent to the expected credit loss for the entire subsisting period. If the credit risk of such financial asset since initial recognition has not increased significantly, the Group will calculate its loss provision according to the expected credit loss amount of such financial asset for the next 12 months. The amount of increase or reversal in the provision for credit loss, apart from financial assets classified as financial asset at fair value through other comprehensive income, is accounted in the profit and loss of the current period. For financial asset classified as measured at fair value through other comprehensive income and charged the impairment loss or gain to the profit and loss of the current period, and will not decrease the book value of such financial asset presented in the balance sheet.

The Group has calculated the loss provision equivalent to the expected credit loss amount for the entire subsisting period of the financial instrument in the preceding accounting period, but at the balance sheet date of the current period, such financial instrument is no longer under the condition of significant increase in credit risk since initial recognition, the Group calculates the loss provision for such financial instrument on the balance sheet date of the current period according

#### Notes to Financial Statements

For the reporting period from January  $1^{\,\rm st}\,2021$  to December  $31^{\,\rm st}\,2021$ 

to an amount equivalent to the expected credit loss for the next 12 months, and the resulting loss provision reversal amount will be counted as impairment gain and booked into the profit and loss of the current period.

#### 10.2.1 Significant increase in credit risk

The Group uses available and reasonable forward-looking information with justification, by comparing the default risk of the financial instrument at the balance sheet date with the default risk on the initial recognition date, to confirm whether the credit risk of the financial instrument has significantly increased after initial recognition. When using the financial instrument impairment rules for loan commitment and financial guarantee contracts, the date when the Group becomes a party of an irrevocable commitment is deemed as the initial recognition date.

The Group considers the following factors when assessing whether the credit risk has significantly increased:

- (1) Whether a significant change has been caused to the internal price indicator due to changes in credit risk.
- (2) Whether the external credit rating of financial instrument has actual or expected significant changes.
- (3) Whether the actual or expected internal credit rating of the debtor has been downgraded.
- (4) Whether adverse changes have occurred in the business, finance or economic conditions which are expected to cause significant changes in the capability of the debtor to perform debt repayment obligations.
- (5) Whether actual or expected significant changes have occurred in the operating results of the debtor.
- (6) Whether significant adverse changes have occurred in the supervision, economic or technical environment in which the debtor operates.
- (7) Whether significant changes have occurred in the value of security pledged for the debt or the quality of guarantee or credit enhancement provided by third parties. Such changes are expected to reduce the debtor's economic motivation of repayment according to contractual term or influence the probability of default.
- (8) Whether significant changes have occurred in the economic motivation which will lower the expectation of repayment by the borrower according to the contractual term.
- (9) Whether significant changes have occurred in the expected performance and repayment behavior of the debtor.

Whether or not the credit risks increase significantly after the foregoing assessments, if any contractual payment for any financial instrument that overdue for over (including) 30 days, it indicates the credit risks of that financial instrument have increased significantly.

On the balance sheet date, if the Group determines that the financial instrument only carries low credit risks, then it assumes that the credit risks of the financial instrument have not increased significantly since the initial recognition. If the risk of default on financial instruments is low, the borrower is highly able to perform its contractual cash flow obligations in the short term, and even if the economic situation and operating environment are adversely changed over a long period of time but not necessarily reducing the borrower's performance of its contractual cash obligations, the financial instrument is considered as having a lower credit risk.

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

#### 10.2.2 Financial assets which have incurred credit impairment already

When one or more events which will have adverse effect on the expected future cash flows from the financial asset of the Group have occurred, such financial asset will become a financial asset which have incurred credit impairment already. The evidence of credit impairment occurred in a financial asset includes the following observable information:

(1) Material financial difficulties have occurred in the issuer or debtor;

(2) Breach of contract by the debtor, such as default or overdue for the payment of interest or repayment of principal;

(3) Due to economic or contractual considerations relating to financial difficulties of the debtor, the creditor has granted concession to the debtor under no other circumstances;

(4) The debtor is likely to go bankrupt or carry out other financial restructuring;

(5) The financial difficulties of the issuer or debtor have caused the disappearance of the active market for the financial asset;

(6) The purchase or generation of a financial asset at a large discount, such discount reflects the fact of occurrence of credit loss.

#### 10.2.3 Confirmation of expected credit loss

The Group's accounts receivable, other receivables, contract assets, lease receivables and long-term receivables, that are individually significant and the debtor has serious financial difficulties, are determined on the basis of individual for its credit loss. For the remaining accounts receivable, other receivables, contract assets, lease receivables and long-term receivables, an impairment matrix is used to determine the credit losses of relevant financial instruments on a portfolio basis. The Group determines credit losses by assessing the probability of breach and loss given default based on the credit ratings on a portfolio basis of notes receivable and receivables. On the basis of common risk characteristics, the Group places financial instruments in different groups. The common credit risk characteristics adopted by the Group include: financial instrument type, credit risk rating, initial recognition date, remaining contract period, industry of debtor, geographic location of debtor, and etc.

The Group confirms the expected credit loss of the relevant financial instrument according to the following method:

- In respect of a financial asset, the credit loss is the present value of the difference between the contractual cash flow that the group should receive and the cash flow that it expects to receive.
- In respect of lease receivables, the credit loss is the present value of the difference between the contractual cash flow that the group should receive and the cash flow that it expects to receive.
- In respect of a financial guarantee contract (for specific accounting policies, please refer to Note (III), 10.4.1.2.1), the credit loss is the present value of the difference between Group's expected payment amount for the compensation made to the contract holder due to the occurrence of credit loss and the amount expected to be received by the Group from such contract holder, debtor or any other parties.
- In respect of financial assets with credit impairment on the balance sheet date but they are not acquired or generated financial assets with credit impairment, the credit loss represents the difference between the balance of the book value of such financial asset and the present value of the estimated future cash flows discounted by



Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

the original effective interest rate.

The factors reflected by the method used for calculating expected credit loss of financial instruments by the Group include: an unbiased weighted average amount determined by assessing a series of probable outcomes; time value of currency; reasonable and justifiable information relating to past events, prevailing conditions and forecast of future economic conditions obtained on the balance sheet date without incurring unnecessary additional cost or effort.

#### 10.2.4 Write-off on financial asset

When the Group ceases to have reasonable expectation on the possible collection of all or part of the contractual cash flows from the financial asset, the balance of book value of such financial asset will be written off directly. Such a write-off constitutes a de-recognition of the relevant financial asset.

#### 10.3 Transfer of financial asset

A financial asset that fulfills one of the following conditions will be de-recognized: (1) termination of contractual rights to receive cash flows from the financial asset; (2) upon transfer of such financial asset and transfer of substantially all the risks and rewards in respect of the ownership of such financial asset to the transferee; (3) upon transfer of such financial asset, though the Group has not transferred nor retained substantially all the risks and rewards in respect of the ownership of such financial asset.

If the Group has not transferred nor retained substantially all the risks and rewards in respect of the ownership of such financial asset, and has retained the control over such financial asset, then such transferred financial asset will continue to be recognized, and the relevant liabilities will continue to be recognized, according to the level of the Group's continuous involvement in such transferred financial asset. The relevant liabilities will be measured by the Group according to the following method:

• If the transferred financial asset is measured by amortized cost, the book value of the relevant liabilities is equivalent to the book value of the transferred asset of continuous involvement less the amortized cost of the rights retained by the Group (if the Group has retained the relevant rights due to transfer of the financial asset) and plus the amortized cost of the obligations undertaken by the Group (if the Group has undertaken the relevant obligations due to transfer of the financial asset), and the relevant liabilities are not designated as financial liabilities at fair value through profit and loss of the current period.

• If the transferred financial asset is measured by fair value, the book value of the relevant liabilities is equivalent to the book value of the transferred asset of continuous involvement less the fair value of the rights retained by the Group (if the Group has retained the relevant rights due to transfer of the financial asset) and plus the fair value of the obligations undertaken by the Group (if the Group has undertaken the relevant obligations due to transfer of the financial asset), and the fair value of the rights and obligations shall be measured at the fair value on a separate basis.

For full transfer, which satisfies the conditions of derecognition, of the financial assets, the difference between the sum of the book value of the transferred financial assets as at the date of derecognition and the consideration received from such

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

transfer and the accumulated amount of change in fair value originally included in other comprehensive income, which corresponds to the amount in respect of derecognition, shall be recognized in the profit and loss for the current period. If the transfer of the financial assets by the Group is designated as investment in equity instrument held for non-trading purpose measured at fair value through other comprehensive income, the accumulated gains or losses previously included in other comprehensive income shall be transferred out from other comprehensive income and be included in retained earnings.

For transfer in part, which satisfies the conditions of derecognition, of the financial assets, the book value of the entire financial assets before the transfer shall be shared between the derecognized portion and the continuous recognition portion at their respective relative fair value on the date of transfer, and the difference between the sum of the consideration received from derecognition and the accumulated amount of change in fair value originally included in other comprehensive income, which corresponds to the amount in respect of derecognition, and the book value of the derecognized portion as at the date of derecognition shall be included in the profit and loss of the current period. If the transfer of the financial assets by the Group is designated as investment in equity instrument for non-trading purpose measured at fair value through other comprehensive income, the accumulated gains or losses previously included in other comprehensive income shall be transferred out from other comprehensive income and be included in retained earnings.

For full transfer, which does not satisfy the conditions of derecognition, of the financial assets, the Group will continue to recognize the entire financial assets transferred and the consideration received as a result of the asset transfer is recognized as a liability when received.

#### 10.4 Classification, confirmation and measurement of financial liabilities and equity instruments

Pursuant to the contractual terms of the issued financial instruments and the substantive economic condition as reflected, but not in legal terms only, combined with the definitions of financial liabilities and equity instruments, the Group has classified such financial instruments or the components thereof as financial liabilities or equity instruments upon initial recognition.

#### 10.4.1 Classification, confirmation and measurement of financial liabilities

Financial liabilities are classified into financial liabilities at fair value through profit and loss of the current period and other financial liabilities upon initial recognition.

#### 10.4.1.1 Financial liabilities at fair value through profit and loss of the current period

Financial liabilities at fair value through profit and loss of the current period comprise of financial liabilities held for trading purpose (including derivatives of financial liabilities) and financial liabilities designated as measured at fair value through profit and loss of the current period. Except for derivatives of financial liabilities, which are presented separately, financial liabilities at fair value through profit and loss of the current period are presented as financial liabilities held for trading.

#### Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to De

For the reporting period from January  $1^{st}\ 2021$  to December  $31^{st}\ 2021$ 

Financial liabilities that fulfill one of the following conditions suggest that the Group assumes such financial liabilities for trading purpose:

- Assumption of the relevant financial liabilities is mainly for the purpose of the recent repurchases.
- The relevant financial liabilities, upon initial recognition, are part of a portfolio of identifiable financial instruments under centralized management, and available objective evidence shows the recent and actual existence of a short-term profit-making model.
- The relevant financial liabilities are derivatives, except derivatives which satisfy the definition of financial guarantee contract and derivatives designated as effective hedging instruments.

Financial liabilities can be designated, upon initial recognition, by the Group as financial liabilities at fair value through profit and loss of the current period, provided that they have satisfied one of the following conditions: (1) such designation can eliminate or substantially reduce accounting mismatches; (2) managing and evaluating the performance of portfolios of financial liabilities, or portfolios of financial assets and financial liabilities, on fair value basis and reporting internally to key personnel of the Group on this basis in accordance with the risk management or investment strategies specified in formal written documents of the Group; (3) hybrid contracts, with embedded derivatives, have satisfied the conditions. Financial liabilities held for trading purpose use fair value for subsequent measurement, gains or losses arise from changes in fair value and the dividends or interest expenses relating to such financial liabilities are accounted in the profit and loss of the current period.

For financial liabilities designated at fair value through profit and loss of the current period, changes in fair value of such financial liabilities caused by changes in the Group's own credit risks shall be included in other comprehensive income, and other changes in fair value shall be included in the profit and loss of the current period. On derecognition of such financial liabilities, the accumulated amount of changes in fair value as a result of changes in our own credit risk included previously in other comprehensive income shall be transferred to retained earnings. Dividends or interest expenses relating to such financial liabilities shall be included in the profit and loss of the current period. If handling the effect of changes in credit risk of such financial liabilities according to the aforesaid method would cause or magnify the accounting mismatches in profit and loss, the Group will include all gains or losses of those financial liabilities (including the amount affected by changes in their own credit risk) in the profit and losses of the current period.

#### 10.4.1.2 Other financial liabilities

Excluding transfer of financial assets not complying with derecognition conditions, or financial liabilities as a result of continuous involvement in transferred financial assets, as well as the financial guarantee contracts, the other financial liabilities will be classified as financial liabilities measured at amortized cost, subsequent measurement will be based on amortized cost, gains or losses on derecognition or amortization will be accounted in the profit and loss of the current period.

If the Group and the counterparty have revised or renegotiated the contract, this has not resulted in the derecognition of

Notes to Financial Statements

For the reporting period from January  $1^{\,\rm st}$  2021 to December  $31^{\,\rm st}$  2021

financial liabilities measured at amortized cost for subsequent measurement, but has caused changes in the contractual cash flows, then the Group should recalculate the book value of such financial liabilities, and the relevant gains or losses shall be accounted in the profit and loss of the current period. The recalculated book value of such financial liabilities will be determined by the Group by discounting the cash flows from the renegotiated or revised contract with the original effect interest rate of the financial liabilities. All costs or expenses incurred in the revision or renegotiation of the contract will be reflected in the adjusted book value of financial liabilities after such revision, and will be amortized during the remaining period of the revised financial liabilities.

#### 10.4.1.2.1 Financial guarantee contract

Financial guarantee contract refers to a contract that requests the issuer to provide a specific amount of compensation to the contract holder who suffers losses when a specific debtor fails to repay the debt on due date according to the initial or revised terms of the debt instrument. In respect of financial liabilities which are not designated at fair value through profit and loss of the current period, or in respect of financial guarantee contract for financial liabilities arising from transfer of financial assets not complying with derecognition conditions or continuous involvement in the transferred financial assets, the measurement after initial recognition will be based on the amount of provision for losses, or the balance of initial recognized amount after deducting the accumulated amortized amount confirmed in accordance with the relevant provisions of the Revenue Standard, whichever the higher.

#### 10.4.2 Derecognition of financial liabilities

When the existing obligations of a financial liability have been wholly or partially discharged, such financial liability or such part of it will be derecognized. When the Group (as borrower) and the lender enter into an agreement to undertake new financial liabilities for replacing the original financial liabilities, if substantive difference exists in the contractual terms between the new financial liabilities and the original financial liabilities, the Group should derecognize the original financial liabilities while at the same time recognizes the new financial liabilities.

When a financial liability is wholly or partially derecognized, the difference between the book value of the derecognized portion and the consideration paid (including non-cash asset transferred out or new financial liabilities undertaken) will be accounted in the profit and loss of the current period.

#### 10.4.3 Equity instrument

Equity instrument refers to a contract which can prove the ownership of remainder interest in assets after deducting all liabilities of the Group. The Group issues (including refinances), repurchases, sells or cancels equity instruments for treatment of changes in equity. The Group will not recognize changes in the fair value of equity instruments. Trading expenses relating to equity transactions will be deducted from equity.

The Group's distribution to holder of equity instrument is treated as profit distribution, the share dividends paid out will not affect the total equity of shareholders.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 10.5 Derivatives and embedded derivatives

Derivatives include foreign exchange forward contract, foreign exchange option contract and interest rate swap contract, etc. Derivatives are measured at fair value initially on the date of signing the relevant contract and will be measured at fair value for subsequent measurement.

For a hybrid contract constituted by an embedded derivative and a master contract, if the master contract is in respect of a financial asset, the Group will not split the embedded derivative from the hybrid contract, but will consider such hybrid contract as a whole unit to which the accounting standards and rules for classification of financial assets are applicable.

If the master contract included in the hybrid contract is not in respect of a financial asset, and fulfills the following conditions at the same time, the Group will split the embedded derivative from the hybrid contract to be treated as a separate subsisting derivative.

- (1) The economic characteristics and risks of the embedded derivative are not closely connected to the economic characteristics and risks of the master contract.
- (2) A separate instrument containing the same terms as the embedded derivative fits the definition of a derivative.
- (3) The hybrid contract is not measured at fair value and changes in fair value are accounted through profit and loss of the current period.

If an embedded derivative is split from the hybrid contract, the accounting treatment adopted by the Group for the master contract within the hybrid contract will be in accordance with the applicable accounting standards and rules. If the Group is unable to measure the fair value of the embedded derivative reliably according to the terms and conditions of the embedded derivative, the fair value of such embedded derivative will be determined by the difference between the fair value of the hybrid contract and the fair value of the master contract. After adoption of the above method, if the fair value of such embedded derivative separately on the acquisition date or subsequent balance sheet date, the Group will designate the entire hybrid contract as a financial instrument measured at fair value through profit and loss of the current period.

#### 10.6 Offsetting between financial assets and financial liabilities

When the Group has legal right to offset the recognized financial assets and financial liabilities, and such legal right is enforceable currently, while at the same time the Group plans to perform netting settlement, or to liquidate the financial asset and repay the financial liability at the same time, the amount after offsetting between the financial asset and financial liability will be presented in the balance sheet. Save as said above, the financial asset and financial liability are presented separately in the balance sheet without offsetting each other.

#### 11. Receivables for Financing

Among the notes receivable measured at fair value through other comprehensive income, the ones with a term of less than (including) one year since they are acquired will be listed as receivables for financing; the ones with a term of more than (including) one year since they are acquired will be listed as other debt investment. The relevant accounting policy is



Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

explained in Note (III), 10.1, 10.2 and 10.3.

#### 12. Inventories

#### 12.1 Categories of inventories

The Group's inventory mainly includes finished products, products in process and raw materials held in daily activities. Inventories are initially measured at cost. Cost of inventories comprises all costs of purchase, costs of conversion and other expenditures incurred in bringing the inventories to their present location and condition.

#### 12.2 Valuation method of inventories upon delivery

The actual cost of inventories upon delivery is calculated using the moving weighted average method.

#### 12.3 Basis for determining net realizable value of inventories

The inventory is measured according to cost and net realizable value, whichever is lower, on the date of balance sheet. When the net realizable value is lower than cost, withdraw inventory impairment reserves.

The net realizable value refers to the amount derived by deducting the potential cost, estimated selling expense and relative taxes to the completion date from the estimated sales price of inventory in daily activities. When determining net realizable value of inventories, take the obtained conclusive evidence as basis and consider the purposes of holding inventories and influence of events after the balance sheet date.

For the low-price stocks in large quantity, provision for the inventory price drops will be made based on the categories of stocks; for the stocks that are related to the products manufactured and sold in the same region, that have identical or similar ultimate use or purpose and that are hard to separate from other items when being measured, they are consolidated for provision for the inventory price drops; for other stocks, the provision for the inventory price drops will be made based on the cost of a single stock item in excess of the net realizable value.

After provision for inventory depreciation reserves is made, if the factors resulting in the write-down of inventory impairment have disappeared and causing the net realizable value higher than its book value, such inventory impairment provision are recovered and reversed, and the reversed amount recorded in profits and losses of the current period.

#### 12.4 Inventory count system

The perpetual inventory system is maintained for stock system.

#### Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### 12.5 Amortization method for low cost and short-lived consumable items and packaging materials

Packaging materials and low cost and short-lived consumable items are amortized using the immediate write-off method.

#### 13. Contract Assets

#### 13.1 Method and standard for determination of contract assets

Contract assets refer to the Group's right to consideration in exchange for goods or services that the Group has transferred to a customer when that right is conditioned on something other than the passage of time. The Group's unconditional (i.e., depending on the passage of time only) right to receive consideration from the customer is separately presented as receivables.

#### 13.2 Methods for determining and accounting of expected credit loss of contract assets

For details of methods for determining and accounting of expected credit loss of contract assets, please refer to Note (III)-10.2 Impairment of financial instruments.

#### 14. Assets Held for Sale

Non-current assets and disposal groups are classified as held for sale category when the Group recovers the book value through a sale (including an exchange of non-monetary assets that has commercial substance) rather than continuing use. Non-current assets or disposal groups classified as held for sale are required to satisfy the following conditions at the same time: (1) the asset or disposal group is available for immediate sale in its present condition subject to terms that are usual and customary for sales of such asset or disposal group; (2) the sale is highly probable, i.e. the Group has made a resolution about a selling plan and obtained a confirmed purchase commitment and the sale is expected to be completed within one year.

Non-current assets or disposal groups classified as held for sale are measured at the lower of the book value and the net amount of the fair value less the cost of disposal. Where the carrying amount is higher than the net amount of fair value less the cost of disposal, the carrying amount should be reduced to the net amount of fair value less the cost of disposal, and such reduction is recognized as impairment loss of assets and included in profit or loss for the period. In the meantime, provision for impairment of held-for-sale assets is made. When there is an increase in the net amount of fair value of noncurrent assets held for sale less the cost of disposal at the subsequent balance sheet date, the original deduction should be reversed from impairment loss of assets recognized after the classification as held for sale, and the reversed amount is included in profit or loss for the period. The impairment loss of assets recognized before the classification as held for sale is not reversed.

Non-current assets or non-current assets within disposal groups classified as held for sale are not depreciated or amortized, and the interests and other costs of liabilities of disposal group classified as held for sale continue to be recognized.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

All or part of equity investments in an associate or joint venture are classified as held-for-sale assets. For the part that is classified as held for sale, it is no longer accounted through equity method since the date of the classification.

#### **15. Long-term Equity Investment**

#### 15.1 Basis for determining joint control and significant influence over investee

Control is the power to govern an entity through participating in relevant activities of the investee; the investor is able to obtain variable benefits from its activities, and at same time, to use the control rights on the investee to influence the amount of returns. Joint control means that joint control for certain arrangement in accordance with relevant agreements; activities relevant to the arrangement cannot be decided until obtaining the unanimous consent of parties sharing control right. 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. When determining whether an investing enterprise is able to exercise control or significant influence over an investee, the effect of potential voting rights of the investee, such as current convertible debts, current executable warrants, etc., held by the investing enterprises or other parties shall be considered.

#### 15.2 Determination of initial investment cost

For a long-term equity, investment acquired through a business combination involving enterprises under common control, the shares of merged party's book value of owners' equity in the final controlling party consolidated financial statements obtained on the merger date shall be considered as the initial investment cost of long-term equity investment. The differences between the initial investment cost of long-term equity investment and the paid cash, the transferred non-cash assets and the book value of the assumed debts are adjusted against the capital surplus; if the capital surplus is not sufficient to be offset, the remaining balance is adjusted against retained earnings. In the case of issued equity securities treated as consolidated financial statements is regarded as initial investment cost of long-term equity investments on the date of consolidation; capital reserve shall be adjusted in accordance with taking total nominal value of issued share as capital share, the difference between the initial investment cost of long-term equity investments and total book value of issued shares; In case the capital reserve is not enough for writing down, the retained earnings shall be adjusted.

For a long-term equity investment acquired through business combination not involving enterprises under common control, and the merging cost confirmed on the purchased date are regarded as the initial investment cost.

The intermediate expenses made by the combining party or purchaser for audit, legal service, assessment and other management related expenses during the business merger should be included into the current profit and loss as it happens.

Long-term equity investment obtained by other means other than long-term equity investment formed by business combination shall be initially measured at cost.

#### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 15.3 Subsequent measurement and recognition of profit or loss

#### 15.3.1 Long-term equity investment accounted for using the cost method

Long-term equity investments in subsidiaries are accounted for using the cost method in the Company's financial statements. A subsidiary is an investee that is controlled by the Group.

The long-term equity investment accounted by the cost method shall be measured at its initial investment cost. If there are additional investments or disinvestments, the long-term equity investment cost shall be adjusted. Income from the investment in the current period shall be recognized in accordance with the cash dividends or profits declared and issued by the investee.

#### 15.3.2 Long-term equity investment accounted for using the equity method

Except for investments in associates and joint ventures that are wholly or partly classified as holding assets for sale, the Group accounts for investment in associates and joint ventures using the equity method. An associate is an entity over which the Group has significant influence and a joint venture is an entity over which the Group can only exercise joint control along with other investors on the investee's net assets.

Under the equity method, where the initial investment cost of a long-term equity investment exceeds the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, no adjustment is made to the initial investment cost. Where the initial investment cost is less than the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, the difference is recognized in profit or loss for the period, and the cost of the long-term equity investment is adjusted accordingly.

Under the equity method, the Group recognizes its share of the net profit or loss and other comprehensive income of the investee for the period as investment income or loss and comprehensive income for the period, meanwhile, the book value of the long-term equity investment shall be adjusted; The Group shall accordingly reduce the book value of the long-term equity investment in terms of the part that shall be enjoyed according to the profit or cash dividends declared by the invested unit to be distributed; For other changes in the owners' equity of the invested unit other than net profits and losses, other comprehensive incomes and the profit distribution, the book value of long-term equity investment shall be adjusted and be included into the capital reserves. The Group shall, on the ground of the fair value of all identifiable assets of the invested entity when it obtains the invested entity. If the accounting policies and accounting periods adopted by the invested unit are different from those adopted by the Group, the adjustment shall be made for the financial statements of the invested unit in accordance with the accounting policies and accounting periods of the Group to recognize the investment income and other comprehensive incomes. For the transaction incurred between the group and associated

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

enterprises and joint ventures, invested or sold assets don't constitute a business, the part that doesn't achieve internal transaction profit or loss or belongs to the Group calculated according to the enjoyed ratio will be offset, and the profit or loss on investment will be confirmed on this basis. But for the unrealized loss arising from the internal transaction between the Group and the invested unit, if such transaction loss is defined as the impairment loss of the transferred asset, they cannot be offset.

When the Group determines the net loss of the invested unit that shall be shared, it is necessary to write-down the book value of the long-term equity investment and other long-term equities substantially constituting the net investment of the invested unit to zero as a limit. Besides, if the Group is obliged to bear extra loss for the invested unit, it shall be necessary to determine provisions and record them to current investment loss in compliance with obligations expected to be assumed. If the invested unit realizes any net profits later, the Group shall, after the amount of its attributable share of profits offsets its attributable share of the un-confirmed losses, resume recognizing its attributable share of profits.

#### 15.4 Disposal of long-term equity investments

On disposal of a long term equity investment, the difference between the proceeds actually received and the carrying amount is recognized in profit or loss for the period.

#### 16. Fixed Assets

#### 16.1 Recognition criteria for fixed assets

Fixed assets are tangible assets that are held for use in the production or supply of goods or services, for rental to others, or for administrative purposes, and have useful lives of more than one accounting year. A fixed asset is recognized only when it is probable that economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. Fixed assets are initially measured at cost.

Subsequent expenditures incurred for the fixed asset are included in the cost of the fixed asset and if it is probable that economic benefits associated with the asset will flow to the Group and the subsequent expenditures can be measured reliably. Meanwhile the carrying amount of the replaced part is derecognized. Other subsequent expenditures are recognized in profit or loss in the period in which they are incurred.

#### 16.2 Depreciation of each category of fixed assets

A fixed asset is depreciated over its useful life using the straight-line method since the month subsequent to the one in which it is ready for intended use. The useful life, estimated net residual value rate and annual depreciation rate of each category of fixed assets are as follows:

#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

Class	Depreciation period	Residual value rate (%)	Annual depreciation rate (%)
Buildings and Constructions	20 years	10	4.5
General-purpose equipment	3-5 years	10	18.0-30.0
Special-purpose equipment	3-5 years	10	18.0-30.0
Means of transportation	5 years	10	18.0

Estimated net residual value of a fixed asset is the estimated amount that the Group would currently obtain from disposal of the asset, after deducting the estimated costs of disposal, if the asset were already of the age and in the condition expected at the end of its useful life.

#### 16.3 Other explanations

If a fixed asset is upon disposal or no future economic benefits are expected to be generated from its use or disposal, the fixed asset is derecognized. When a fixed asset is sold, transferred, retired or damaged, the amount of any proceeds on disposal of the asset net of the carrying amount and related taxes is recognized in profit or loss for the period.

The Group reviews the useful life and estimated net residual value of a fixed asset and the depreciation method applied at least once at each financial year-end, and account for any change as a change in an accounting estimate.

#### **17.** Construction in Process

Construction in progress is measured at its actual costs. The actual costs include various construction expenditures during the construction period, borrowing costs capitalized before it is ready for intended use and other relevant costs. Construction in progress is not depreciated. Construction in progress is transferred to a fixed asset when it is ready for intended use.

#### **18. Borrowing Costs**

Borrowing costs directly attributable to the acquisition & construction or production of assets eligible for capitalization shall be capitalized when assets expenditure, borrowing costs and necessary construction or production for bringing assets to expected conditions for use or marketing have taken place; when construction or production of assets ready for capitalization reach to expected conditions for use or marketing, capitalization shall be ceased. Other borrowing expenses are recognized as expenses in the current period.

Where funds are borrowed under a specific-purpose borrowing, the amount of interest to be capitalized is the actual interest expense incurred on that borrowing for the period less any bank interest earned from depositing the borrowed funds before being used on the asset or any investment income on the temporary investment of those funds. Where funds are borrowed

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

under general-purpose borrowings, the Group determines the amount of interest to be capitalized on such borrowings by applying a capitalization rate to the weighted average of the excess of cumulative expenditures on the asset over the amounts of specific-purpose borrowings. The capitalization rate is the weighted average of the interest rates applicable to the general-purpose borrowings. During the capitalization period, exchange differences related to a specific-purpose borrowing denominated in foreign currency are all capitalized. Exchange differences in connection with general-purpose borrowings are recognized in profit or loss in the period in which they are incurred.

#### **19. Intangible Assets**

#### 19.1 Intangible Assets Valuation Method, Service Life and Impairment Test

Intangible assets include land use right, intellectual property (IP), application software, and franchise, etc.

An intangible asset is measured initially at cost. When an intangible asset with a finite useful life is available for use, its original cost is amortized over its estimated useful life using the straight-line method. The useful life and predicted net residual value of various intangible assets are shown as follows:

Class	Service life (year)	Salvage value rate (%)
Land use right	40 or 50 years	-
IP Right	10 Years	-
Application Software	5-10 years	-
Franchise	Franchised operating period	-

The fees charged by the Group to those who acquire public products and services during the project operation period do not constitute an unconditional right to receive cash. When the PPP project assets are ready for their intended use, the difference between the consideration amount of the relevant PPP project assets or the amount of confirmed construction income and the amount of cash (or other financial assets) that is entitled to receive a determinable amount will be recognized as intangible assets.

For an intangible asset with a finite useful life, the Group reviews the useful life and amortization method at the end of the period, and makes adjustments when necessary.

For the impairment test of intangible assets, please refer to Note (III), 20. Long-term asset impairment.

#### 19.2 Accounting Policy for Internal Research and Development Expenditure

Expenditure during the research phase is recognized as an expense in the period in which it is incurred.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

Expenditure during the development phase that meets all of the following conditions at the same time is recognized as intangible asset. Expenditure during development phase that does not meet the following conditions is recognized in profit or loss for the period.

(1) It is technically feasible to complete the intangible asset so that it will be available for use or sale;

(2) The Group has the intention to complete the intangible asset and use or sell it;

(3) The Group can demonstrate the ways in which the intangible asset will generate economic benefits, including the evidence of the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset;

(4) The availability of adequate technical, financial and other resources to complete the development and the ability to use or sell the intangible asset; and

(5) The expenditure attributable to the intangible asset during its development phase can be reliably measured.

If the expenditures cannot be distinguished between the research phase and development phase, the Group recognizes all of them in profit or loss for the period. The costs of the intangible assets generated by internal development activities only include the total expenditure incurred from the time point when the capitalization conditions are available to the point when the intangible assets are used for their intended purposes; for the expenditure that already becomes an expenditure in the profit and loss statement before the capitalization conditions are available during development of the same intangible asset, no adjustment will be made.

#### 20. Long-term Assets Impairment

The Group assesses at each balance sheet date whether there is any indication that the long-term equity investment, fixed assets, construction in process, intangible assets with a finite useful life and assets related to contract costs may be impaired. If there is any indication that such assets may be impaired, recoverable amounts are estimated for such assets. Intangible assets with indefinite useful life and intangible assets not yet available for use are tested for impairment annually, irrespective of whether there is any indication that the assets may be impaired.

Recoverable amount is estimated on individual basis. If it is not practical to estimate the recoverable amount of an individual asset, the recoverable amount of the asset group to which the asset belongs will be estimated. The recoverable amount is determined by the higher of 1) net amount of fair value of the asset or asset group deducted by the disposal expenses; or 2) the present value of the expected future cash flows of the asset or asset group.

If the recoverable amount of an asset or an asset group is less than its carrying amount, the deficit is accounted as an impairment provision and is recognized in profit or loss for the period.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

In determining impairment losses on assets related to contract costs, impairment losses are first determined for other assets recognized in accordance with other relevant ASBEs and related to the contract; then, for assets related to contract costs whose carrying value is higher than the difference between the following two items, the Group makes provision for impairment for the excess to be recognized as asset impairment losses: (1) the remaining amount of consideration expected to be obtained by the Group for the transfer of goods or services related to the asset; (2) the estimated costs to be incurred in connection with the transfer of relevant goods or services.

Goodwill impairment test shall be conducted at the end of each year at least. Goodwill impairment test shall be conducted in accordance with the concerned asset group or asset portfolio. That is to allocate the book value of goodwill to the asset group or asset portfolio that is expected to benefit from the synergies of the combination in a reasonable way from the date of purchasing. When recoverable amount of apportion-included asset group or asset portfolio of goodwill is less than book value of goodwill, impairment loss shall be recognized. Firstly, amount of impairment loss shall be apportioned to the book value of goodwill of the said asset group or asset portfolio, and then book value of other assets, except for goodwill, in asset group or asset portfolio shall be abated in proportion.

Except for asset impairment losses related to contract costs, once the impairment loss of such assets is recognized, it cannot be reversed in any subsequent period. After the provision for impairment for the asset related to contract costs is made, if the difference between the above two items is higher than the carrying amount of the asset due to changes in the factors of impairment in previous periods, the original provision for impairment of the asset is reversed and included in the current profit or loss, but the carrying amount of the asset after the reversal shall not exceed the carrying amount of the asset on the reversal date assuming no provision for impairment is made.

#### 21. Long-term Deferred Expenses

Long-term deferred expenses are the expenses that are already incurred but will be shared in the current reporting period and later periods with amortization term of more than one year, mainly for the expenses on betterment of leased fixed assets and employee housing loan deferred interest. Long-term deferred expenses are evenly amortized in installments in three to five years during the expected benefit period.

#### 22. Contract Liabilities

Contract liabilities refer to the obligation of the Group to transfer goods or services to customers for consideration received or receivable from customers. Contract assets and contract liabilities under the same contract are presented in net terms.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 23. Employee Compensation

#### 23.1 Accountant Arrangement Method of Short-term Remuneration

During accounting period when the Group's employees provide services, actual short-term remuneration shall be recognized as the liabilities and current profit and loss or relevant asset cost. The Group's employee benefits and welfare are included into current profit and loss or relevant asset cost according to actual amount occurred during the period. If the employee benefits and welfare is non-monetary, it shall be measured according to its fair value.

During the accounting period that the employees service the Group, the Group pays social insurance premiums such as medical insurance premium, industrial injury insurance premium, maternity insurance premium and housing accumulation fund for its employees, as well as labor union expenditure and employee education expenses calculated and withdrawn according to the regulations, corresponding employee remuneration amount shall be calculated and determined in accordance with specified calculation and withdrawal basis and proportion to recognize corresponding liabilities and included into the current profit and loss or relevant asset cost.

#### 23.2 Accountant Arrangement Method of Post-employment Benefits

All post-employment benefits shall be considered as the defined contribution plan.

In the accounting period when the employee serves for the Group, the deposited amount calculated based on defined contribution plan shall be recognized as liabilities and included in the current profit and loss or relevant asset cost.

#### 23.3 Accountant Arrangement Method of the Termination Benefits

Where the Group provides termination benefits, the employee remuneration liabilities caused by such termination benefits will be determined as the following date, whichever is earlier, and will be included in the current profit and loss: 1) When the Group cannot unilaterally withdraw the termination benefits provided due to labor relation cancellation plan or employee lay-off suggestion; or 2) when the Group determines costs or expenses in relation with the restructuring of the paid termination benefits.

#### 24. Provisions

Provisions are recognized when the Group has a present obligation related to a contingency such as products quality assurance, etc. And it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the balance sheet date, taking into account factors pertaining to a contingency such as the risks, uncertainties and time value of money. Where the effect of the time value of money is material, the amount of the provision is determined by discounting the related future cash outflows.

#### 25. Share-based Payment

Share-based payment refers to a transaction in which the Group grants the equity instruments or undertakes the equityinstrument-based liabilities in return for services from employees. The Group's share-based payment is an equity-settled share-based payment.

A share-based payment is a transaction which the Group grants equity instruments, or incurs liabilities for amounts that are determined based on the price of equity instruments, in return for services rendered by employees. The Group's share-based payments are equity-settled share-based payments.

#### 25.1 Equity-settled share-based payments

Grants to employees are equity-settled share-based payments.

Equity-settled share-based payments in exchange for services rendered by employees are measured at the fair value of the equity instruments granted to employees at the grant date. Such amount is recognized as related costs or expenses on a straight-line basis over the vesting period, with a corresponding increase in capital reserve.

At each balance sheet date during the vesting period, the Group makes the best estimate according to the subsequent latest information of change in the number of employees who are granted with options that may vest, etc. and revises the number of equity instruments expected to vest. The effect of the above estimate is recognized as related costs or expenses, with a corresponding adjustment to capital reserve.

#### 25.2. Accounting treatment related to implementation, modification and termination of share-based payment arrangement

In case the Group modifies a share-based payment arrangement, if the modification increases the fair value of the equity instruments granted, the Group will include the incremental fair value of the equity instruments granted in the measurement of the amount recognized for services received. If the modification increases the number of the equity instruments granted, the Group will include the fair value of additional equity instruments granted in the measurement of the amount recognized for services received. The increase in the fair value of the equity instruments granted is the difference between fair value of the equity instruments before and after the modification on the date of the modification. If the Group modifies the terms

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

or conditions of the share-based payment arrangement in a manner that reduces the total fair value of the share-based payment arrangement, or is not otherwise beneficial to the employee, the Group will continue to account for the services received as if that modification had not occurred, other than a cancellation of some or all the equity instruments granted.

If cancellation of the equity instruments granted occurs during the vesting period, the Group will account for the cancellation of the equity instruments granted as an acceleration of vesting, and recognize immediately the amount that otherwise would have been recognized over the remainder of the vesting period in profit or loss for the period, with a corresponding recognition in capital reserve. When the employee or counterparty can choose whether to meet the non-vesting condition but the condition is not met during the vesting period, the Group treats it as a cancellation of the equity instruments granted.

#### 26. Revenue

26.1 Accounting policies applied in revenue recognition and measurement

The revenue of the Group is mainly generated from business types as follows:

(1) Revenue from sale of products

Product sales revenue is the revenue from sales of video surveillance products, smart home products, robotics products and other products of the Group.

(2) Project construction revenue

Project construction revenue is the revenue from constructions related to intelligent security solution projects and PPP Projects provided by the Group.

(3) Cloud service and other service revenue

Revenue from cloud services and other services refers to cloud services such as storage services, video services, and telephone services provided by the Group, maintenance services related to security projects, and other services, etc.

When (or as) a performance obligation in a contract was satisfied, i.e., when (or as) the customer obtains control of relevant goods or services, the Group recognizes as revenue the amount of the transaction price that is allocated to that performance obligation. A performance obligation is the Group's commitment to transfer to a customer a good or service (or a bundle of goods or services) that is distinct, in a contract with the customer. The transaction price is the amount of consideration to which the Group expects to be entitled in exchange for transferring promised goods or services to a customer, excluding amounts collected on behalf of third parties and amounts that the Group expects to refund to the customer.

Revenue is recognized over time by reference to the progress towards complete satisfaction of the relevant performance obligation if one of the following criteria is met: (1) the customer simultaneously receives and consumes the benefits provided by the Group's performance as the Group performs; (2) the Group's performance creates or enhances an asset that the customer controls as the Group performs; or (3) the Group's performance does not create an asset with an

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

alternative use to the Group and the Group has an enforceable right to payment for performance completed to date. Otherwise, revenue is recognized at a point in time when the customer obtains control of the distinct good or service.

The Group adopts the output method to determine the progress of performance, that is, the progress of contract performance is determined according to the value of the goods or services that have been transferred to the customer in the view of the customer. When the performance progress cannot be reasonably determined, and the costs incurred can be expected to be compensated, the Group recognizes revenue based on the amount of costs incurred until the performance progress can be reasonably determined.

If the contract contains two or more performance obligations, the Group allocates the transaction price to each single performance obligation on the contract start date in accordance with the relative proportion of the individual selling price of the goods or services promised by each single performance obligation. However, if there is strong evidence that the contract discount or variable consideration is only related to one or more (but not all) performance obligations in the contract, the Group allocates the contract discount or variable consideration to the relevant one or more performances obligation. Individual selling price refers to the price at which the Group sells goods or services to customers separately. Where the individual selling price cannot be directly observed, the Group comprehensively considers all relevant information that can be reasonably obtained, and uses the observable input value to the maximum to estimate the individual selling price.

If there is variable consideration in the contract, the Group determines the best estimate of variable consideration based on the expected value or the most likely amount. The transaction price including variable consideration shall not exceed the amount that is likely to cause no significant reversal of accumulated recognized revenue when the relevant uncertainty is eliminated. At each balance sheet date, the Group re-estimates the amount of variable consideration that should be included in the transaction price.

For sales with sales return terms attached, as the customer obtains ownership of related goods, the Group recognizes revenue in accordance with the consideration (excluding expected refund amounts due to sales returns) that the Group is expected to receive due to the transfer of goods or services to the customer, and recognizes expected liabilities in accordance with expected refund amounts due to sales returns. The remaining amount, subsequent to deduction of expected costs from collecting the goods (including the decrease in value of the returned goods), is recognized as an asset in accordance with the carrying amount during the expected transfer of returned goods after deducting the costs of the above net assets carried forward.

For sales with quality assurance clauses, if the quality assurance provides a separate service beyond the assurance to the customer that the goods or services sold meet established standards, the quality assurance constitutes a single performance obligation. Otherwise, the Group conducts accounting for quality assurance responsibilities in accordance with the *Accounting Standards for Business Enterprises No. 13-Contingencies*.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

The additional purchase option of customers includes customer reward incentives. With respect to the additional purchase option with material rights provided to customers, the Group regards it as a single performance obligation, and recognizes relevant revenue upon obtaining the control over relevant goods or services by the customers who exercise the purchase option in future or upon lapse of such option. If a stand-alone selling price of the additional purchase option of customers is not directly observable, the Group shall consider all relevant information including the difference in discount obtained with and without the exercise of such option by customers and the possibility of exercising such option by customers during estimation.

If there is a significant financing component in the contract, the Group determines the transaction price based on the amount payable in cash when the customer assumes control of the goods or services. The difference between the transaction price and the contract consideration is amortized using the effective interest rate method during the contract period. On the contract commencement date, the Group does not consider the significant financing components in the contract if the interval between the customer obtaining control of the goods or services and the price being paid by the customer is not more than one year.

The Group judges whether the Group's identity is the principal or agent when engaging in transactions based on whether it has control over the goods or services before transferring the goods or services to customers. If the Group is able to control the goods or services before transferring them to customers, the Group is the principal responsible person, and revenue is recognized based on the total amount of consideration received or receivable; otherwise, the Group is an agent and recognizes revenue based on the amount of commissions or fees which the Group is expected to be entitled to charge. The amount of commissions or fees is determined based on the total amount of consideration received or receivable net of the amount payable to other parties.

When the Group collects amounts of sold goods or services in advance from the customer, the Group will firstly recognize the amounts as a liability and then transfer to revenue until satisfying relevant performance obligations. When the advances from customers is non-refundable and the customer may give up all or part of contract right, and the Group is expected to be entitled to obtain amounts associated with contract rights given up by the customer, the above amounts shall be proportionally recognized as revenue in accordance with the model of exercising contract rights by the customer; otherwise, the Group will transfer the relevant balance of the above liability to revenue only when the probability is extremely low for the customer to satisfy remaining performance obligations.

The Group, as a private capital, entered into a PPP project contract with the government and provided construction, operation, maintenance and other services. The Group identifies each individual performance obligation in the contract, and allocates the transaction price to each performance obligation based on the relative proportion of the stand-alone selling price of each performance obligation. When providing construction services or outsourcing projects to other parties, whether the identity of the Group is the principle or agent is determined, and then accounting for construction revenue to confirm the contract assets is made. After the PPP project is ready for use, the Group recognizes revenue related to operation and maintenance services.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 27. Cost of Contract

#### 27.1 Cost of obtaining a contract

Incremental costs incurred by the Group to obtain a contract (that is, costs that would not have occurred without a contract) and expected to be recovered are recognized as an asset, and amortized using the same basis as revenue recognition for the goods or services to which the asset relates, and included in current profit or loss. If the amortization period of the asset does not exceed one year, it is included in current profit or loss when it occurs. Other expenses incurred by the Group in order to obtain the contract shall be included in current profit or loss when incurred, unless it is clearly borne by the customer.

#### 27.2 Cost of contract fulfillment

The cost of the Group's performance of a contract that does not fall within the scope of accounting standards other than the revenue standard and meets the following conditions is recognized as an asset: (1) The cost is directly related to a current or anticipated contract; (2) The cost increases the Group's resources for fulfilling performance obligations in the future; (3) The cost is expected to be recovered. The aforesaid assets are amortized on the same basis as the recognition of income from goods or services related to the assets, and are included in the current profit or loss.

The Group's asset in relation to contract costs are mainly contract performance costs, and they are included in inventories based on their current nature.

#### 28. Types of Governmental Subsidies and Accounting Treatment Methods

Government subsidies refer to the monetary and non-monetary assets obtained by the Group from the government for free. Government subsidies are recognized when they can meet the conditions attached to the government subsidies and can be received.

If a government subsidy is a monetary asset, it shall be measured at the amount received or receivable.

#### 28.1 Judgment basis and Accountant treatment of government subsidy related to assets

The government subsidies for Chongqing Manufacture Base construction and etc. are used for constructions and forms long-term assets, and therefore are categorized as government subsidy related to assets.

A government grant related to an asset is recognized as deferred income, and it should be evenly amortized to profit or loss over the useful life of the related asset.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 28.2 Judgment basis and accountant treatment of government subsidy related to income

The Group receives government subsidies including subsidies for Core-electronics, High-end-general-Chips, and Infrastructural-software projects, subsidies for Value-Added-Tax rebate (VAT rebate), subsidies for special projects, tax refunds, and Value-Added-Tax deductions, etc. which are used to compensate the group-related costs or losses, and therefore are categorized as government subsidy related to income.

For a government grant related to income, such as subsidies for Core-electronics, High-end-general-Chips, and Infrastructural-software projects, if the subsidy is a compensation for related expenses or losses to be incurred in subsequent periods, it is recognized as deferred income, and recognized in profit or loss over the periods in which the related costs or losses are recognized; If the subsidy, such as VAT Rebate, is a compensation for related expenses or losses already incurred, it is recognized immediately in profit or loss for the period.

For government subsidies related to the Group's daily operations shall be booked into other income; for those not related to the Group's daily operations, shall be booked into non-operating income/expense.

For the policy-backed preferential subsidized loan, if the Ministry of Finance will appropriate the subsidy amount to the lending bank, who will grant the loan to the Group at the policy-backed preferential interest rate, the actually received loan amount will be the entry value of the loan and the loan-related expenses will be calculated based on the loan principal and policy-backed preferential interest rate.

#### 29. Deferred Tax Assets / Deferred Tax Liabilities

The income tax expenses include current income tax and deferred income tax.

#### 29.1. Current Income Tax

At the balance sheet date, current income tax liabilities (or assets) for the current and prior periods are measured at the amount expected to be paid (or recovered) according to the requirements of tax laws.

#### 29.2 Deferred Tax Assets and Deferred Tax Liabilities

For temporary differences between the carrying amounts of certain assets or liabilities and their tax base, or between the nil carrying amount of those items that are not recognized as assets or liabilities and their tax base that can be determined according to tax laws, deferred tax assets and liabilities are recognized through the balance sheet liability method.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

Deferred tax is generally recognized for all temporary differences. Deferred tax assets for deductible temporary differences are recognized to the extent that it is probable that taxable profits will be available against which the deductible temporary differences can be utilized. However, for temporary differences associated with the initial recognition of goodwill and the initial recognition of an asset or liability arising from a transaction (not a business combination) that affects neither the accounting profit nor taxable profits (or deductible losses) at the time of transaction, no deferred tax asset or liability is recognized.

For deductible losses and tax credits that can be carried forward, deferred tax assets are recognized to the extent that it is probable that future taxable profits will be available against which the deductible losses and tax credits can be utilized.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries, except where the Group is able to control the timing of 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 are only recognized to the extent that it is probable that there will be taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

On the balance sheet date, the deferred income tax assets and deferred income tax liabilities are measured at the applicable tax rates in the period in which the related assets are recovered or the related liabilities are recovered in accordance with the tax laws.

Current and deferred tax expenses or income are recognized in profit or loss for the period, except when they arise from transactions or events that are directly recognized in other comprehensive income or in shareholders' equity, in which case they are recognized in other comprehensive income or in shareholders' equity; and when they arise from business combinations, in which case they adjust the carrying amount of goodwill.

At the balance sheet date, the carrying amount of deferred tax assets is reviewed and reduced if it is no longer probable that sufficient taxable profits will be available in the future to allow the benefit of deferred tax assets to be utilized. Such reduction in amount is reversed when it becomes probable that sufficient taxable profits will be available.

#### 29.3 Offset of Income Tax

When the Group has a legal right to settle on a net basis and intends either to settle on a net basis or to realize the assets and settle the liabilities simultaneously, current tax assets and current tax liabilities are offset and presented on a net basis.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

When the Group has a legal right to settle current tax assets and liabilities on a net basis, and deferred tax assets and deferred tax liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities which intend either to settle current tax assets and liabilities on a net basis or to realize the assets and liabilities simultaneously, in each future period in which significant amounts of deferred tax assets or liabilities are expected to be reversed, deferred tax assets and deferred tax liabilities are offset and presented on a net basis.

#### 30. Lease

Lease refers to a contract that conveys the right to use an asset for a period of time in exchange for consideration.

The Group assesses whether a contract is, or contains, a lease at the inception date. The Group does not re-assess whether a contract contains a lease unless the terms and conditions of the contract are changed.

#### 30.1 The Group as the lessee

#### 30.1.1 Separating components of lease

In case the contract contains one or more lease and non-lease components, the Group separates each lease component and non-lease component, and allocates the consideration to the lease and non-lease components based on the proportion of relative stand-alone prices of the components.

#### 30.1.2 Right-of-use assets

The Group recognizes the right-of-use assets for leases on the commencement date of the lease term, except for short-term lease and lease of low-value assets. The commencement date of the lease term refers to the date from which the lessor makes the leased assets available for use by the Group. Right-of-use assets are initially measured at cost. The cost includes:

- Initial measurement amount of lease liabilities;
- Amount of lease payment made at or before the commencement date of the lease, less any lease incentives received;
- Initial direct costs incurred by the Group;
- An estimate of any costs to be incurred by the Group in dismantling and removing the underlying asset, or restoring the site on which it is located, or restoring the leased assets to the conditions as agreed under the terms of the lease, excluding costs incurred to produce inventories.

The Group calculates depreciation of the right-of-use assets in accordance with the relevant depreciation provisions of *Accounting Standards for Business Enterprises No. 4 - Fixed Assets*. The right-of-use asset is depreciated over the shorter of the lease term and the useful life of the right-of-use asset, unless there is a transfer of ownership or purchase option which is reasonably certain to be exercised at the end of the lease term.

The Group determines whether the right-of-use assets are impaired and accounts for the identified impairment loss in accordance with the provisions of *Accounting Standards for Business Enterprises No. 8 - Impairment of Assets*.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 30.1.3 Lease liabilities

The Group initially measures the lease liability on the commencement date at an amount equal to the present value of the lease payments during the lease term that are not paid at that date, except short-term lease and lease of low-value assets. In calculating the present value of the lease payments, the Group adopts the interest rate implicit in the lease as the discount rate. The Group uses its incremental borrowing rate if the interest rate implicit in the lease cannot be readily determined.

Lease payments refer to the payments made by the Group to the lessor in connection with the right to use the leased asset during the lease term, including:

- Fixed payments, including in-substance fixed payments, less any lease incentives receivable;
- The exercise price of a purchase option, if the Group is reasonably certain to exercise that option;
- Payments for terminating the lease, if the lease term reflects the lessee exercising the option to terminate the lease;
- Amounts expected to be payable by the Group under residual value guarantees.

After the commencement date of the lease term, the Group calculates interest expense of lease liabilities in each period of lease term at fixed periodic rate and recognizes in the current loss and profit or relevant asset costs.

After the commencement date of the lease term, the Group remeasures the lease liability and adjusts the corresponding right-of-use assets under the following circumstances. If the carrying value of the right-of-use assets has been reduced to zero while the lease liability needs to be further reduced, the Group will recognize the difference into the current loss and profit:

- In case of any change of the lease term or any change in the valuation of the purchase option, the Group remeasures the lease liability at the present value calculated based on the modified lease payments and the revised discount rate;
- In the event of any change in the amount expected to be payable based on the residual value guarantees, the Group remeasures the lease liability at the present value calculated based on the changed lease payments and the original discount rate.

#### 30.1.4 Short-term lease and lease of low-value assets

The Group has elected not to recognize the right-of-use assets and lease liabilities for short-term leases and leases of lowvalue assets. Short-term lease refers to lease with a term no more than 12 months from the commencement date of lease term and without purchase option. Lease of low-value assets refers to lease for single lease asset with low value when it is new. The Group recognizes lease payments under short-term leases and leases of low-value assets as the current loss and profit or the relevant asset costs on a straight-line basis over each period during the lease term.

#### 30.1.5 Lease modification

In case of lease modification, the Group makes accounting treatment of such lease change as a separate lease if all of the following conditions are met:

• such lease modification increases the scope of the lease by adding the right to use one or more lease assets;

### Notes to Financial Statements

For the reporting period from January  $1^{st}\ 2021$  to December  $31^{st}\ 2021$ 

• the increased consideration is commensurate with the stand-alone price for the increase in scope and any appropriate adjustments to reflect the circumstances of the particular contract.

Where accounting treatment is not made for lease modification as a separate lease, at the effective date of lease modification, the Group reallocates the contract consideration after the modification, redetermines the lease term, and remeasures the lease liability based on the present value calculated according to the modified lease payments and the revised discount rate.

In the event that the lease scope is decreased or the lease term is shortened as a result of the lease modification, the Group reduces the carrying amount of the right-of-use assets, and recognizes the relevant gains or losses relating to the partial or full termination of the lease in the income statement; for the lease liabilities remeasured due to other lease modifications, the Group adjusts the carrying amount of the right-of-use assets accordingly.

#### 30.2 The Group as the lessor

#### 30.2.1 Separating components of lease

In case the contract contains both lease and non-lease components, the Group allocates the contract consideration in accordance with the provisions of Accounting Standards for Business Enterprises No. 14 - Revenue on portion of transaction prices, based on the respective stand-alone prices of the lease component and the non-lease component.

#### 30.2.2 Classification of lease

Finance lease is a lease that substantially transfers all the risks and rewards of incidental to ownership of an underlying asset. Operating lease refers to the leases other than finance lease.

#### 30.2.2.1 The Group records the operating lease business as the lessor

The Group recognizes the lease payments from operating leases as rental income on a straight-line basis for all periods over the lease term. The Group's initial direct costs incurred in connection with operating leases is capitalized as incurred, recognized in the income statement over the lease term on the same basis as the lease income.

#### 30.2.2.2 The Group records the finance lease business as the lessor

On the commencement date of the lease term, the Group uses the net lease investment as the carrying value of the finance lease receivables and derecognizes the finance lease assets. Net lease investment is the sum of present value of unguaranteed residual value and lease payments receivable discounted at the interest rate implicit in lease on the commencement date of the lease term.

Lease payments receivable, which refer to amounts receivable by the Group from the lessee for conveying the right to use the leased assets during the lease term, include:

#### Notes to Financial Statements

For the reporting period from January  $1^{\,\text{st}}$  2021 to December  $31^{\,\text{st}}$  2021

- Fixed payment including in-substance fixed payments by the lessee, less any lease incentives payable;
- The exercise price of a purchase option, if the lessee is reasonably certain to exercise that option;
- Payments for terminating the lease (if the lease term reflects the lessee exercising the option to terminate the lease;
- Residual value guarantees provided to the Group by the lessee, a party related to the lessee, or a third party unrelated to the lessor that is capable of discharging the obligations under the guarantee.

The Group calculates and recognizes the interest income in each period of the lease term according to the fixed periodic interest rate.

#### 30.2.3 Lease modification

In case of modification of the operating lease, the Group accounts for it as a new lease as of the effective date of the modification, any prepaid or accrued lease payments relating to the original lease are considered as payments for the new lease .

In case of modification of the finance lease, the Group accounts for the modification of a finance lease as a separate lease if all of the following conditions are met:

- The modification increases the scope of the lease by adding the right to use one or more lease assets;
- The consideration for the lease increases by an amount that is commensurate with the stand-alone price for the increase in scope, and any appropriate adjustments to that price to reflect the circumstances of the particular contract.

If a modification of finance lease is not accounted for as a separate lease, the Group accounts for the changed lease under the following circumstances:

- If the modification becomes effective on the commencement date of the lease and the lease is classified as an operating lease, the Group accounts for it as a new lease from the effective date of the lease modification and measures as the net lease investment prior to the effective date of the lease modification as the carrying value of the leased asset.
- If the modification becomes effective on the commencement date of the lease and the lease is classified as a finance lease, the Group accounts for it in accordance with the provisions of Accounting Standards for Business Enterprises No. 22 Recognition and Measurement of Financial Instruments regarding the modification or renegotiation of contracts.

#### 30.2.4 Sale and leaseback transaction

#### 30.2.4.1 The Group as the seller-lessee

The Group assesses and determines whether the transfer of the asset in sale and leaseback transaction qualifies as a sale in accordance with the provisions of *Accounting Standards for Business Enterprises No. 14 - Revenue*. If the transfer does not qualify as a sale, the Group continues to recognize the transferred asset and at the same time recognize a financial liability equal to the transfer proceeds and account for the financial liability in accordance with the provisions of

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments. If the transfer of the asset qualifies as a sale, the Group measures the right-of-use asset arising from the leaseback as the proportion of the previous carrying amount of the asset that relates to the right of use retained. The gain or loss recognized is limited to the proportion of the total gain or loss that relates to the rights transferred to the buyer-lessor.

#### 30.2.4.2 The Group as the buyer-lessor

If the transfer of the asset in a sale and leaseback transaction does not qualify as a sale, the Group does not recognize the transferred asset, but recognizes a financial asset equal to the transfer proceeds and account for the financial asset in accordance with the provisions of *Accounting Standards for Business Enterprises No. 22 - Recognition and Measurement of Financial Instruments*. If the transfer of the asset qualifies as a sale, the Group accounts for the purchase of the asset in accordance with other applicable Accounting Standards for Business Enterprises and account for the lease of the asset.

# **31.** Important Judgments while Applying Accounting Policy, and Key Assumptions and Uncertainty Factors Applied for Accounting Estimate

During the process of using accounting policy described in note (III), due to the uncertainty in operation activities, the group should judge, estimate and assume the book value of the report items which may not be metered reliably. These judgments, estimates and assumptions are based on the historical experience of the Group's management and other related factors. Differences may exist between the actual results and the Group's estimate.

The Group regularly reviews the above judgments, assumptions and estimations on the basis of continuous operation. If the changes of accounting estimate only influence current period, the influence amount will be affirmed during the changing period; if it influences the current period and subsequent periods, the influence amount will be recognized in the current period and future period.

#### - Key assumptions and uncertainties used in accounting estimate

On balance sheet date, key assumptions and uncertainties for performing accounting estimates on book value of assets and liabilities in subsequent future periods are:

#### Impairment provision for inventories

Except for contract performance costs, inventories are measured at the lower of cost or net realizable value. For raw materials, the latest or future actual purchase price is used as the basis for determining the net realizable value; For products in progress, the actual selling price of the latest or future finished product minus the estimated costs and costs that will be incurred when similar products are completed in the current period, the estimated selling expenses and related taxes to be incurred, is used as the basis for determining the net realizable value; For finished products, the actual selling price of the latest or future finished selling expenses and related taxes to be incurred, is used as the basis for determining the net realizable value; For finished products, the actual selling price of the latest or future finished product minus the estimated selling expenses and related taxes will be incurred, is used as the basis for determining the net realizable value; For finished products, the actual selling price of the latest or future finished product minus the estimated selling expenses and related taxes will be incurred, is used as the basis for determining the net realizable value. The Group will regularly conduct a comprehensive stocktaking to review the

Notes to Financial Statements

For the reporting period from January  $1^{st}$  2021 to December  $31^{st}$  2021

impairment circumstances on defective, obsoleted or slow-moving inventory if any; in addition, the Group's management will regularly review the impairment circumstance of inventory with long storage time according to the inventory aging list. The review procedure includes the comparison between book value of defective, obsoleted or slow-moving inventories and inventory with long storage time and its corresponding net realizable value in order to determine whether to withdraw provisions on the defective, obsoleted or slow-moving inventory and inventory with long storage time. Based on the above procedure, the Group's management deems that the full provision amounts have been withdrawn for inventory.

#### Impairment of accounts receivable

Except for accounts receivable whose credit losses are determined on the basis of individual basis, the Group adopts an impairment matrix to determine its expected credit loss provision. Based on the historical loss rate, the Group determines the proportion of corresponding loss reserves for various types of accounts receivable with similar risk characteristics. The impairment matrix is determined based on the historical overdue ratio and default of the Group, taking into account reasonable and well-founded industry forward-looking information. As of December 31<sup>st</sup> 2021, the Group has reassessed the historically observable overdue ratio and considered changes in forward-looking information. The amount of the provision for expected credit losses will change as the estimation of the Group. The details on the provision for expected credit losses of the Group are given in Note (V). 4.

#### Useful life and predicted net residual value of fixed asset

The Group's estimation of fixed assets useful life is based on the historical experience of actual usable term of fixed assets with similar properties and functions, the estimation of predicted net residual value is the amount obtained currently by the Group from the assets after deducting the anticipated disposal expense based on the anticipated status assuming the conditions that fixed assets' predicted useful life expires and fixed assets are at the end of useful life. The Group shall conduct the review on the predicted service life and predicted net residual value of fixed assets at least annually. For the current reporting period, the Group's management did not see signs either indicating a shortened or extended useful life of the Group's fixed asset or indicating a change in predicted net residual value.

#### Accrued liabilities of product quality warranty

Accrued liabilities of product quality assurance are costs and expenses incurred to meet the established standards of product quality assurance obligations to customers in accordance with the product contract; the Group made such an estimation according to the predicted repair and replacement cost of relevant products. The estimation considers the product claim rate trend, historic defect rate, industry practice and other major estimations. The management deems that the current estimation on accrued liabilities of product quality warranty is reasonable, however, the Group will continue to review the conditions of product repairs, and will conduct adjustment if any sign indicating the need to make adjustments on accounting estimates.

#### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### Deferred tax assets and deferred tax liabilities

Deferred income tax assets and deferred income tax liabilities are measured at the applicable income tax rate during the period when the relevant asset is expected to be recovered or the relevant debt is expected to be paid off. The expected applicable income tax rate is determined according to the relevant current tax regulations and the actual situation of the Group. If the estimated income tax rate is different from the original estimate, the management of the Group will adjust it.

The realization of deferred income tax assets mainly depends on the actual future profits and the effective tax rate of temporary difference in the future applicable years. If the actual profit in the future is less than the estimation, or actual tax rate is lower than the estimation, then the confirmed deferred income tax assets will be reversed and confirmed in the income statement during the corresponding period. If the actual profit in the future is more than the estimation, or actual tax rate is higher than the estimation, then the corresponding deferred income tax assets might be adjusted and confirmed in the income statement during the corresponding period.

#### Goodwill impairment

When performing impairment test on goodwill, the predicted present value of future cash flows of relevant asset group or asset group portfolio included the goodwill need to be calculated, the future cash flows of relevant asset group or asset group portfolio need to be estimated, and the proper pretax rate that fairly reflects the current market time value of money and specific asset risk need to be determined. When the future actual result is different from the original estimation, the goodwill impairment loss will alter.

#### Fair value measurement and valuation process

Held-for-trading financial assets, receivables for financing, and other non-current financial assets of the Group are measured at fair value in the financial statement. When valuating the fair value of these assets, the Group preferably uses obtainable and observable market data. If no observable data is available, the Group will organize an internal evaluation panel or hire qualified third-party valuers to conduct valuation. The Finance Department and evaluation panel of the Group will work closely with the hired valuers to determine appropriate valuation techniques and the input values of the valuation model. The valuation techniques and input values used for valuating the fair value of various assets are disclosed in Note (IX).

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### 32. Significant Alternation in Accounting Policy and Accounting Estimations

32.1 Significant changes in accounting policies

Changes in accounting policies and reasons		Notes
New Lease Standards		
Since January 1 <sup>st</sup> 2021 (the "First Adoption Date"), the Company has implemented the <i>Accounting Standards for Business Enterprises No. 21 – Leases</i> revised by the Ministry of Finance in 2018 (hereinafter referred to as the "New Lease Standards," and the Lease Standards before the revision referred to as the "Original Lease Standards"). The New Lease Standards refine the definition of a lease, and add content on the identification, splitting and merger of leases; eliminate the classification of leases by lessees as an operating lease or financing lease, and require the recognition of right-to-use assets and lease liabilities of all leases on the starting date of the lease term (excluding short-term leases and leases of low-value assets), with depreciation and interest expenses recognized separately; and improve the subsequent measurement of leases by lessees, add an accounting method in the instance of option revaluation and lease modification, and increase related disclosure requirements. In addition, they also widen the scope of disclosure of lessors. Please refer to Note (III) 30 for the revised accounting policies of the Company on the recognition and measurement of leases as lessee and lessors.		
For contracts existing before the date of initial application, the Group chose not to reassess whether it is a lease or contains a lease on the date of initial execution.		
The Group as the lessee		
The Group adjusts the amount of retained earnings and the amount of relevant items in the financial statements on the initial application date according to the cumulative impact of the initial application of the New Lease Standards, in which the information of the comparable is not be adjusted.		None
<ul> <li>For operating lease other than low-value lease prior to the date of initial adoption, the Group elects to apply one or more of the following simplified approach depending on each lease:</li> <li>Any lease that will be completed within 12 months of the date of initial execution shall be treated as short-term lease;</li> <li>The same discount rate shall be used for leases with similar characteristics when measuring the lease liability;</li> <li>The measurement of right-of-use assets does not include initial direct costs;</li> <li>In case of any extension option or termination option, the Group may determine the lease term according to the actual exercise of the option before the first adoption date and other latest conditions;</li> <li>If a lease is modified occurs before the date of initial adoption, the Group will account for it according to the final arrangement of the lease modification.</li> </ul>	Group at board of director general meeting.	
On the date of initial adoption, the Group makes the following adjustments as a result of the implementation of the New Lease Standards:		
<ul> <li>For finance lease prior to the date of initial adoption, the Group will respectively measure the right-of-use asset and lease liability based on the original carrying values of the finance lease assets and finance lease payables on the date of initial adoption.</li> <li>For operating lease prior to the date of initial adoption, the Group shall measure the</li> </ul>		
lease liability on the date of initial adoption based on the current value of the remaining lease payments discounted according to the lessee's incremental		



#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

borrowing rate on the date of initial adoption, and measure the right-of-use asset at an amount equal to the lease liability, with necessary adjustments to prepaid rent.

The Group recognizes lease liabilities (including due within one year) of RMB 386,475,961.59 and right-of-use assets of RMB 392,997,553.30 as of January 1<sup>st</sup> 2021. For operating leases before the date of initial adoption, the Group shall use the present value discounted by the incremental borrowing rate on the first adoption day to measure the lease liabilities. The range of incremental borrowing rate is from 1.14% to 9.50%.

The impact of the Group's adoption of the New Lease Standards as of January 1<sup>st</sup> 2021 is detailed in Note (III), 32.2.

#### The Group as the lessor

The Group does not adjust the lease as a lessor in accordance with the transition regulations, and conducts accounting treatment in accordance with the new lease standards from the date of initial application.

#### Interpretation No. 14 of Accounting Standards for Business Enterprises

The Ministry of Finance issued and implemented the *Interpretation No. 14 of Accounting Standards for Business Enterprises* (the "Interpretation No. 14") on February 2<sup>nd</sup> 2021, regulating the accounting treatment of private capital parties for Public-Private Partnership (PPP) project contracts.

#### Accounting treatment of PPP project contracts

A PPP project contract refers to a contract entered into by the private capital and the government for a PPP project, which conforms to the following characteristics: (1) the private capital shall provide public goods and services by using PPP project assets on behalf of the government during the operation period agreed in the contract; (2) the private capital shall be compensated for the public goods and services provided by it within the period agreed in the contract. A PPP project contract also meets the following conditions: (1) the government controls or regulates the types, objects and prices of public goods and services that the private capital must provide for the use of PPP project assets; (2) upon termination of the PPP project contract, the government shall control the significant residual interest of the PPP project assets through ownership, income rights or other forms.

The Group enters into PPP project contracts with the government as a private capital. The Group provides construction services (including construction and reconstruction and expansion) or subcontracts them to other parties, and determines whether the Group is the principle or the agent for accounting treatment according to *Accounting Standards for Business Enterprises No. 14* - *Revenue*, and confirms the contract assets.

If the contract stipulates that the Group provides various services (such as construction service for PPP project assets, and operation service and maintenance service after completion), according to *Accounting Standards for Business Enterprises No. 14 - Revenue*, separate performance obligations shall be identified and the transaction price shall be allocated to each performance obligation based on the relative proportion of the standalone selling price of each performance obligation.

If the contract stipulates that the Group is entitled to receive a determinable amount of cash (or other financial assets) during the operation of the project, the receivables shall be recognized when the Group has the right to receive such consideration (which is conditioned on the passage of time). When the PPP project assets reach a predetermined usable state, the Group shall
## Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

recognize as intangible assets the difference between the consideration or the recognized construction income of relevant PPP project assets, and the determinable amount of cash (or other financial assets) that the Group is entitled to receive.

For the part where the Group recognizes the consideration or the recognized construction income of relevant PPP project assets as intangible assets, the contract assets recognized during the relevant construction period shall be presented in the item of intangible assets; and other contract assets recognized during the relevant construction period shall be presented in the items of contract assets or other non-current assets based on whether they are expected to be realized within one year since the date of the balance sheet.

In accordance with the Interpretation No. 14, the Group implements accounting treatment for the new PPP projects from January 1<sup>st</sup> 2021 to the implementation date of the Interpretation No. 14 in accordance with requirements under the Interpretation. The Group has made retroactive adjustments to relevant PPP project contracts that were implemented before December 31<sup>st</sup> 2020 and have not been completed until the implementation date of the Interpretation No. 14. For relevant amounts under cumulative impact, retained earnings and the amounts of other relevant items in the financial statements as at January 1st 2021 has been adjusted, and the data in comparable period has not been adjusted. Details of the impact of the adoption of the Interpretation No. 14 by the Company on January 1st 2021 are set out in Note (III) 32.3.

32.2 The impact of the implementation of the New Lease Standards on the relevant items in the consolidated balance

sheet at the beginning of the period is shown below:

Item	December 31 <sup>st</sup> 2020	Reclassified (Note)	January 1st 2021
Current Assets:			
Prepayments	296,334,689.86	(2,952,118.77)	293,382,571.09
Other receivables	519,143,350.82	(117,288.00)	519,026,062.82
Other current assets	497,914,506.64	(477,453.85)	497,437,052.79
Non-current Assets:			
Fixed assets	5,876,007,536.60	(45,330,337.75)	5,830,677,198.85
Right-of-use assets	-	392,997,553.30	392,997,553.30
Current Liabilities:			
Non-current liabilities due within one year	3,507,680,339.78	137,118,074.50	3,644,798,414.28
Non-current Liabilities:			
Long-term payables	39,595,459.35	(23,052,993.27)	16,542,466.08
Lease Liabilities	-	230,055,273.70	230,055,273.70

Note: Due to the implementation of the New Lease Standards, the Group reclassifies prepaid rents totaling RMB 3,546,860.62, which were previously included in prepayments, other receivables and other current assets to right-of-use assets; reclassifies financial lease assets of RMB 45,330,337.75 previously included in fixed assets to right-of-use assets; reclassifies finance lease payments of RMB 23,052,993.27 previously included in long-term payables and the finance lease payments of RMB 19,302,613.39 previously included in non-current liabilities which due within one year to lease liabilities (including those due within one year). For operating leases prior to the date of initial adoption, the Group adopts the new lease standard to recognize right-of-use assets of RMB 344,120,354.93 and lease liabilities (including those due within one year). So January 1<sup>st</sup> 2021, the Group recognized a total of RMB 230,055,273.70 of lease liabilities, RMB 156,420,687.89 of lease liabilities due within one year and RMB 392,997,553.30 of right-of-use assets.

Unit RMR



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

# The impact of the implementation of the new lease standards on the relevant items of the parent company's balance sheet at the beginning of the period is set out below:

			Unit: RMB
Item	December 31st 2020	Reclassified (Note)	January 1st 2021
Non-current Assets:			
Right-of-use assets	-	66,446,154.01	66,446,154.01
Current Liabilities:			
Non-current liabilities due within one year	3,219,794,958.37	29,999,165.05	3,249,794,123.42
Non-current Liabilities:			
Lease Liabilities	-	36,446,988.96	36,446,988.96

Note: Due to the implementation of the new lease standards, the Company recognizes right-of-use assets of RMB 66,446,154.01 and lease liabilities (including those due within one year) of RMB 66,446,154.01.

## Information on the difference between the Group's lease liability recognized as of January 1<sup>st</sup> 2021 and the significant operating lease commitments disclosed in the financial statements of the fiscal year of 2020 is as follows: Unit: RMB

Item	January 1 <sup>st</sup> 2021
I. Operating lease commitments as of December 31st 2020	408,812,072.84
Lease liabilities discounted at the incremental borrowing rate on the date of initial adoption	377,897,839.67
Less: Recognition of exemptions - short-term leases and leases of low-value assets	33,777,484.74
Lease liabilities recognized in connection with the original operating lease upon implementation of the new lease standards	344,120,354.93
Add: Finance lease payables as of December 31st 2020 (including due within one year)	42,355,606.66
II. Lease liabilities as of January 1 <sup>st</sup> 2021	386,475,961.59
Including: Non-current liabilities due within one year	156,420,687.89
Lease liabilities	230,055,273.70

#### The components of the carrying value of right-of-use assets as of January 1st 2021 are as follows:

ItemJanuary 1st 2021Right-of-use assets:Right-of-use assets recognized under operating leases prior to the date of initial adoption344,120,354.93Reclassified prepaid rent3,546,860.62Finance leased assets recognized as fixed assets under the Original Lease Standards45,330,337.75Total392,997,553.30

#### On January 1st 2021, right-of-use assets are disclosed by category as follows:

Unit: RMB

Item	January 1 <sup>st</sup> 2021
Building and construction	333,243,923.96
General-purpose equipment (Note)	135,811.98
Special-purpose equipment (Note)	45,194,525.77
Transportation vehicles	14,423,291.59
Total	392,997,553.30

Note: The Group recognized the general-purpose equipment and special-purpose equipment that were classified as



For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

financial leases under the original lease standards which were still leased on January 1<sup>st</sup> 2021 as right-of-use assets, with book values of RMB 135,811.98 and RMB 45,194,525.77, respectively.

<u>32.3 The impact of the implementation of Interpretation No. 14 on the relevant items in the consolidated balance sheet at</u> the beginning of the year is shown below:

			Unit: RMB
Item	December 31 <sup>st</sup> 2020	Adjustments	January 1st 2021
Current Assets:			
Accounts receivable	21,979,380,716.86	76,687,200.93	22,056,067,917.79
Contract assets	245,754,510.98	73,650,033.12	319,404,544.10
Non-current assets due within one year	1,001,208,813.83	(150,337,234.05)	850,871,579.78
Non-current Assets:			
Long-term receivables	2,105,570,004.53	(1,619,823,514.21)	485,746,490.32
Intangible assets	1,251,317,923.69	70,649,800.00	1,321,967,723.69
Other non-current assets	721,511,156.08	1,549,173,714.21	2,270,684,870.29

Note: Due to the implementation of Interpretation No. 14, on January 1<sup>st</sup> 2021, the Group reclassifies RMB 1,619,823,514.21 originally included in long-term receivables and RMB 150,337,234.05 originally included in noncurrent assets due within one year to accounts receivable of RMB 76,687,200.93, contract assets of RMB 73,650,033.12 and other non-current assets of RMB 1,549,173,714.21. The difference between the amount of construction revenue recognized for the relevant PPP project assets and the right to receive a determinable amount of cash is recognized as intangible assets of RMB 70,649,800.00. Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

## IV. Taxes

#### 1. Major Categories of Taxes and Tax Rates

Category of tax	Basis of tax computation	Tax rate
Enterprise income tax	Taxable income	25% (Note 1)
VAT	For the taxable product sales revenue or taxable labor revenue, the Company and its domestic subsidiaries are ordinary Value-added Tax payers; the VAT payable is the balance of input tax after deducting the deductible output tax.	6%, 9%, 13% and simple collection rate of 5%, 3% (Note 3)
City maintenance and construction tax	Actual payable turnover tax	7%,5%
Education surcharges	Actual payable turnover tax	3%
Local education surcharges	Actual payable turnover tax	2%

Note 1: Except that this Company and subsidiaries in China are applicable to the following tax preference, this Company's other subsidiaries in China are applicable to 25% of enterprise income tax rate, the overseas subsidiaries are applicable to corresponding local tax rate.

(1) In accordance with the Letter of Reply on Publishing the List of Identified High-tech Enterprises of Zhejiang Province in 2020 (Guo Ke Huo Zi [2020] No. 251) issued by the Leading Group Office of National High-tech Enterprise Identification Management on December 29<sup>th</sup> 2020, the Company was identified as the high-tech enterprise with a valid term of 3 years, from 2020 to 2022.

In accordance with the Notice on Printing and Distributing the List of Key Software Enterprises and IC Design Enterprises in the National Planning Layout for 2013-2014 (Fa Gai Gao Ji [2013] No. 2458), the Company was recognized as a national key software enterprise in 2013. According to the Announcement on the Enterprise Income Tax Policies for Promoting the High-quality Development of Integrated Circuit Industry and Software Industry (Ministry of Finance, State Administration of Taxation, National Development and Reform Commission, Ministry of Industry and Information Technology Announcement [2020] No. 45), the Company was approved by the tax authorities in May 2021 to pay the 2020 annual corporate income tax at the rate of 10%. As of the approval date of this report, the Company's preferential income tax in 2021 has not been verified and approved. Therefore, the Company's enterprise income tax in 2021 is still calculated and paid at the rate of 15% (2020: 15%).

- (2) In accordance with Finance and Taxation [2011] No. 58 Document of Ministry of Finance, State Administration of Taxation and General Administration of Customs, the wholly-owned subsidiaries, Chongqing Hikvision Technology Co., Ltd. (hereinafter referred to as "Chongqing Technology") and Chongqing Hikvision System Technology Co., Ltd. (hereinafter referred to as "Chongqing System"), are qualified to enjoy the west development preferential tax policy from 2011 to 2020. According to the , *Announcement on Continuation of the Corporate Income Tax Policy for the Western Development (*Ministry of Finance, State Administration of Taxation, National Development and Reform Commission Announcement [2020] No.23), Chongqing Technology and Chongqing System will still enjoy the preferential policies for the Western Development from 2021 to 2030. Therefore, the current enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020:15%).
- (3) In accordance with the Replies on Publishing the List of First Batch of identified High-tech Enterprises of Zhejiang Province in 2018 (GuoKeHuoZi [2019] No. 70) issued by the Leading Group Office of Zhejiang High-tech Enterprise Identification Management Work on February 20<sup>th</sup> 2019, the Company's joint venture subsidiary, Hangzhou Fuyang Baotai Security Technology Service Co., Ltd. (hereinafter referred to as "Fuyang Baotai"), was recognized as a high-tech enterprise and was valid for 3 years from 2018 to 2020. According to the Recording List of the First Batch of identified High-tech Enterprises of Zhejiang Province in 2021 issued by the Leading Group Office of National High-tech Enterprise Identification Management Work on January 24 2022, Fuyang Baotai is still identified as a high-tech enterprise, and the validity period of the identification is 3 years, from 2021 to 2023. Therefore, the enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020:15%).

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

- (4) In accordance with the *Replies on Publishing identified High-tech Enterprises of Zhejiang Province in 2019* (GuoKeHuoZi [2020] No. 32) issued by the leading group office of Zhejiang high-tech enterprise identification management work on January 20<sup>th</sup> 2020, the Company's wholly-owned subsidiary, Hangzhou Hikvision System Technology Co., Ltd. (hereinafter referred to as "Hangzhou System") and the Company's joint venture subsidiary Hangzhou Kuangxin Technology Co., Ltd. (hereinafter referred to as "Hangzhou Kuangxin"), was recognized as a high-tech enterprise and was valid for 3 years from 2019 to 2021. Therefore, the enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020:15%).
- (5) In accordance with the Notice on Publishing the List of Third Batch of Proposed Identified High-tech Enterprises of Shanghai in 2020 issued by Shanghai High-tech Enterprise Identification Office on November 20<sup>th</sup> 2020, the Company's wholly-owned subsidiary, Shanghai Goldway Intelligent Transportation System Co., Ltd. (hereinafter referred to as "Shanghai Goldway") was identified as the high-tech enterprise with a valid term of 3 years, from 2020 to 2022. Therefore, the enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020:15%).
- (6) In accordance with the Letter of Reply on Publishing the List of Identified High-tech Enterprises of Zhejiang Province in 2020 (Guo Ke Huo Zi [2020] No. 251) issued by the Leading Group Office of National High-tech Enterprise Identification Management on December 29<sup>th</sup> 2020, the Company's joint-venture subsidiary, Hangzhou Hikrobot Technology Co., Ltd. (hereinafter referred to as "Hangzhou Robotic Technology") were identified as the high-tech enterprises with a valid term of 3 years, from 2020 to 2022. Therefore, the enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020:15%).
- (7) In accordance with the Letter of Reply on Publishing the List of Identified High-tech Enterprises of Zhejiang Province in 2020 (Guo Ke Huo Zi [2020] No. 32) issued by the Leading Group Office of National High-tech Enterprise Identification Management on January 20<sup>th</sup> 2020, the Company's joint-venture subsidiary, Hangzhou Hikmicro Sensing Technology Co., Ltd. (hereinafter referred to as "Hangzhou Hikmicro Sensing") were identified as the hightech enterprises with a valid term of 3 years, from 2019 to 2021.

According to the Ministry of Industry and Information Technology of the People's Republic of China, the National Development and Reform Commission, the Ministry of Finance and the National State Administration of Taxation, No. 9 of 2021 *Announcement on the Enterprise Income Tax Policy for Promoting the High-quality Development of the Integrated Circuit Industry and Software Industry* (Ministry of Finance, State Administration of Taxation, National Development and Reform Commission, Ministry of Industry and Information Technology Announcement [2020] No. 45), *Notice on Requirements for Formulating Lists of Integrated Circuit Enterprises, Projects and Software Enterprises enjoying Preferential Tax Policies* (Fa Gai Gao Ji [2021] No. 413), Hangzhou Hikmicro Sensing is an integrated circuit design enterprise established before December 31<sup>st</sup> 2017. The qualified enterprise will be exempted from corporate income tax for the first year to the second year from the profitable year, and levied half of the corporate income tax at a statutory tax rate of 25% from the third year to the fifth year. The year of 2021 is the first year of Hangzhou Hikmicro Sensing making profits and is exempt from enterprise income tax.

- (8) In accordance with the Announcement on the Enterprise Income Tax Policies for Promoting the High-quality Development of Integrated Circuit Industry and Software Industry (Ministry of Finance, State Administration of Taxation, National Development and Reform Commission, Ministry of Industry and Information Technology Announcement [2020] No. 45), enterprises engaging in integrated circuit design, equipment, materials, packaging, testing and software encouraged by the state are entitled to exemption from enterprise income tax in the first and second years after start of profiting and pays enterprise income tax at half of the 25% statutory tax rate in the third to fifth years. The Company's joint venture subsidiaries, Hangzhou EZVIZ Software Co., Ltd. (hereinafter referred to as "EZVIZ Software") and Hangzhou Microimage Software Co., Ltd. (hereinafter referred to as "Hangzhou Microimage Software"), are qualified software companies and are entitled to exemption from enterprise income tax in 2021 (2020: tax-exempted).
- (9) According to the Recording List of the First Batch of identified High-tech Enterprises of Zhejiang Province in 2021 issued by the Leading Group Office of National High-tech Enterprise Identification Management Work on January 24 2022, the Company's joint venture subsidiaries Hangzhou Hikstorage Technology Co., Ltd. (hereinafter referred as

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

"Hangzhou Hikstorage") is identified as a high-tech enterprise with a validity period of 3 years, from 2021 to 2023. Therefore, the enterprise income tax is calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period (2020: 25%).

Note 2: In accordance with the requirements of the *Notice on Software Product Value-added Tax Policy* (Cai Shui [2011] No. 100) promulgated by the Ministry of Finance and the State Administration of Taxation, as for self-developed software products sales of the Company, Hangzhou System, the Company's joint-venture subsidiaries such as Hangzhou Hikrobot Technology, Hangzhou Auto Software Co., Ltd., Hangzhou EZVIZ Software, Hangzhou Hikstorage, Hangzhou Hikimaging Technology, Hangzhou Hikfire Technology Co., Ltd. (hereinafter referred to as "HikFire"), Hangzhou Rayin Technology Co., Ltd. (hereinafter referred to as "Hangzhou Microimage Software, Henan Haikang Hua'An BaoQuan Electronics Co., Ltd. (hereinafter referred to as "Hua'An BaoQuan Electronics") and Hangzhou Kuangxin, the VAT shall be calculated and paid with tax rate of 13% at first, then the portion with actual tax bearing excess 3% shall be refunded after State Administration of Taxation reviews.

Note 3: In accordance with the *Announcement on Relevant Policies for Deepening the Value-Added Tax Reform* (Joint Announcement [2019] No. 39) jointly issued by the Ministry of Finance, the State Administration of Taxation and the General Administration of Customs, from April 1<sup>st</sup> 2019 to December 31<sup>st</sup> 2021, taxpayers in the production and living services industry are allowed to deduct an additional 10% of the current deductible input tax to deduct the tax payable ("Additional Deduction Policy"), the Company's wholly-owned subsidiaries, a part of Hangzhou Hikvision Technology Co., Ltd.'s subsidiaries , Hangzhou Hikvision Security Equipment Leasing Service Co., Ltd. (hereinafter referred to as "Hangzhou Leasing"), Anhui Hikvision Urban Operation Service Co., Ltd. (hereinafter referred to as "Anhui Urban Service"), and the Company's joint venture subsidiaries, Hangzhou Kuangxin, Zhejiang Haikang City Service Co., Ltd. Luliang Branch, Henan Hua'An Bao Quan Intelligent Development Co., Ltd. Luoyang Branch, Henan Hua'An Bao Quan Intelligent Developments, and their sales accounted for more than 50% of its total sales, are complying with the provisions of the Additional Deduction Policy and were entitled to additional deduction preferential tax policy of input tax since April 1<sup>st</sup> 2019.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### V. Notes to Items in the Consolidated Financial Statements

### 1. Cash and Bank Balances

	Closing Balance			Opening Balan	ce	
Item	Foreign currency amount	Exchange rate for conversion	RMB amount	Foreign currency amount	Exchange rate for conversion	RMB amount
Cash:						
RMB	-	-	16,909.86	-	-	17,959.62
EUR	41,743.98	7.2197	301,379.03	71,638.34	8.0250	574,897.70
INR	2,288,210.50	0.0857	196,099.64	2,504,019.19	0.0891	223,108.11
USD	33,133.82	6.3757	211,251.31	32,776.72	6.5249	213,864.82
GBP	2,343.11	8.6064	20,165.74	6,341.78	8.8903	56,380.33
Other currencies	-	-	1,105,467.95	-	-	18,836.93
Bank balance:						
RMB	-	-	31,577,521,085.40	-	-	27,789,108,210.05
USD	272,857,839.86	6.3757	1,739,659,729.57	941,351,972.89	6.5249	6,142,227,487.92
EUR	96,011,075.74	7.2197	693,171,163.55	52,026,066.91	8.0250	417,509,186.97
GBP	17,199,784.69	8.6064	148,028,226.97	11,204,897.40	8.8903	99,614,899.38
INR	1,092,845,025.79	0.0857	93,656,818.71	1,203,270,539.96	0.0891	107,211,405.11
RUB	731,254,280.94	0.0855	62,522,241.02	1,742,132,380.50	0.0877	152,785,009.77
BRL	36,644,426.85	1.1436	41,906,566.54	54,535,451.03	1.2551	68,447,444.59
CAD	6,629,301.03	5.0046	33,176,999.93	5,383,485.44	5.1161	27,542,449.88
HKD	31,824,133.26	0.8176	26,019,411.35	13,632,862.61	0.8416	11,473,417.17
MXN	75,249,325.96	0.3116	23,447,689.97	-	-	
THB	121,837,799.11	0.1912	23,295,387.19	14,687,508.85	0.2328	3,419,252.06
JPY	392,086,869.13	0.0554	21,721,612.55	336,505,067.09	0.0632	21,267,120.24
PLN	10,745,706.25	1.5717	16,889,026.51	12,359,893.85	1.7520	21,654,534.02
ZAR	39,232,629.30	0.4004	15,708,744.77	14,765,683.20	0.4458	6,582,541.57
KRW	2,683,059,127.78	0.0054	14,488,519.29	855,655,685.00	0.0060	5,133,934.11
AED	5,055,058.19	1.7361	8,776,086.53	36,263,518.29	1.7761	64,407,634.83
AUD	1,886,989.36	4.6220	8,721,664.84	2,279,274.45	5.0163	11,433,524.41
Other currencies	-	-	25,075,802.57	-	-	18,195,337.35
Other currency funds:						
RMB	-	-	112,293,072.17	-	-	463,887,119.07
USD	3,595,184.37	6.3757	22,921,816.99	3,101,420.39	6.5249	20,236,457.90
EUR	580,030.78	7.2197	4,187,648.22	465,821.33	8.0250	3,738,216.17
Other currencies	-	-	6,830,343.19	-	-	2,748,878.19
Total			34,721,870,931.36			35,459,729,108.27
Including: deposited in overseas banks			737,750,220.06			782,389,029.81



For the reporting period from January 1st 2021 to December 31st 2021

		Closing Balance		0	pening Balanc	e
Item	Foreign currency amount	Exchange rate for conversion	RMB amount	Foreign currency amount	Exchange rate for conversion	RMB amount
Capitals with limitations:						
Bank acceptance bill	-	-	35,387,135.77	-	-	8,484.61
Deposits for letter of guarantee	-	-	51,980,170.28	-	-	44,417,713.65
Other security deposits	-	-	4,679,097.53	60,000.00	4.7050	282,300.00
Deposits for letter of Credit in BRL	-	-	-	283,313.18	1.2551	355,586.37
Tax Operation Margin for India	-	-	-	120,305.95	0.0891	10,719.26
Other capitals with limitations	-	-	25,880,098.58	-	-	389,816,426.07
Subtotal			117,926,502.16			434,891,229.96
Capitals without limitations:						
Deposit in Alipay, Tenpay, etc.	-	-	27,469,681.96	-	-	25,263,562.38
Other currency funds in USD	119,611.52	6.3757	762,607.17	4,662,441.59	6.5249	30,421,965.14
Other currency funds in EUR	10,262.10	7.2197	74,089.28	3,965.11	8.0250	31,820.01
Other currency funds in ZAR	-	-	-	23,875.03	0.0877	2,093.84
Subtotal			28,306,378.41			55,719,441.37
Total			146,232,880.57			490,610,671.33

#### 2. Held-for-trading Financial Assets

		Unit: RMB
Item	Closing Balance	Opening Balance
Financial assets measured at fair value through current gain and loss	34,320,010.83	22,679,846.77
Including: derivative financial assets	34,320,010.83	22,679,846.77
Total	34,320,010.83	22,679,846.77

On December 31<sup>st</sup> 2021, derivative financial assets included forward foreign exchange contracts, foreign exchange option contracts and interest rate swap contracts. The notional amount of forward foreign exchange contracts is RMB 982,803,001.81 (2020: RMB 1,875,987,806.80), the notional amount of foreign exchange option contracts is RMB 127,514,000.00 (2020: RMB 326,245,000.00) and the notional amount of interest rate swap contracts is RMB 389,142,481.68 (2020: Nil). The above forward foreign exchange contracts, foreign exchange option contracts and interest rate swap contracts are not designated as hedging instruments, and the gains or losses arising from changes in their fair values are directly included in the current profit and loss.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### 3. Notes Receivable

#### 1) Categories of notes receivable

Unit: RMB

Category	Closing Balance	Opening Balance
Bank acceptance bill	1,228,046,849.95	1,003,388,157.28
Commercial acceptance bill	294,714,055.35	299,864,547.91
Total	1,522,760,905.30	1,303,252,705.19

- 2) As of December  $31^{st}$  2021, the pledged notes receivable by the Group is nil.
- 3) At the end of the current reporting period, notes receivable endorsed by the Group but not yet due at the balance sheet day

		Unit: RMB
Category	Derecognized amount as of December 31st 2021	Amount not derecognized as of December 31 <sup>st</sup> 2021
Bank acceptance bill Note (V) 30.3	-	711,238,103.83
Total	-	711,238,103.83

#### Note: Transfer of financial assets

As of December 31<sup>st</sup> 2021, the Group gave RMB 711,238,103.83 (2020: RMB 482,454,604.99) undue bank acceptance bills to suppliers for endorsement. Since the Group has not transferred almost all the risks and rewards of ownership of financial assets, the Group has not terminated its confirmation. For details, please refer to Note (V) 30.3.

4) As of December 31<sup>st</sup> 2021, the Group transferred the defaulted notes receivable into accounts receivable.

	Unit: RMB
Category	Amounts transferred into accounts receivable as of December 31st 2021
Commercial Acceptance Bill	104,372,882.41
Total	104,372,882.41

5) The Group believes except for bills that are transferred to accounts receivable due to the failure of the drawer to perform the contract, the bank acceptance bills and commercial acceptance bills held by the Group do not have significant credit risks and will not cause major losses due to the counterparty's default. Therefore, no loss provision is made.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 4. Accounts Receivable

#### 1) Disclosure by aging

Unit: RMB

L.	Closing Balance					
Item	Accounts receivable	Credit loss provision	Proportion (%)			
Within credit period	16,624,872,547.82	177,834,756.44	1.07			
Within 1 year after exceeding credit period	8,356,240,264.84	372,160,503.23	4.45			
1-2 years after exceeding credit period	1,507,966,937.94	333,458,412.68	22.11			
2-3 years after exceeding credit period	1,005,164,963.25	492,661,398.25	49.01			
3-4 years after exceeding credit period	392,162,927.88	335,519,470.71	85.56			
Over 4 years after exceeding credit period	315,024,416.44	315,024,416.44	100.00			
Subtotal	28,201,432,058.17	2,026,658,957.75	7.19			

#### 2) Classified disclosure of credit loss provision by methods

					Unit: RMB			
		Closing Balance						
Category	Carrying a	imount	Credit loss p	rovision	Book Value			
	Amount	Proportion (%)	Amount	Proportion (%)	Amount			
Provision for credit loss on a single basis	-	-	-	-	-			
Provision for credit loss by portfolios	28,201,432,058.17	100.00	2,026,658,957.75	7.19	26,174,773,100.42			
Total	28,201,432,058.17	100.00	2,026,658,957.75	7.19	26,174,773,100.42			
		Begin	ning Balance (Resta	ted)				
Category	Carrying a	imount	Credit loss p	Book Value				
	Amount	Proportion (%)	Amount	Proportion (%)	Amount			
Provision for credit loss on a single basis	-	-	-	-	-			
Provision for credit loss by portfolios	23,573,877,737.66	100.00	1,517,809,819.87	6.44	22,056,067,917.79			
Total	23,573,877,737.66	100.00	1,517,809,819.87	6.44	22,056,067,917.79			

#### Provision for credit loss by portfolios for accounts receivable

			Unit: RMB				
Customer		Closing balance					
Customer	Carrying amount	Credit loss provision	Proportion (%)				
Portfolio A	3,806,501,754.60	92,528,632.14	2.43				
Portfolio B	18,681,447,755.29	1,765,923,934.20	9.45				
Portfolio C	5,713,482,548.28	168,206,391.41	2.94				
Total	28,201,432,058.17	2,026,658,957.75	7.19				

Description of credit loss provision by portfolios for accounts receivable

As part of the Group's credit risk management, the Group uses the ageing of accounts receivable to assess the expected credit losses of accounts receivable formed by domestic and overseas sales business, and divides the risk characteristics into portfolio A, portfolio B and portfolio C, according to the business area and object. These three portfolios involve a large number of customers with the same risk characteristics. Aging information is able to reflect the solvency of these three types of customers when the accounts receivable are due.

For the reporting period from January 1st 2021 to December 31st 2021

As of December 31<sup>st</sup> 2021 and January 1<sup>st</sup> 2021, the credit risk and expected credit losses of accounts receivable from portfolio A are as follows:

U	nit:	RM	E

		Closing balance					Beginning balance	
Age	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value
Within credit period	0.04	3,095,392,524.62	1,291,742.49	3,094,100,782.13	0.02	2,971,260,488.09	604,959.50	2,970,655,528.59
Within 1 year after exceeding credit period	1.70	594,470,571.01	10,117,916.29	584,352,654.72	2.02	640,220,646.55	12,955,798.75	627,264,847.80
1-2 years after exceeding credit period	44.11	50,793,800.93	22,404,389.00	28,389,411.93	51.50	82,533,903.30	42,503,136.38	40,030,766.92
2-3 years after exceeding credit period	83.73	43,832,222.47	36,701,948.79	7,130,273.68	90.10	40,717,280.97	36,686,603.66	4,030,677.31
3-4 years after exceeding credit period	100.00	19,359,244.96	19,359,244.96	-	100.00	5,809,507.07	5,809,507.07	-
Over 4 years after exceeding credit period	100.00	2,653,390.61	2,653,390.61	-	100.00	830,934.85	830,934.85	-
Total	2.43	3,806,501,754.60	92,528,632.14	3,713,973,122.46	2.66	3,741,372,760.83	99,390,940.21	3,641,981,820.62

As of December 31<sup>st</sup> 2021 and January 1<sup>st</sup> 2021, the credit risk and expected credit losses of accounts receivable from portfolio B are as follows:

Unit: RMB

		Closing balance				Beg	inning balance (rest	ated)
Age	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value
Within credit period	1.99	8,575,278,759.81	170,679,301.15	8,404,599,458.66	0.76	6,294,425,956.16	48,017,503.05	6,246,408,453.11
Within 1 year after exceeding credit period	4.63	7,167,632,732.53	331,869,605.70	6,835,763,126.83	3.78	5,799,607,133.14	219,408,150.28	5,580,198,982.86
1-2 years after exceeding credit period	19.80	1,387,932,595.51	274,788,108.40	1,113,144,487.11	20.69	1,436,628,039.73	297,283,759.42	1,139,344,280.31
2-3 years after exceeding credit period	44.75	914,771,713.21	409,398,421.89	505,373,291.32	57.51	665,262,321.85	382,616,768.44	282,645,553.41
3-4 years after exceeding credit period	83.68	347,000,938.34	290,357,481.17	56,643,457.17	83.09	238,233,041.29	197,947,096.87	40,285,944.42
Over 4 years after exceeding credit period	100.00	288,831,015.89	288,831,015.89	-	100.00	146,749,340.78	146,749,340.78	-
Total	9.45	18,681,447,755.29	1,765,923,934.20	16,915,523,821.09	8.86	14,580,905,832.95	1,292,022,618.84	13,288,883,214.11

For the reporting period from January 1st 2021 to December 31st 2021

As of December 31<sup>st</sup> 2021 and January 1<sup>st</sup> 2021, the credit risk and expected credit losses of accounts receivable from portfolio C are as follows:

Unit: RMB

			Closing balance				Beginning balance	
Age	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value	Estimated average loss rate (%)	Carrying value	Credit loss provision	Book value
Within credit period	0.12	4,954,201,263.39	5,863,712.80	4,948,337,550.59	0.20	4,736,831,208.62	9,676,562.96	4,727,154,645.66
Within 1 year after exceeding credit period	5.08	594,136,961.30	30,172,981.24	563,963,980.06	6.84	391,071,518.27	26,753,464.86	364,318,053.41
1-2 years after exceeding credit period	52.38	69,240,541.50	36,265,915.28	32,974,626.22	51.18	69,085,009.97	35,354,825.98	33,730,183.99
2-3 years after exceeding credit period	100.00	46,561,027.57	46,561,027.57	-	100.00	28,016,950.72	28,016,950.72	-
3-4 years after exceeding credit period	100.00	25,802,744.58	25,802,744.58	-	100.00	11,470,715.01	11,470,715.01	-
Over 4 years after exceeding credit period	100.00	23,540,009.94	23,540,009.94	-	100.00	15,123,741.29	15,123,741.29	-
Total	2.94	5,713,482,548.28	168,206,391.41	5,545,276,156.87	2.41	5,251,599,143.88	126,396,260.82	5,125,202,883.06

#### 3) Credit loss provision

#### Provision, re-collection, or reverse of the credit loss provision in the current reporting period

	Unit: RMB
Credit loss provision	Total
Balance on January 1 <sup>st</sup> 2021 (restated)	1,517,809,819.87
Provision/(reverse) during the current reporting period	566,389,266.23
Derecognition of financial assets (including direct write-downs) and transfer out	(54,561,920.83)
Difference arised from foreign currency statement translation	(2,978,207.52)
Balance on December 31st 2021	2,026,658,957.75

#### Actual write-off of accounts receivable during current reporting period:

In the current reporting period, the amount of actual accounts receivable write-off is RMB 55,152,653.63, and RMB 590,732.80 is recollected after writing-off.

Notes to Financial Statements
For the reporting period from January 1st 2021 to December 31st 2021

### 4) Top five debtors based on corresponding closing balance of accounts receivable

				Unit: RMB
Name of the Party	Relationship with the Company	Book value balance of accounts receivable	Closing balance for credit loss provision	Proportion (%) of the total balance of accounts receivable at the end of the current reporting period
CETC's subsidiary company A (Note)	Related Party	373,842,942.92	129,057,296.16	1.33
Third Party A	Third party	340,541,342.55	2,962,709.68	1.21
Third Party B	Third party	213,520,031.59	1,857,624.27	0.76
Third Party C	Third party	141,703,906.59	1,232,823.99	0.50
Third Party D	Third party	139,825,164.14	1,931,817.02	0.50
Total		1,209,433,387.79	137,042,271.12	4.30

Note: A subsidiary of CETC is a subsidiary of China Electronics Technology Group Co., Ltd., the Company's ultimate controller.

- 5) As of December 31<sup>st</sup> 2021, there is no termination of accounts receivable booking due to transfer of a financial asset.
- 6) As of December 31<sup>st</sup> 2021, the Group has no assets/liabilities booked due to transferred accounts receivable that the Group still continue to be involved in.

#### 5. Receivables for Financing

1) Receivables for financing by categories

Unit: RMB

		Ulit. KIVID
Item	Closing Balance	Opening Balance
Bank acceptance bill	1,316,035,122.06	1,959,601,195.25
Total	1,316,035,122.06	1,959,601,195.25

#### 2) At the end of the reporting period, the Group's pledged receivables for financing

Unit: RMB

Item	Amount pledged as of December 31st 2021
Bank acceptance bill	4,337,929.69
Total	4,337,929.69

3) At the end of the reporting period, receivables for financing endorsed or discounted by the Group that have not yet expired on the balance sheet date.

Unit: RMB

Item	Derecognized amount as of December 31 <sup>st</sup> 2021	Amount not derecognized as of December 31st 2021
Bank acceptance bill	2,800,863,150.72	-
Total	2,800,863,150.72	-

#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

4) The Group believes that the acceptance bank's credit rating of the bank acceptance bill held is high, and there is no significant credit risk, so no loss provision is made.

#### 6. Prepayment

#### 1) Prepayments by aging analysis

				Unit: RMB	
Aging	Closing Balanc	e	Opening Balanc	Opening Balance (Restated)	
	Carrying amount	Proportion (%)	Carrying amount	Proportion (%)	
Within 1 year	472,051,582.19	93.33	261,740,350.78	89.22	
1-2 years	16,837,633.29	3.33	20,302,314.17	6.92	
2-3 years	12,180,525.79	2.41	9,021,070.25	3.07	
Over 3 years	4,728,512.08	0.93	2,318,835.89	0.79	
Total	505,798,253.35	100.00	293,382,571.09	100.00	

#### 2) Closing balances of top five prepayments parties

As of December 31<sup>st</sup> 2021, the Group's top five balances of prepayments amounted to RMB 165,956,536.73, accounting for 32.81% of total closing balance of prepayments.



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### 7. Other Receivables

### 1) Other receivables by aging

Unit: RMB

Item	Closing Balance					
	Other receivables	Bad debt provision	Proportion (%)			
Within contract period	297,564,204.37	2,587,782.99	0.87			
Within 1 year	52,387,962.11	1,743,779.91	3.33			
1-2 years	7,248,182.48	1,343,438.08	18.53			
2-3 years	9,568,207.30	3,943,058.26	41.21			
3-4 years	5,983,084.56	4,120,660.15	68.87			
Over 4 years	12,437,987.22	11,830,462.77	95.12			
Subtotal	385,189,628.04	25,569,182.16	6.64			

### 2) Other receivables by nature of the payment

Unit: RMB

Item	Closing Balance	Opening Balance (Restated)
Temporary payments for receivables	113,230,687.20	294,409,377.31
Guarantee deposits	216,176,255.21	173,447,240.76
Tax rebates	762,862.50	67,714,444.77
Investment intention fund	4,000,000.00	1,000,000.00
Others	51,019,823.13	33,758,132.77
Total	385,189,628.04	570,329,195.61

For the reporting period from January 1st 2021 to December 31st 2021

### **3**) Provision for credit loss

Unit: RMB

Category Opening balance		Amo	ount of changes in the current report	Difference resulted from		
	Provision or reverse	Recollect	Resell or write off	foreign currency statements Conversion	Closing balance	
Other receivables	51,303,132.79	409,000.25	(25,640,443.39)	-	(502,507.49)	25,569,182.16
Total	51,303,132.79	409,000.25	(25,640,443.39)	-	(502,507.49)	25,569,182.16

#### Changes in credit loss provisions for other receivables

				Unit: RMB
	Stage 1	Stage 2	Stage 3	
bed debts allowance	Expected credit losses in the next 12 months	Expected credit loss for the entire duration (credit impairment has not incurred)	Expected credit loss for the entire duration (credit impairment has occurred)	Total
Balance on January 1st 2021	3,092,760.15	9,818,044.78	38,392,327.86	51,303,132.79
The book balance of other receivables on January 1st				
2021 in the current reporting period				
Transfer into stage 2	(411,469.92)	411,469.92	-	-
Transfer into stage 3	-	(1,995,928.05)	1,995,928.05	-
provision/(reverse) in the current reporting period	409,000.25	(5,146,368.66)	(20,494,074.73)	(25,231,443.14)
Other changes	(502,507.49)	-	-	(502,507.49)
Balance on December 31 <sup>st</sup> 2021	2,587,782.99	3,087,217.99	19,894,181.18	25,569,182.16

#### 4) The actual write-off of other receivables during the current reporting period:

The actual write-off of other receivables during the current reporting period is nil.

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

5) Top five debtors based on corresponding closing balance of other receivables

Unit: RMB

Entities	Relationship with the Company	Nature	Closing balance	Aging	Proportion of total closing balance for other receivables (%)	Closing balance for credit loss provision
Third party E	Third party	Guarantee deposits	6,927,179.05	Within 1 year	1.80%	293,019.67
Third party F	Third party	Guarantee deposits	5,078,072.96	Within the contract period	1.32%	44,179.23
Third party G	Third party	Guarantee deposits	5,000,000.00	Within the contract period	1.30%	43,500.00
Third party H	Third party	Guarantee deposits	3,738,423.66	Within 2-3 years	0.97%	1,540,604.39
Third party I	Third party	Guarantee deposits	3,550,000.00	Within the contract period	0.92%	30,885.00
Total			24,293,675.67		6.31%	1,952,188.29

- 6) As of December 31<sup>st</sup> 2021, the Group does not have other receivables related to government subsidies.
- 7) As of December 31<sup>st</sup> 2021, there is no termination of other receivables booking due to transfer of a financial asset.
- 8) As of December 31<sup>st</sup> 2021, the Group has no assets/liabilities booked due to any transferred other **receivables** that the Group continues to be involved in.

#### 8. Inventories

**1**) Categories of inventories

Unit: RMB

	Closing Balance			Opening Balance			
Category	Carrying amount	Provision for decline in value of inventories/ Impairment provision for contract performance cost	Book value	Carrying amount	Provision for decline in value of inventories/ Impairment provision for contract performance cost	Book value	
Raw materials	7,947,851,148.15	233,046,765.20	7,714,804,382.95	5,307,099,264.63	96,173,520.97	5,210,925,743.66	
Work-in-progress	437,963,160.90	-	437,963,160.90	364,831,525.62	-	364,831,525.62	
Finished goods	9,760,949,606.67	702,675,806.16	9,058,273,800.51	5,863,464,370.61	516,926,580.56	5,346,537,790.05	
Contract performance cost	763,071,063.24	-	763,071,063.24	555,610,981.37	-	555,610,981.37	
Total	18,909,834,978.96	935,722,571.36	17,974,112,407.60	12,091,006,142.23	613,100,101.53	11,477,906,040.70	



For the reporting period from January 1st 2021 to December 31st 2021

#### 2) Provision for decline in value of inventories

						Unit: RMB
Category	Opening balance	Increase in the current	Decrease in the curre		Effect on conversion of financial statements	Closing Balance
8,5	1 8	reporting period	Reversals	Write-off	denominated in foreign currencies	8
Raw materials	96,173,520.97	137,440,277.81	-	567,033.58	-	233,046,765.20
Finished goods	516,926,580.56	297,173,954.13	-	96,860,925.14	(14,563,803.39)	702,675,806.16
Subtotal	613,100,101.53	434,614,231.94	-	97,427,958.72	(14,563,803.39)	935,722,571.36

The write-offs of provision for inventories in the current reporting period are due to use or sale of inventories.

For contract performance cost recognized as an asset, the Group recognizes it into current profit or loss on the same basis as the revenue from goods relating to such asset, and is recognized at the point of time when the goods are delivered to and accepted by the counterparty; there was an amount of RMB 528,050,817.38 recognized during the current reporting period.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 9. Contract Assets

#### 1) Details of contract assets:

Unit: RMB

Unit: RMR

Unit: RMR

		Closing Balance		Opening Balance (Restated)		
Items	Carrying amount	Provisions for impairment	Book value	Carrying amount	Provisions for impairment	Book value
Constructions	1,274,476,664.40	9,873,249.73	1,264,603,414.67	253,042,589.28	2,242,831.31	250,799,757.97
Maintenance services	148,057,308.84	1,288,098.60	146,769,210.24	69,123,440.48	518,654.35	68,604,786.13
Total	1,422,533,973.24	11,161,348.33	1,411,372,624.91	322,166,029.76	2,761,485.66	319,404,544.10

2) The classification and disclosure of the method of provision for impairment of contract assets during the current reporting period:

Items	Closing Balance					
	Carrying amount		Provisions for impairment		Book value	
	Amount	Proportion (%)	Amount	Provision proportion (%)	Amount	
Provision for impairment on a single item	-	-	-	-	-	
Provision for impairment by portfolio	1,422,533,973.24	100.00	11,161,348.33	0.78	1,411,372,624.91	
Total	1,422,533,973.24	100.00	11,161,348.33	0.78	1,411,372,624.91	

Provision, re-collection, or reverse in the current reporting period:

Credit loss provision	Expected credit loss during the whole duration (No credit impairment occurred)	Expected credit loss during the whole duration (Credit impairment occurred)	Total
Balance on January 1st 2021 (restated)	2,761,485.66	-	2,761,485.66
Provision/reverse during the current reporting period	8,399,862.67	-	8,399,862.67
Balance on December 31st 2021	11,161,348.33	-	11,161,348.33

Impairment provision for the current reporting period amounted to RMB 8,399,862.67, with no reversal, write-off or recovery of impairment provision during the current reporting period.

Contract assets arise from the Group's construction works business as well as maintenance services relating to security projects. The Group provides construction works and maintenance services based on contracts with customers, and recognizes revenue based on the performance progress during the term of the contracts. The Group's customers make milestone payments for the construction works and maintenance services of the Group as provided in the contracts. For the portion where the Group has obtained an unconditional right to consideration, it will be recognized as accounts receivable, while the remaining portion will be recognized as contract assets; if the contract price receivable by the Group presents contract assets and contract liabilities under the same contract on a net basis.



For the reporting period from January 1st 2021 to December 31st 2021

#### 10. Non-current Assets Due within One Year

		Unit: RMB
Item	Closing Balance	Opening Balance (Restated)
Long-term receivables due within one year (Note (V) 12)	975,960,437.14	850,871,579.78
Total	975,960,437.14	850,871,579.78

#### 11. Other Current Assets

Unit: RMB Closing balance Opening balance (restated) Item Deductible VAT input 671,022,973.90 391,898,131.26 Prepaid corporate income tax 146,600,985.54 41,520,799.46 Prepaid tariff 113,756,173.22 22,446,422.69 Others 91,220,245.12 41,571,699.38 497,437,052.79 Total 1,022,600,377.78

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Notes to Financial Statements ar For the reporting period from January 1st 2021 to December 31st 2021

#### 12. Long-term Receivables

#### 1) Details of long-term receivables

Unit:	RMI
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		Closing balance		O	Range of		
Item	Carrying amount	Provision for credit loss	Book value	Carrying amount	Provision for credit loss	Book value	discount rate
Financial leases receivables	338,676,520.11	32,408,674.53	306,267,845.58	332,860,621.51	21,387,061.50	311,473,560.01	0.54%-6.05%
Including: Unrealized income from financing	15,579,721.55	-	15,579,721.55	20,751,939.07	-	20,751,939.07	-
Installments for selling goods	881,821,037.32	87,043,902.28	794,777,135.04	1,094,609,682.99	69,465,172.90	1,025,144,510.09	4.24%-6.45%
Including: Unrealized income from financing	26,548,778.33	-	26,548,778.33	40,238,738.24	-	40,238,738.24	-
Employee housing loan	487,983,401.49	-	487,983,401.49	-	-	-	4.95%
Including: Unrealized income from financing	59,389,998.51	-	59,389,998.51	-	-	-	-
Less: Non-current assets due within one year (Note (V) 10)	1,093,138,859.09	117,178,421.95	975,960,437.14	935,714,181.41	84,842,601.63	850,871,579.78	-
Total	615,342,099.83	2,274,154.86	613,067,944.97	491,756,123.09	6,009,632.77	485,746,490.32	-

#### 2) Credit loss provision

As part of the Group's credit risk management, in addition to employee housing loans, the Group uses the aging of long-term receivables to assess the expected credit losses of long-term receivables formed by financial leasing and installment collection business. The customers involved in financial leasing and installment collection business are mainly government department and state-owned enterprises and institutions. There are a large number of customers with the same risk characteristics. The aging information is able to reflect the repayment capability of these customers when the long-term receivables are due.

#### As of December 31st 2021, the credit risk and expected credit losses of long-term receivables of these customers are as follows:

			Unit: RMB				
A ga	Closing balance						
Age	Amounts	Credit loss provision	Estimated average loss rate (%)				
Within credit period	646,311,250.51	5,623,293.18	0.87				
Within 1 year after exceeding credit period	263,839,586.40	11,158,541.08	4.23				

For the reporting period from January 1st 2021 to December 31st 2021

Am	Closing balance						
Age	Amounts	Credit loss provision	Estimated average loss rate (%)				
1-2 years after exceeding credit period	181,691,364.31	33,921,777.72	18.67				
2-3 years after exceeding credit period	87,750,268.44	36,161,885.63	41.21				
3-4 years after exceeding credit period	26,997,755.81	18,679,747.24	69.19				
Over 4 years after exceeding credit period	13,907,331.96	13,907,331.96	100.00				
Total	1,220,497,557.43	119,452,576.81	9.79				

The changes in the Group's long-term receivables' expected credit loss provision for the current reporting period are as follows:

Unit: RMB

	Stage 1	Stage 2	Stage 3		
Credit loss provision	Expected credit losses in the next 12 months	entire duration		Total	
Balance on January 1st 2021 (restated)	11,371,156.80	37,954,013.24	41,527,064.36	90,852,234.40	
On January 1 <sup>st</sup> 2021, the book balance of long-term receivables in the current reporting period					
Transfer into stage 2	(3,113,307.12)	3,113,307.12	-	-	
Transfer into stage 3	-	(18,717,132.26)	18,717,132.26	-	
Provision/(reverse) during the current reporting period	(2,634,556.50)	22,730,130.70	8,504,768.21	28,600,342.41	
Balance on December 31 <sup>st</sup> 2021	5,623,293.18	45,080,318.80	68,748,964.83	119,452,576.81	

3) As of December 31<sup>st</sup> 2021, there is no termination of long-term receivables booking due to transfer of a financial asset.

4) As of December 31<sup>st</sup> 2021, the Group has no assets/liabilities booked due to any transferred long-term **receivables** that the Group continue to be involved in.

Notes to Financial Statements ar For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### 13. Long-term Equity Investment

Unit: R	MB
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		Increase/Decrease in the current reporting period							Closing		
The invested entity		Investment reduction	Investment Profit (Loss) recognized under the equity Method	Adjustment: Other comprehensive income	Other Changes in equity	Declaration of cash dividends or profit distribution	Impairment provision	others	Closing Balance	balance for impairment provision	
1. Joint venture compa	anies								·	•	
Hangzhou Haikang Intelligent Industrial Equity Investment Fund Partnership (L.P.)	612,479,371.62	-	-	89,889,968.33	-	-			-	702,369,339.95	_
Daishan Hailai Yunzhi Technology Co., Ltd. ("Daishan Hailai")(Note 1)	15,253,091.76	-	-	645,353.20	-	-	- (999,000.00)	-	(14,899,444.96)	-	-
Zhejiang City Digital Technology Co., Ltd.	11,864,018.37	-		350,301.92	-					12,214,320.29	-
Zhejiang Haishi Huayue Digital Technology Co., Ltd.	9,985,577.32	-	-	1,944,935.34	-	-		-	-	11,930,512.66	-
Shenzhen Hikvision Urban Service Operation Co., Ltd.	6,029,569.69	-		(4,764,911.31)	) -					1,264,658.38	-
Guangxi Haishi Urban Operation Management Co., Ltd. (Note2)	5,296,695.36	3,000,000.00	-	(3,664,494.77)	-	-		-	-	4,632,200.59	-
Yunnan Yinghai Parking Service Co., Ltd.	4,841,060.76	-		(282,179.67)	) -					4,558,881.09	-
Xuzhou Kangbo Urban Operation Management Service Co., Ltd. (Note2)	4,631,286.58	4,900,000.00	-	(298,084.91)	-	-		-	-	9,233,201.67	-
Subtotal	670,380,671.46	7,900,000.00		83,820,888.13	-		. (999,000.00)	-	(14,899,444.96)	746,203,114.63	-

For the reporting period from January 1st 2021 to December 31st 2021

			Increase/Decrease in the current reporting period						Closing		
	Additional Investments	Investment reduction	Investment Profit (Loss) recognized under the equity Method	Adjustment: Other comprehensive income	Other Changes in equity	Declaration of cash dividends or profit distribution	Impairment provision	others		balance for impairment provision	
2. Associated Company	uies										
Wuhu Sensor Technology Co., Ltd.	58,491,264.42	-	-	16,975,212.42	-	-	-	_	_	75,466,476.84	-
Maxio Technology (Hangzhou) Co., Ltd.	91,955,638.61	-		12,581,889.69	-	-	-	-	_	104,537,528.30	-
Zhiguang Hailian Big Data Technology Co., Ltd.	21,253,058.87	-	-	32,784.40	-	-	-	-	-	21,285,843.27	-
Sanmenxia Xiaoyun Vision Technology Co., Ltd.	3,671,496.93	-		(602,110.90)	-	-	-	-	-	3,069,386.03	-
Jiaxin Haishi JiaAn Zhicheng Technology Co., Ltd. (Note2)	8,479,131.27	12,000,000.00	-	1,175,611.18	-	-	-	-	-	21,654,742.45	-
Qinghai Qingtang Big Data Co., Ltd.	9,795,448.67	-	-	153,006.26	-	-	-	-	-	9,948,454.93	-
Subtotal	193,646,038.77	12,000,000.00	-	30,316,393.05	-	-	-	-	-	235,962,431.82	-
Total	864,026,710.23	19,900,000.00	-	114,137,281.18	-	-	(999,000.00)	-	(14,899,444.96)	982,165,546.45	-

Note 1: The Group includes Daishan Hailai in the scope of consolidated financial statements in 2021, and it is no longer accounted for as a joint venture. Please refer to Note (VI) 1 for details.

Note 2: The Group made additional investment in the investee this year, and the proportion of equity held in the investee remained unchanged.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

### 14. Other Non-current Financial Assets

Unit: RMB

Invested Entity (Note 1)	Shareholding %	Opening balance	Additional investment during the current reporting period	Investment recovery during the current reporting period	Changes in fair value during the current reporting period	Closing balance
CETC Finance Co., Ltd. (Note 2)	3.83%	423,435,737.20	-	-	(45,714,936.94)	377,720,800.26
Hangzhou Confirmware Technology Co., Ltd.	9.52%	31,092,032.62	-	-	(4,277,193.66)	26,814,838.96
Zhejiang Tuxun Technology Co.,Ltd. (Zhejiang Tuxun)	8.13%	32,222,764.45	-	-	(3,222,764.45)	29,000,000.00
Zhengzhou Guokong Smart City Technology Co., Ltd.	7.00%	700,000.00	-	-	-	700,000.00
Guangxi Jilian Haibao Technical Service Co., Ltd.	10.00%	2,884,220.00	-	-	-	2,884,220.00
Shenzhen Wanyu Security Service Technology Co., Ltd.	5.00%	1,000,000.00	-	-	-	1,000,000.00
Nanwang Information Industry Group Co., Ltd.	0.25%	604,313.00	-	-	-	604,313.00
Total		491,939,067.27	-	-	(53,214,895.05)	438,724,172.22

Note 1: It refers to the Group's equity investments of private companies. The Group has no control, joint control or significant influence over the invested company.

Note 2: It is an enterprise controlled by CETC, the ultimate controlling party of the Group. During the current reporting period, the Company received a cash dividend of RMB 115,644,801.97 from China Electronic Technology Finance Co., Ltd. (2020: RMB 150,000,000.00) and recognized it as current profit and loss. Please refer to Note (V) 52 for details.

#### 15. Fixed Assets

#### 1) Details of fixed assets

Unit: RMB

Items	Building and construction	General-purpose equipment	Special-purpose equipment	Transportation vehicles	Total
I. Total original carrying amount					
1. Opening balance (restated)	5,100,087,402.39	941,827,698.48	2,045,911,036.97	96,077,396.86	8,183,903,534.70
2. Increase in the current reporting period	793,892,828.70	451,748,264.69	341,197,135.46	12,948,583.65	1,599,786,812.50
1) purchase	3,463,469.47	399,945,494.69	317,277,749.81	6,628,378.05	727,315,092.02
2) transferred from construction in progress	725,317,455.23	12,600,791.51	23,919,385.65	-	761,837,632.39
3) Increase due to business combination not under common control	65,111,904.00	39,201,978.49	-	6,320,205.60	110,634,088.09
3.Decrease in the current reporting period	47,120,425.71	18,746,909.37	64,738,596.94	9,697,070.45	140,303,002.47
1) disposal or write-off	47,120,425.71	18,746,909.37	64,738,596.94	9,697,070.45	140,303,002.47
4. Effect on conversion of	(6,279,079.76)	(8,704,926.28)	(3,560,443.31)	(480,620.81)	(19,025,070.16)

#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

Items	Building and construction	General-purpose equipment	Special-purpose equipment	Transportation vehicles	Total
financial statements denominated in foreign currencies					
5.Closing Balance	5,840,580,725.62	1,366,124,127.52	2,318,809,132.18	98,848,289.25	9,624,362,274.57
II. Accumulated depreciation					
1. Opening balance (restated)	992,312,042.71	368,072,360.10	937,821,068.08	55,020,864.96	2,353,226,335.85
2. Increase in the current reporting period	249,655,037.63	168,558,608.03	254,911,458.17	11,904,100.45	685,029,204.28
(1) accrual	249,655,037.63	168,558,608.03	254,911,458.17	11,904,100.45	685,029,204.28
3.Decrease in the current reporting period	25,823,526.69	15,847,515.29	53,025,757.14	7,417,628.76	102,114,427.88
(1) disposal or write- off	25,823,526.69	15,847,515.29	53,025,757.14	7,417,628.76	102,114,427.88
4. Effect on conversion of financial statements denominated in foreign currencies	(759,626.03)	(4,651,337.25)	(1,746,499.39)	(212,046.28)	(7,369,508.95)
5.Closing balance	1,215,383,927.62	516,132,115.59	1,137,960,269.72	59,295,290.37	2,928,771,603.30
III. Total book value					
Closing balance on book value	4,625,196,798.00	849,992,011.93	1,180,848,862.46	39,552,998.88	6,695,590,671.27
Opening balance on book value (restated)	4,107,775,359.68	573,755,338.38	1,108,089,968.89	41,056,531.90	5,830,677,198.85

2) As of December 31<sup>st</sup> 2021, the Group did not have any significant idle fixed assets.

3) As of December 31<sup>st</sup> 2021, the Group had not rent out any fixed asset through operating leasing.

4) Fixed assets of which certificates of title have not been granted as of December 31st 2021:

		Unit: RMB
Item	Carrying amount	Reason for certificates of title not granted
Office building for branches	13,451,117.83	In the process of obtaining the real estate
Office building for branches	-,-,	certificates
Fuzhou High-tech Zone Innovation Park	94,622,498.88	In the process of obtaining the real estate
Fuzilou High-tech Zone Innovation Fark	- ,- ,	certificates after transferred to fixed assets
Changeing Science and Tashnalagy Dark Phase II Project	415,416,636.80	In the process of obtaining the real estate
Chongqing Science and Technology Park Phase II Project	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	certificates after transferred to fixed assets
Total	523,490,253.51	



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### **16.** Construction in Progress

#### 1) Details of construction in progress

#### Unit: RMB

Item		Closing balance		Opening balance			
Item	Carrying amount	Provision	Book value	Carrying amount	Provision	Book value	
Chengdu Science and Technology Park Project	896,287,490.09	-	896,287,490.09	521,626,793.33	-	521,626,793.33	
Hangzhou Innovation Industry Park	393,310,782.16	-	393,310,782.16	337,821,702.49	-	337,821,702.49	
Security Industrial Base (Tonglu) Phase II Continued Construction Project	390,702,241.74	-	390,702,241.74	74,726,929.65	-	74,726,929.65	
Xi'an Science and Technology Park Project	181,009,327.21	-	181,009,327.21	12,679,174.93	-	12,679,174.93	
Shijiazhuang Science and Technology Park Project	100,184,640.21	-	100,184,640.21	2,060,553.46	-	2,060,553.46	
EZVIZ Smart Home Products' Industrial Base Project (Infrastructure Part)	95,322,172.33	-	95,322,172.33	2,332,067.08	-	2,332,067.08	
Chongqing Science and Technology Park Phase II Project	-	-	-	249,810,250.79	-	249,810,250.79	
Others	266,519,444.94		266,519,444.94	224,177,721.99	-	224,177,721.99	
Total	2,323,336,098.68	-	2,323,336,098.68	1,425,235,193.72	-	1,425,235,193.72	

2) Changes in significant construction in progress during the current reporting period

Unit: RMB

Item	Budget (RMB 0,000)	Opening balance	Increase in the current reporting period	during the	Effect on conversion of financial statements denominated in foreign currencies	Other Reductions (Note 1)	Closing balance	Amount invested as proportion of budget amount (%)	Construction in Progress (%)	Accumulated capitalized interest and profit/loss on exchange (Note 2)	Including: capitalized interest and profit/loss on exchange for the current reporting period	Capitalizat ion rate for interest in the current reporting period (%)	Source of funds
Chengdu Science and Technology Park Project	196,900.00	521,626,793.33	374,660,696.76	-	-	-	896,287,490.09	45.52%	45.52%	-	-	-	Self- financing
Hangzhou Innovation Industry Park	102,600.00	337,821,702.49	55,489,079.67	-	-	-	393,310,782.16	38.33%	38.33%	(70,963,330.44)	(124,649,345.63)	0.85%	Special loan

For the reporting period from January 1st 2021 to December 31st 2021

Item	Budget (RMB 0,000)	Opening balance	Increase in the current reporting period	Transferred to fixed assets during the current reporting period	Effect on conversion of financial statements denominated in foreign currencies	Other Reductions (Note 1)	Closing balance	Amount invested as a proportion of budget amount (%)	Construction in Progress (%)	Accumulated capitalized interest and profit/loss on exchange (Note 2)	Including: capitalized interest and profit/loss on exchange for the current reporting period	Capitaliz ation rate for interest in the current reporting period (%)	Source of funds
Security Industrial Base (Tonglu) Phase II Continued Construction Project	85,100.00	74,726,929.65	315,975,312.09	-	-	-	390,702,241.74	45.91%	45.91%	-	-	-	Self- financing
Xi'an Science and Technology Park project	227,800.00	12,679,174.93	168,330,152.28	-	-	-	181,009,327.21	7.95%	7.95%	-	-	-	Self- financing
Shijiazhuang Science and Technology Park Project	89,800.00	2,060,553.46	98,124,086.75	-	-	-	100,184,640.21	11.16%	11.16%	-	-	-	Self- financing
EZVIZ Smart Home Products Industrial Base Project (Infrastructure Part)	75,257.00	2,332,067.08	92,990,105.25	-	-	-	95,322,172.33	12.67%	12.67%	-	-	-	Self- financing
Security Industrial Base (Tonglu) Phase III	77,000.00	659,304.24	48,109,601.71	-	-	-	48,768,905.95	6.33%	6.33%				Self- financing
Zhengzhou Science and Technology Park Project	48,500.00	13,529,409.53	28,500,043.29	-	-	-	42,029,452.82	8.67%	8.67%	-	-	-	Self- financing
Wuhan Intelligence Industrial Park	238,700.00	2,370,546.89	19,234,593.60	-	-	-	21,605,140.49	0.91%	0.91%				Self- financing
Chongqing Science and Technology Park project- phase 2	43,000.00	249,810,250.79	175,974,725.06	(425,784,975.85)	-	-	-	100.00%	100.00%	-	-	-	Self- financing
Others		207,618,461.33	286,993,506.34	(336,052,656.54)	(1,576,075.70)	(2,867,289.75)	154,115,945.68	-	-	-	-	-	Self- financing
Total	1,184,657.00	1,425,235,193.72	1,664,381,902.80	(761,837,632.39)	(1,576,075.70)	(2,867,289.75)	2,323,336,098.68	-	-	(70,963,330.44)	(124,649,345.63)		



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

Note 1: Other reductions during the the current reporting period were the completed renovation that transferred to the long-term deferred expenses.

Note 2: This amount is calculated by interest expense for specific foreign currency borrowings, less interest income for unused borrowing fund and profit/loss on exchange rate difference.

As of December 31st 2021, the Group did not have any sign of impairment of projects under construction; therefore, no provision for impairment loss was booked.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### 17. Right-of-use Assets

					Unit: RMB
Items	Building and construction	General-purpose equipment	Special-purpose equipment	Transportation vehicles	Total
I. Total original carrying amount					
1. Opening balance (restated)	333,243,923.96	230,374.45	91,934,144.20	14,423,291.59	439,831,734.20
2. Increased	381,865,373.66	-	-	10,480,492.36	392,345,866.02
(1)New Lease	360,641,319.67	-	-	10,480,492.36	371,121,812.03
(2) Increase due to business combination not under common control	21,224,053.99	-	-	-	21,224,053.99
3. Decreased	13,645,883.01	-	-	55,450.93	13,701,333.94
(1) The lease contract expires or terminates early	13,645,883.01	-	-	55,450.93	13,701,333.94
4. Effect on conversion of financial statements denominated in foreign currencies	(13,925,949.47)	-	-	(1,953,346.06)	(15,879,295.53)
5. Closing balance	687,537,465.14	230,374.45	91,934,144.20	22,894,986.96	802,596,970.75
II. Accumulated depreciation					
1. Opening balance (restated)	-	94,562.47	46,739,618.43	-	46,834,180.90
2. Increased	169,004,407.93	50,014.45	21,357,177.93	7,950,776.09	198,362,376.40
(1) Provisions	169,004,407.93	50,014.45	21,357,177.93	7,950,776.09	198,362,376.40
3. Decreased	6,370,832.58	-	-	55,450.93	6,426,283.51
(1) The lease contract expires or terminates early	6,370,832.58	-	-	55,450.93	6,426,283.51
4. Effect on conversion of financial statements denominated in foreign currencies	(2,145,437.09)	-	-	(421,538.70)	(2,566,975.79)
5. Closing balance	160,488,138.26	144,576.92	68,096,796.36	7,473,786.46	236,203,298.00
III. Total book value					
1. Closing balance on book value	527,049,326.88	85,797.53	23,837,347.84	15,421,200.50	566,393,672.75
2. Opening balance on book value (restated)	333,243,923.96	135,811.98	45,194,525.77	14,423,291.59	392,997,553.30

Note: The Group leased a number of assets, including building and construction, general-purpose equipments, special-purpose equipments and transportation vehicles, for lease terms ranging from 1 to 13 years.

In the current reporting period, the short-term lease expenses and low-value asset lease expenses that the Group included in the current profit and loss with simplified processing were RMB 82,001,765.42.

The profit and loss arising from the sale-leaseback transaction of the Group this year was RMB 21,407,192.38 for the depreciation of the right-of-use asset. Please refer to Note (X) 5 for details.

The total cash outflow related to leases for the year was RMB 272,298,575.65.

As of December 31<sup>st</sup> 2021, the short-term lease portfolio committed by the Group is consistent with the short-term lease corresponding to the above lease fee.

#### 18. Intangible Assets

1) Details of construction in progress



For the reporting period from January 1st 2021 to December 31st 2021

Item	Land use right	Intellectual property right	Application Software	Franchise	Total
I. Total original carrying amount					
1. Opening balance (restated)	1,224,893,932.49	70,044,034.88	298,812,867.42	83,741,415.51	1,677,492,250.30
2. Increased	34,319,532.77	-	80,770,503.27	8,195,011.94	123,285,047.98
(1) Purchase	34,319,532.77	-	80,770,503.27	8,195,011.94	123,285,047.98
3. Decreased	-	-	1,589,705.68	-	1,589,705.68
(1)Disposal or write-off	-	-	1,589,705.68	-	1,589,705.68
4. Effect on conversion of financial statements denominated in foreign currencies	-	(77,601.00)	(3,011,514.19)	(2,909.84)	(3,092,025.03)
5. Closing balance	1,259,213,465.26	69,966,433.88	374,982,150.82	91,933,517.61	1,796,095,567.57
II. Total accumulated amortization					
1.Opening balance (restated)	76,612,562.29	60,718,480.10	217,067,323.75	1,126,160.47	355,524,526.61
2. Increased	26,980,428.75	4,345,702.67	98,918,896.79	10,463,080.36	140,708,108.57
(1)Accrual	26,980,428.75	4,345,702.67	98,918,896.79	10,463,080.36	140,708,108.57
3. Decreased	-	-	1,416,795.89	-	1,416,795.89
(1)Disposal or write-off	-	-	1,416,795.89	-	1,416,795.89
4. Effect on conversion of financial statements denominated in foreign currencies	-	(61,588.49)	(2,905,511.37)	(586.93)	(2,967,686.79)
5. Closing balance	103,592,991.04	65,002,594.28	311,663,913.28	11,588,653.90	491,848,152.50
III. Total book value					
1. Closing balance on book value	1,155,620,474.22	4,963,839.60	63,318,237.54	80,344,863.71	1,304,247,415.07
2. Opening balance on book value (restated)	1,148,281,370.20	9,325,554.78	81,745,543.67	82,615,255.04	1,321,967,723.69

2) At the end of the current reporting period, the intangible asset of the Group that has not completed the title certificate is nil.

#### 19. Goodwill

#### 1) Goodwill book value

		Increased	Decreased	Effect on		
The name of the investee or the matter that forming a goodwill	Dalalice		Liquidation & cancellation	conversion of financial statements denominated in foreign currencies	Closing balance	
Secure Holdings Limited (Note 1)	130,320,174.19	-	130,320,174.19	-	-	
HuaAn Baoquan Intelligence and its subsidiaries	61,322,871.63	-	-	-	61,322,871.63	
Hangzhou Kuangxin Technology Co., Ltd.	59,060,454.06	-	-	-	59,060,454.06	
Hundure Technology (Shanghai) Co., Ltd. (Note 1)	13,774,405.88	-	13,774,405.88	-	-	
BK EESTI AKTSIASELTS	4,826,266.94	-	-	(484,310.63)	4,341,956.31	
SIA "BK Latvia"	4,819,569.44	-	-	(483,638.54)	4,335,930.90	



For the reporting period from January 1st 2021 to December 31st 2021

		Increased	Decreased	Effect on		
The name of the investee or the matter that forming a goodwill	Datatice		Liquidation & cancellation	conversion of financial statements denominated in foreign currencies	Closing balance	
Hikvision Joint-Stock Company (original name: ZAO Hikvision) (Note 1)	67,349.64	-	67,349.64	-	-	
Hangzhou Haikang Zhicheng Investment and Development Co., Ltd.	12,573.42	-	-	-	12,573.42	
SISTEMAS Y SERVICIOS DE COMUNICACIÓN, S.A. DE C.V. ("Syscom MX") (Note 2)	-	74,385,546.76	-	(1,077,437.71)	73,308,109.05	
Total	274,203,665.20	74,385,546.76	144,161,929.71	(2,045,386.88)	202,381,895.37	

Note 1: Secure Holdings Limited, Hundure Technology (Shanghai) Co., Ltd. and Hikvision Joint-Stock Company were cancelled in 2021, the goodwill decreased by RMB 144,161,929.71 this year.

Note 2: The Group acquired Syscom MX in September 2021, resulting in a goodwill of RMB 74,385,546.76, see Note (VI) 1.

#### 2) Goodwill impairment provision

When the Group conducts impairment test on goodwill at the end of the reporting period, the key assumptions adopted and their basis are as follows:

The recoverable amount of asset group containing apportioned goodwill is determined according to the present value of the estimated future cash flow of the relevant asset group. Its future cash flows are determined based on the 5-year financial budget from 2022 to 2026 approved by management, with a certain discount rate. Cash flow over 5 years is calculated on the basis of 0-2% growth rate. This growth rate is determined based on the relevant industry's growth forecast and does not exceed the long-term average growth rate for that industry. Estimates of future cash flows are based on past performance and expectations of market development, and are based on the estimated sales, cost of sales, and operating expenses during the estimated period.

During the reporting period, the Group did not find that the recoverable amount of the relevant asset group including the apportioned goodwill was lower than its book value, so it is considered that there is no need to accrue impairment loss for goodwill.

#### 20. Long-term Deferred Expenses

					Unit: RMB
Invested unit	Opening Balance	Increased	Amortized	Difference of foreign currency translation	Closing balance
Improvement expenditure for leased fixed asset	108,584,686.85	49,373,074.47	57,732,233.15	(1,608,351.67)	98,617,176.50
Employee housing loan deferred interest	-	68,159,986.92	8,769,988.52	-	59,389,998.40
Total	108,584,686.85	117,533,061.39	66,502,221.67	(1,608,351.67)	158,007,174.90

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### 21. Deferred Tax Assets/Deferred Tax Liabilities

#### 1) Deferred tax assets that are not presented on net off basis

				Unit: RMB		
		ig balance		Opening balance		
Item	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets		
Provision for impairment losses of assets	746,689,777.87	203,337,661.26	439,119,363.43	118,145,320.66		
Provision for credit loss	2,019,377,828.80	414,456,930.82	1,539,163,635.55	317,826,951.61		
Payroll payables	1,021,696,707.76	156,929,402.30	340,995,206.97	67,364,166.74		
Share-based payment	546,398,398.17	92,168,164.61	395,569,612.03	63,817,274.43		
Provisions	124,817,084.93	18,515,337.61	125,721,860.51	20,746,514.91		
Expenditure without invoice	224,525,193.17	49,859,840.33	343,485,705.59	79,499,747.08		
Unrealized profit from inter- group transactions	2,025,608,612.07	303,841,291.79	1,332,036,632.93	203,654,079.47		
Changes in the fair value of derivative financial instruments	3,795,920.86	948,980.22	4,862,446.50	1,215,611.63		
Deferred income	400,764,044.74	61,186,781.23	175,339,879.57	28,307,816.27		
Total	7,113,673,568.37	1,301,244,390.17	4,696,294,343.08	900,577,482.80		

#### 2) Deferred tax liabilities that are not presented on net off basis

				Unit: RMB
	Closing	balance	Opening	g balance
Item	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Difference in depreciation of fixed assets	926,803,951.40	170,262,256.00	792,868,727.84	155,188,912.37
Difference in amortization of intangible assets	2,769,106.64	415,366.00	2,077,910.40	311,686.57
Changes in the fair value of derivative financial instruments	29,037,242.51	7,259,310.63	18,487,400.00	4,621,850.00
Changes in fair value of other non-current financial assets	38,300,223.10	5,745,033.47	87,026,019.27	13,053,902.89
Total	996,910,523.65	183,681,966.10	900,460,057.51	173,176,351.83

#### 3) Deferred tax assets or deferred tax liabilities that are presented at the net amount after offset

Unit: RMB

	Closing	balance	Opening balance		
Item	Offset amount at the end of the reporting period	Deferred tax assets or liabilities at the net amount after offset	Offset amount at the beginning of the reporting period	Deferred tax assets or liabilities at the net amount after offset	
Deferred tax assets	90,366,814.93	1,210,877,575.24	80,196,527.94	820,380,954.86	
Deferred tax liabilities	90,366,814.93	93,315,151.17	80,196,527.94	92,979,823.89	

#### 4) Details of unrecognized deferred tax assets

		Unit: RMB
Item	Closing balance	Opening balance
Deductible temporary differences	687,848,166.51	788,077,425.69
Deductible loss	2,841,919,737.84	2,881,025,358.37
Total	3,529,767,904.35	3,669,102,784.06



For the reporting period from January 1st 2021 to December 31st 2021

#### 5) Deductible losses for unrecognized deferred tax assets will expire in the following years

		Unit: RMB
Year	Closing balance	Opening balance
2021	-	9,821,670.35
2022	9,759,663.51	53,969,583.10
2023	33,125,518.27	61,192,370.12
2024	34,945,616.34	91,527,082.27
2025	148,742,047.53	151,932,560.93
2026 and beyond	2,615,346,892.19	2,512,582,091.60
Total	2,841,919,737.84	2,881,025,358.37

#### 22. Other Non-current Assets

Unit: RMB							
Item		Closing balance		Ope	Opening balance (restated)		
nem	Carrying amount	Provision	Book value	Carrying amount	Provision	Book value	
Contract assets	2,672,243,740.12	24,017,466.88	2,648,226,273.24	2,168,908,350.12	19,342,154.89	2,149,566,195.23	
Prepayments for acquisition of land	278,398,706.94	-	278,398,706.94	79,046,571.00	-	79,046,571.00	
Prepayments for real estate	269,600,676.00	-	269,600,676.00	-	-	-	
Prepayments for equipment	140,577,165.61	-	140,577,165.61	26,838,623.06	-	26,838,623.06	
Prepayments for infrastructure	4,679,432.89	-	4,679,432.89	15,233,481.00	-	15,233,481.00	
Others	9,044,156.95	-	9,044,156.95	-	-	-	
Total	3,374,543,878.51	24,017,466.88	3,350,526,411.63	2,290,027,025.18	19,342,154.89	2,270,684,870.29	

#### 23. Short-term Borrowings

1) Categories of short-term borrowings

		Unit: RMB
Item	Closing balance	Opening balance
Fiduciary loan	4,074,962,469.97	3,999,246,634.59
Total	4,074,962,469.97	3,999,246,634.59

2) As of December 31<sup>st</sup> 2021, the Group did not have any overdue short-term loans that were failed to repay.

#### 24. Held-for-trading Financial Liabilities

		Unit: RMB
Item	Closing balance	Opening balance
Financial liabilities measured at fair value through current profits and losses	4,062,317.57	7,405,771.15
Including: derivative financial liabilities	4,062,317.57	7,405,771.15
total	4,062,317.57	7,405,771.15

As of December 31<sup>st</sup> 2021, the notional amount of the Group's outstanding forward foreign exchange contracts was RMB 550,853,892.55 (December 31<sup>st</sup> 2020: RMB 498,858,533.76). The above forward foreign exchange contracts are

321



Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

not designated as hedging instruments, and the gains or losses arising from changes in their fair values are directly included in the current profit and loss.

#### 25. Notes Payable

Unit: RMB

Item	Closing balance	Opening balance	
Bank acceptance Bill	1,339,998,383.34	1,036,920,229.85	
Total	1,339,998,383.34	1,036,920,229.85	

As of December 31st 2021, the Group did not have any unpaid matured notes payable.

#### 26. Accounts Payable

#### 1) List of accounts payable

		Unit: RMB
Item	Closing balance	Opening balance
Payments for goods	15,585,975,750.26	13,461,766,461.74
Payables on equipment	303,719,230.86	132,118,328.45
Total	15,889,694,981.12	13,593,884,790.19

2) As of December 31<sup>st</sup> 2021, the Group did not have any significant accounts payable with aging above one year.

#### 27. Contract Liabilities

#### 1) List of contract liabilities

		Unit: RMB
Item	Closing balance	Opening balance
Advanced receipts from sales of products	2,181,573,144.68	1,605,290,145.88
Advanced receipts for construction settlement payment	185,782,167.92	401,866,195.59
Advanced receipts from services	236,278,710.74	154,010,329.79
Subtotal	2,603,634,023.34	2,161,166,671.26
Less: Contract liabilities included in other non-current liabilities (Note (V), 38)	22,739,796.75	-
Total	2,580,894,226.59	2,161,166,671.26

2) Qualitative and Quantitative Analysis on the Above Contract Liabilities:

Advanced receipts for product sales include prepayments for goods by customers and sales rebates provided to distributors. Product sales revenue of the Group is recognized when the control of such product is transferred to the customers. During the transaction, prepayments for goods by customers are recognized as a contract liability till the goods are shipped or delivered to the customers. Sales rebates to distributors of the Group may be accumulated when they purchase products from the Group, and are deductible for payments for goods to be purchased in the future. Such sales rebates enable distributors to enjoy discounts in their future purchase of goods, which are not available to the same type of customers. Therefore, the commitment to offer such discounts to distributors on their future purchase prices is a separate performance obligation. Such commitment is recognized as a contract liability based on the transaction price allocated on the basis of

## Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

the fair value of rebates when the sales transaction takes place, and is recognized as revenue when distributors use the sales rebates for deduction of purchase prices.

The Group provides construction works and maintenance services based on the construction works and maintenance service contracts with customers, and recognizes revenue based on the performance progress during the term of the contracts. The Group's customers make milestone payments for the construction works and maintenance services of the Group as provided in the contracts. For the portion where the Group has obtained an unconditional right to the payment, it will be recognized as accounts receivable, while the remaining portion will be recognized as contract assets; where the contract price received or receivable by the Group exceeds the performance obligation completed to date, the excess portion will be recognized as contract liabilities. The Group presents contract assets and contract liabilities under the same contract on a net basis.

The Group provides cloud services including storage service, video service, and telephone service to its customers. Such services are performance obligations to be satisfied during a period of time, and revenue is recognized based on the performance progress over the period in which such services are rendered. As customers have prepaid for cloud services at the time of purchase, at the time of transaction, the Group recognizes as a contract liability for the payments that would be received for cloud services, and recognizes revenue based on the performance progress over the period in which such services are rendered.

3) As of January 1<sup>st</sup> 2021, the book value of contract liabilities amounted to RMB 2,161,166,671.26 has been recognized as revenue in 2021, including contract liabilities of RMB 1,605,290,145.88 arising from advance receipt of product sales payment, the contract liabilities of RMB 401,866,195.59 arising from advance receipt of project settlement payment and contract liabilities of RMB 154,010,329.79 arising from the advance receipt of cloud service payment. As at December 31<sup>st</sup> 2021, the contract liabilities of RMB 2,580,894,226.59 are expected to be recognized as revenue in the coming year.

#### 28. Payroll Payable

#### **1**) Details of payroll payable

				Unit: RMB
Item	Opening balance	Increase in the current reporting period	Decrease in the current reporting period	Closing balance
1.Short-term remuneration	2,858,597,482.49	13,698,139,075.95	12,035,934,098.52	4,520,802,459.92
2. Termination benefits – defined contribution scheme	19,188,948.22	888,575,801.80	833,015,136.82	74,749,613.20
Total	2,877,786,430.71	14,586,714,877.75	12,868,949,235.34	4,595,552,073.12

#### 2) List of Short-term remuneration

				Unit. RMD
Item	Opening balance	Increase in the current reporting period	Decrease in the current reporting period	Closing balance

Unit RMB
For the reporting period from January 1st 2021 to December 31st 2021

1.Wages or salaries, bonuses, allowances and subsidies	2,671,062,392.28	12,247,906,540.03	10,620,585,395.08	4,298,383,537.23
2.Staff welfare	14,300.82	238,692,657.07	238,695,313.35	11,644.54
3.Social insurance contributions	11,227,541.93	515,588,996.17	486,468,951.39	40,347,586.71
Including: Medical insurance	10,852,343.07	494,018,231.61	466,368,463.01	38,502,111.67
Injury insurance	330,255.63	15,101,602.15	14,065,793.64	1,366,064.14
Maternity insurance	44,943.23	6,469,162.41	6,034,694.74	479,410.90
4.Housing funds	146,194.01	557,598,474.59	557,744,668.60	-
5.Labor union and education fund	176,147,053.45	138,352,408.09	132,439,770.10	182,059,691.44
Subtotal	2,858,597,482.49	13,698,139,075.95	12,035,934,098.52	4,520,802,459.92

### **3**) Defined contribution plan

				Unit: RMB
Item	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
1.Basic pension insurance	18,665,404.09	859,688,761.68	805,812,222.99	72,541,942.78
2.Unemployment insurance	523,544.13	28,887,040.12	27,202,913.83	2,207,670.42
Subtotal	19,188,948.22	888,575,801.80	833,015,136.82	74,749,613.20

Note: The Group participates in pension insurance and unemployment insurance plans established by government agencies in accordance with regulations. According to these plans, the Group pays monthly fees to these plans in proportion to the payment base. The Group has no other material obligation for the payment of pension benefits beyond the contributions described above, and corresponding expenses were booked into current profits and losses or corresponding assets.

In 2021, the Group shall pay RMB 859,688,761.68 and RMB 28,887,040.12 to the pension insurance plan and unemployment insurance plan respectively (2020: RMB 448,873,230.48 and RMB 15,530,813.51). As of December 31<sup>st</sup> 2021, the Group had fees payables of RMB 72,541,942.78 and RMB 2,207,670.42 (December 31<sup>st</sup> 2020: RMB 18,665,404.09 and RMB 523,544.13), which were due but not paid during the reporting period for pension and unemployment insurance plans. The relevant fees payables have been paid after the reporting period.

## 29. Taxes Payable

		Unit: RMB
Item	Closing balance	Opening balance
Corporate income tax	927,703,038.55	1,403,744,369.98
Value-added tax	426,720,008.08	294,728,811.39
City construction and maintenance tax	21,622,541.71	17,924,699.09
Education surcharges	9,380,789.66	7,547,297.38
Local education surcharges	6,529,587.16	5,437,435.12
Others	69,514,064.53	40,675,295.66
Total	1,461,470,029.69	1,770,057,908.62

## 30. Other Payables

1) Categories



For the reporting period from January 1st 2021 to December 31st 2021

Item	Closing balance	Opening balance
Dividend payable	247,382,205.37	205,898,523.84
Other payables	1,583,244,377.66	1,319,154,832.11
Total	1,830,626,583.03	1,525,053,355.95

## 2) Dividends payable

		Unit: RMB
Item	Closing balance	Opening balance
Dividends of incentive restricted shares	144,401,634.74	205,898,523.84
Dividends of common stock	102,980,570.63	-
Total	247,382,205.37	205,898,523.84

## 3) Other payables

## (1) List of other payables according to the nature of the payment

Unit: RN			
Item	Closing balance	Opening balance	
Unexpired commercial acceptance bills that were endorsed (Note (V) 3)	711,238,103.83	482,454,604.99	
Accrued expenses	144,958,993.62	337,678,697.37	
Guarantee and deposit fees	341,371,587.01	298,869,865.03	
Collection and payment on behalf	261,710,850.19	157,485,875.39	
Other expense payable	123,964,843.01	42,665,789.33	
Total	1,583,244,377.66	1,319,154,832.11	

(2) As of December 31<sup>st</sup> 2021, the Group did not have any significant other payables aging over one year.

# 31. Non-current Liabilities Due within One Year

Unit:	RMB
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Item	Closing balance	Opening balance (restated)
Long-term borrowings due within one year (Note (V) 33)	347,587,089.91	3,486,243,087.91
Lease liabilities due within one year (Note (V), 34)	248,027,043.35	156,420,687.89
Long-term payables due within one year (Note (V) 35)	1,301,227.32	2,134,638.48
Total	596,915,360.58	3,644,798,414.28

## **32.** Other Current Liabilities

Unit:	RMB

Item	Closing balance	Opening balance
Subscription payment of restricted shares	511,594,361.52	560,959,368.73
Output VAT to be transferred	405,885,561.09	184,752,210.84
Total	917,479,922.61	745,711,579.57

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

## **33.** Long-term Borrowings

		Unit: RMB
Item	Closing balance	Opening balance
Pledged loan (Note 1)	1,455,221,540.20	1,556,927,316.08
Fiduciary loan (Note 2)	1,611,886,043.22	3,700,483,533.13
Guaranteed loan (Note 3)	387,851,149.01	-
Other borrowing (Note 4)	177,000,000.00	190,000,000.00
Less: Long-term loans due within one year (Note (V) 31)	347,587,089.91	3,486,243,087.91
Total	3,284,371,642.52	1,961,167,761.30

**Note 1:** As of December 31<sup>st</sup> 2021, RMB 245,504,285.70 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *Urumqi High-tech Zone (New Urban Area) Safe City & Surveillance system for Social Comprehensive Management -- PPP Project Agreement*; the maturity date is June 20<sup>th</sup> 2028, among them, the annual interest rate of RMB 227,937,142.84 of the loan is 4.41% and the annual interest rate of RMB 17,567,142.86 of the loan is 4.31%.

RMB 176,800,000.00 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *MoYu Security Protection and Prevention Control System-- PPP Project Agreement*; the maturity date is March 26<sup>th</sup> 2035, among them, the annual interest rate of RMB 138,200,000.00 of the loan is 4.445%, and the annual interest rate of RMB 38,600,000.00 of the loan is 4.345%.

RMB 215,780,000.00 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *PiShan Security Protection and Prevention Control System-- PPP Project Agreement*; the maturity date is March 26<sup>th</sup> 2040. Among them, the annual interest rate of RMB 164,800,000.00 of the loan is 4.445%, and the annual interest rate of RMB 50,980,000.00 of the loan is 4.345%.

RMB 221,600,000.00 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *LuoPu Security Protection and Prevention Control System-- PPP Project Agreement*; the maturity date is March 26<sup>th</sup> 2035, among them, the annual interest rate of RMB 134,400,000.00 of the loan is 4.445%, the annual interest rate of RMB 87,200,000.00 of the loan is 4.245%.

RMB 95,600,000.00 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *YuTian Safe City-- PPP Project Agreement*; the maturity date is March 26<sup>th</sup> 2034, the annual interest rate is 4.245%.

RMB 498,000,000.00 of the pledged loan was obtained by the Group with all the rights and benefits pledged under the *Xi'an Public Security Video Surveillance Construction Network Application Construction--Public-Private Partnership* (*PPP*) *Project Agreement*; the maturity date is November 5<sup>th</sup> 2031, among them, the annual interest rate of RMB 295,000,000.00 of the loan is 4.445%, and the annual interest rate of RMB 203,000,000.00 of the loan is 4.345%.

**Note 2:** As of December 31<sup>st</sup> 2021, the fiduciary loan with a book value of RMB 1,082,955,000.00 was 150 million euros in credit loans, which is mainly used for the Company to repay the investment and construction of the Hangzhou Innovation Industrial Park project and Xi'an Science and Technology Park project, the maturity date is November 29<sup>th</sup> 2024, and the interest rate is 0.80%.

The fiduciary loans with a book value of RMB 200,000,000.00, which is mainly used for the Company to repay the investment and construction of the Hangzhou Innovation Industrial Park project and the Xi'an Science and Technology Park project. The maturity date is December 2<sup>nd</sup> 2026, and the annual interest rate is 3.00%.

The fiduciary loans with a book value of RMB 328,000,000.00, which is mainly used for the acquisition of the thermal imaging division asset group by Hangzhou Hikmicro Sensing, a subsidiary of the Group, and the maturity dates are September 28<sup>th</sup> 2022 and September 27<sup>th</sup> 2023, respectively, and the annual interest rate is 3.20%.

Note 3: At the end of the reporting period, the guaranteed loans with a book value of RMB 387,290,538.98 is the guaranteed loan of USD 61,035,256.00, which was mainly used for the acquisition of 51% of the shares of Syscom MX



For the reporting period from January  $1^{st}\ 2021$  to December  $31^{st}\ 2021$ 

and Equipos Profesionales de Comunicacion. S.A. de C.V. ("Epcom MX"). The maturity date is August 30<sup>th</sup> 2024, and the annual interest rate is 1.621%.

Note 4: During 2016, the Group entered into an agreement with CDB Development Fund Ltd. (CDBDF) to jointly inject capital into Hikvision Electronics Co., Ltd. ("Hangzhou Electronics"), a subsidiary of the Group. Pursuant to the capital injection agreement, CDBDF would not participate in senior management personnel such as directors, and it would either take part in decision-making or make significant influence on Hangzhou Electronics. The Group shall pay a 1.2% annualized return to CDBDF through dividends or interest payments, and the Group is required to redeem the CDBDF's equity investment in the current reporting period by installments each year from 2021 to 2024. Therefore, the capital injection by CDBDF is treated as a long-term loan. The Group paid RMB 13 million to redeem the 2% equity of Hangzhou Electronics Company held by CDBDF during the reporting period. As of December 31<sup>st</sup> 2021, the balance of the loan is 177 million (December 31<sup>st</sup> 2020: RMB 190 million).

## 34. Lease Liabilities

Unit: RMB

Item	Closing balance	Opening balance(restated)
Lease liabilities	565,978,922.56	386,475,961.59
Less : Lease liabilities due within one year (Note (V), 31)	248,027,043.35	156,420,687.89
Total	317,951,879.21	230,055,273.70

## 35. Long-term Payables

Unit: RMB

Item	Closing balance	Opening balance (restated)
Purchase goods in installments	10,310,558.82	10,677,104.56
Borrowing	-	8,000,000.00
Less: Long-term payables due within one year (Note (V), 31)	1,301,227.32	2,134,638.48
Total	9,009,331.50	16,542,466.08

## 36. Provisions

Unit: RMB

Item	Closing balance	Opening balance	
Product quality warranty	200,675,950.96	151,443,871.02	
Total	200,675,950.96	151,443,871.02	

## 37. Deferred Income

Unit: RMB

Item	Opening balance	Increase in current reporting period	Decrease in current reporting period	Closing balance	Details
Government Subsidies	190,878,987.69	652,192,764.28	104,485,293.92	738,586,458.05	Note
Total	190,878,987.69	652,192,764.28	104,485,293.92	738,586,458.05	



Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

As of December 31st 2021, the deferred income related to government subsidies:

Unit: RMB						
Liability Items	Opening Balance	Increase in current reporting period	Amounts booked into other income during the current reporting period	Other changes	Closing Balance	Related to assets/related to incomes
Chongqing Manufacturing Base construction	76,835,135.44	-	36,117,454.10	-	40,717,681.34	Related to assets
Other special subsidies	93,995,937.25	483,985,764.28	38,851,173.16	-	539,130,528.37	Related to assets
Other special subsidies	20,047,915.00	168,207,000.00	29,516,666.66	-	158,738,248.34	Related to incomes
Subtotal	190,878,987.69	652,192,764.28	104,485,293.92	-	738,586,458.05	

Note: Refer to government subsidies received by the Group for projects such as Chongqing Manufacturing Base construction and other special projects; Actual expenses occurred in the current reporting period for other special subsidies related to incomes were recognized in other income; and relevant assets for Chongqing Manufacture Park construction and other special subsidies related to assets were amortized averagely in other income within the assets' useful lives.

## 38. Other Non-current Liabilities

		Unit: RMB
Item	Closing balance	Opening balance
Subscription for restricted stocks	511,594,361.52	560,959,368.74
Contract liabilities	22,739,796.75	-
Total	534,334,158.27	560,959,368.74

## **39. Share Capital**

Unit: RMB

	Changes for the current reporting period						
	Opening balance	New issue of shares	Bonus issue	Transfer from Capital Reserve	Others (Note)	Subtotal	Closing balance
2021	2021						
Total shares	9,343,417,190.00	-	-	-	(7,611,076.00)	(7,611,076.00)	9,335,806,114.00
2020	2020						
Total shares	9,345,010,696.00	-	-		(1,593,506.00)	(1,593,506.00)	9,343,417,190.00

Note: On December 25<sup>th</sup> 2020, in accordance with the authorization of the Company's 2018 second extraordinary general meeting and the resolutions of the 20<sup>th</sup> meeting of the fourth Board of Directors and the revised articles of association, the Company repurchased and cancelled the granted 7,611,076 restricted RMB treasury shares that have not been unlocked, reducing the share capital by RMB 7,611,076 and the capital reserve by RMB 115,032,981.28. The Company had completed the repurchase cancellation registration on July 2<sup>nd</sup> 2021.

On December 24<sup>th</sup> 2019, according to the authorization of the Company's second extraordinary general meeting of shareholders in 2016, the resolution of the 14<sup>th</sup> meeting of the 4<sup>th</sup> session of the Board of Directors and the revised articles of association, the Company repurchased and cancelled 1,593,506 restricted treasury shares that are granted but not yet unlocked. The share capital was reduced by RMB 1,593,506.00, and the capital reserve was reduced by RMB 11,823,911.35. The Company went through the repurchase cancellation registration on December 17<sup>th</sup> 2020.

### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

# 40. Capital Reserves

				Unit: RMB
Item	Opening balance	Increase in the current reporting period (Note 1)	Decrease in the current reporting period (Note 2)	Closing balance
2021				
Share premium	4,747,808,907.38	175,364,843.03	122,433,910.47	4,800,739,839.94
Other capital reserves	430,968,554.71	347,727,048.45	175,364,843.03	603,330,760.13
Total	5,178,777,462.09	523,091,891.48	297,798,753.50	5,404,070,600.07
2020				
Share premium	3,834,418,853.06	985,668,869.46	72,278,815.14	4,747,808,907.38
Other capital reserves	292,524,845.90	782,471,622.99	644,027,914.18	430,968,554.71
Total	4,126,943,698.96	1,768,140,492.45	716,306,729.32	5,178,777,462.09

Note 1: The increase of RMB 175,364,843.03 in the share premium in the current fiscal year was due to the exercise of equity-settled share-based payments, and other capital reserves were transferred to the share premium.

The increase of RMB 347,727,048.45 in other capital reserves in the current fiscal year was calculated with equity-settled share-based payments which were included in the capital reserve. Please refer to Note (XI) for details.

The increase of RMB 644,027,914.18 in share premium during the prior year was due to the exercise of equity-settled share-based payments, and other capital reserves were transferred to share premium; The increase of RMB 341,640,955.28 was due to the business integration of the thermal imaging business and intelligent fire protection and control of the Group through transferring the asset groups of the thermal imaging business department to the holding subsidiary Hangzhou Hikmicro Sensing by the Company, and transferring the asset groups of the intelligent fire protection and control business department, 100% equity interests in Wuhan Hiksafety Technology Co., Ltd. and Zhejiang Hiksafety Technology Co., Ltd. to its holding subsidiary Hangzhou Hikfire Technology by the Company, the difference between the collected transfer consideration and the transferred net assets is formed, the shareholding ratio in the two companies was changed from direct holding of 100% to indirect holding of 60%.

The increase of RMB 782,471,622.99 in other capital reserves during the prior year was due to equity-settled share-based payments which were included in the capital reserve.

Note 2: The decrease of RMB 115,032,981.28 in share premium during the current reporting period was due to the Company's repurchase of 7,611,076 granted but unlocked RMB treasury shares by cash, please refer to Note (V) 39; The decrease of RMB 7,400,929.19 in share premium during the current reporting period was due to share distributions by equity settlements to minority shareholders.

Among the decrease in share premium during the prior year, a decrease of RMB 11,823,911.35 was due to the Company's repurchase of 1,593,506 granted but unlocked RMB treasury shares by cash ; a decrease of RMB 29,967,599.60 was due to share distributions by equity settlements to minority shareholders; a decrease of RMB 30,487,304.19 was due to the difference between the payment of the consideration and the share of identifiable net assets calculated based on the newly increased shareholding ratio as a result of acquisition of 42.86% minority interest in each of the holding subsidiaries Hua'An Baoquan Intelligence and Hua'An Bao Quan Electronics



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## 41. Treasury Shares

				Unit: RMB
Item	Opening Balance	Increase in the current reporting period	Decrease in the current reporting period (Note 1)	Closing balance
2021				
Restricted shares incentive scheme	1,121,918,737.47	-	98,730,014.43	1,023,188,723.04
Total	1,121,918,737.47	-	98,730,014.43	1,023,188,723.04
2020				
Restricted shares incentive scheme	2,148,273,864.36	-	1,026,355,126.89	1,121,918,737.47
Total	2,148,273,864.36	-	1,026,355,126.89	1,121,918,737.47

Note 1: During the current reporting period, the decreased amount of RMB 98,730,014.43 in treasury shares was due to the provision of cash dividend allocated to restricted shares and the repurchase and cancellation of 7,611,076 restricted shares of 2016 and 2018 Restricted Share Incentive Scheme.

During the prior year, the decreased amount of RMB 1,026,355,126.89 in treasury shares was due to the provision of cash dividend allocated to restricted shares, the repurchase and cancellation of 1,593,506 restricted shares of the Company's 2016 Restricted Share Incentive Scheme, the unlocking of 21,204,645 shares for the expiry of the 3<sup>rd</sup> unlocking period of the Company's 2016 Restricted Share Incentive Scheme, the unlocking of 45,591,794 shares for the expiry of the 1<sup>st</sup> unlocking period of the Company's 2018 Restricted Share Incentive Scheme.

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

# 42. Other Comprehensive Income

							Unit: RMB
Item	Opening balance	A The before- income-tax amount incurred during the current reporting period	Amounts occurre Less: transfer to current period P/L from previous other comprehens ive income	Less: income tax expense	Attributable to the parent company (after tax)	d Attributable to minority shareholders (after tax)	Closing balance
2021							
Other incomes that may be reclassified subsequently to profit or loss	(84,993,926.94)	4,631,122.68	-	-	7,809,801.65	(3,178,678.97)	(77,184,125.29)
Included: Effect on conversion of financial statements denominated in foreign currencies	(84,993,926.94)	4,631,122.68	-	-	7,809,801.65	(3,178,678.97)	(77,184,125.29)
Other comprehensive income	(84,993,926.94)	4,631,122.68	-	-	7,809,801.65	(3,178,678.97)	(77,184,125.29)
2020							
Other incomes that may be reclassified subsequently to profit or loss	(53,541,146.99)	(34,145,243.17)	-	-	(31,452,779.95)	(2,692,463.22)	(84,993,926.94)
Included: Effect on conversion of financial statements denominated in foreign currencies	(53,541,146.99)	(34,145,243.17)	-	-	(31,452,779.95)	(2,692,463.22)	(84,993,926.94)
Other comprehensive income	(53,541,146.99)	(34,145,243.17)	-	-	(31,452,779.95)	(2,692,463.22)	(84,993,926.94)

## 43. Surplus Reserves

Unit: RMB

				Unit: RMB
		Increase in the	Decrease in the	
Item	Opening balance	current	current	Closing balance
	Opening balance	reporting	reporting	Closing balance
		period	period	
2021 and 2020				
Statutory surplus reserves (Note)	4,672,505,348.00	-	-	4,672,505,348.00
Total	4,672,505,348.00	-	-	4,672,505,348.00

Note: According to the *Company Law of the People's Republic of China* and the *Articles of Association* of the Company, The Company shall withdraw the statutory surplus reserve fund at 10% of the annual net profit, and when the accumulated amount of the statutory surplus reserve fund reaches more than 50% of the registered capital, it may not be withdrew. The

# Notes to Financial Statements

For the reporting period from January  $1^{\,\mbox{st}}$  2021 to December  $31^{\,\mbox{st}}$  2021

Company has withdrawn a statutory surplus reserve of RMB 4,672,505,348.00, which has reached 50% of the Company's share capital, so no subsequent statutory surplus reserve will be accrued in the current fiscal year.

The statutory surplus reserve can be used to make up for losses or increase the share capital after approval.

## 44. Retained Earnings

		Unit: RMB
Item	2021	2020
Retained Earnings at the close of the prior reporting period	35,806,523,826.37	28,961,389,145.22
Add: Net profit attributable to the parent company for the current reporting period	16,800,411,032.05	13,385,526,714.15
Less: Dividends payable on common shares (Note)	7,458,057,406.90	6,540,392,033.00
Retained earnings at the end of the current reporting period	45,148,877,451.52	35,806,523,826.37

Note: According to the resolution of 2020 Annual General Meeting dated on May 14<sup>th</sup> 2021, based upon the total capital share of the Company on the equity distribution date, for each 10 ordinary shares, the Company distributed cash dividends of RMB 8 (tax inclusive), the rest of retained earnings were all carried forward for future distributions.

## 45. Operating Income/Operating Cost

45.1 Operating income and operating cost

Unit: RMB							
Itom	2021		2020				
Item	Revenue	Cost	Revenue	Cost			
Operating income	80,803,165,490.40	44,894,713,863.87	62,879,112,889.36	33,607,174,664.31			
Other operating income	616,888,048.87	434,686,468.78	624,338,002.42	350,523,193.42			
Total	81,420,053,539.27	45,329,400,332.65	63,503,450,891.78	33,957,697,857.73			

#### 45.2 Operating business (by business type)

		Unit: RMB
Item	2021	
item	Revenue	Cost
Product sales	75,532,012,528.94	41,361,920,302.85
Construction contract	4,003,746,727.88	3,084,364,818.86
Provide services	1,267,406,233.58	448,428,742.16
Total	80,803,165,490.40	44,894,713,863.87

### 45.3 Operating business (by the time of revenue recognition)

Item	2021	
Item	Revenue	Cost
Satisfied at a point in time	75,532,012,528.94	41,361,920,302.85
Satisfied over time	5,271,152,961.46	3,532,793,561.02
Total	80,803,165,490.40	44,894,713,863.87

Unit. DMD

Unit. DMD

#### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

## 45.4 Operating business (By product or business type)

		Unit: RMB
Item	2021	
nem	Revenue	Cost
Products and services for main business	64,528,795,025.87	34,509,451,081.26
Constructions	4,003,746,727.88	3,084,364,818.86
Innovative businesses	12,270,623,736.65	7,300,897,963.75
Total	80,803,165,490.40	44,894,713,863.87

Note: The main business is other parts other than innovative businesses.

### **Descriptions of Performance obligations:**

The Group sells video surveillance and other main business products, smart home products, robotic products, thermal imaging products, auto electronics products, storage products and other innovative businesses 'products and related services. For sales of goods to customers, the Group recognizes revenue when the control of the goods is transferred, i.e. when the goods are delivered to the location designated by other party, or delivered to the carrier designated by other party, or delivered to the other party for acceptance. Since the delivery of the goods to the customer represents the right to unconditionally receive the contract consideration, and the maturity of the payment only depends on the passage of time, the Group recognizes a receivable when the goods are delivered to the customer prepays for the goods, the Group recognizes the transaction amount received as a contract liability, and recognizes revenue until the goods are delivered to the customer.

For projects constructed for customers, since the customers could control the assets under construction during the performance of the Group, the Group recognizes revenue according to the performance progress by treating them as the obligations within certain period, except that the performance progress cannot be reasonably determined. The Group applies the output method to determine the performance progress, which is based on the value to the customers of the goods or services that have been transferred to them. Where the performance progress cannot be reasonably determined, and the costs incurred by the Group are expected to be compensated, the revenue shall be recognized according to the amount of the costs already incurred until the performance progress can be reasonably determined. The customers of the Group pay the Group for the construction works by milestone payments in accordance with the contract. For the portion where the Group has obtained an unconditional right to the payment, it will be recognized as accounts receivable, while the remaining portion will be recognized as contract assets; where the contract price received or receivable by the Group exceeds the performance obligation completed to date, the excess portion will be recognized as contract liabilities. The Group presents contract assets and contract liabilities under the same contract on a net basis.

The Group provides customers with operation and maintenance services. Since customers obtain and consume the economic benefits generated by the performance of the Group at the same time when the Group performs its obligations, the Group recognizes revenue according to the performance progress by treating them as the obligations within certain period. The customers of the Group pay the Group for the maintenance services by milestone payments in accordance with the contract. For the portion where the Group has obtained an unconditional right to the payment, it will be recognized as accounts receivable, while the remaining portion will be recognized as contract assets; where the contract price received

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

or receivable by the Group exceeds the performance obligation completed to date, the excess portion will be recognized as contract liabilities. The Group presents contract assets and contract liabilities under the same contract on a net basis.

According to the project contract, the Group provides both project asset construction services and post-construction operation services and maintenance services. The Group identifies construction services, operation services and maintenance services as individual performance obligations, and allocates the transaction price to each performance obligation based on the relative proportion of the stand-alone selling price of each performance obligation.

The Group provides cloud services including storage service, video service, and telephone service to its customers. Such services are performance obligations to be satisfied during a period of time, and revenue is recognized based on the performance progress over the period in which such services are rendered. As customers have prepaid for cloud services at the time of purchase, the Group recognizes the payments for cloud services received at the time of transaction as a contract liability, and recognizes revenue based on the performance progress over the period in which such services are rendered.

Sales rebates to distributors of the Group may be accumulated when they purchase products from the Group, and are deductible for payments for goods to be purchased in the future. Such sales rebates enable distributors to enjoy discounts in their future purchase of goods, which are not available to the same type of customers. Therefore, the commitment to offer such discounts to distributors on their future purchase prices is a separate performance obligation. Such commitment is recognized as a contract liability based on the transaction price allocated on the basis of the fair value of rebates when the sales transaction takes place, and is recognized as revenue when distributors use the sales rebates for deduction of purchase prices.

The Group provides quality assurance for the sold video surveillance products, smart home products, robotic products and other products and related accessories, as well as the assets constructed. The quality assurance related to the products sold by the Group cannot be purchased separately, and is a guarantee to customers that the products sold meet the established standards, therefore, the Group conducts accounting treatment in accordance with the Accounting Standards for Business Enterprises No. 13 - Contingencies, please refer to Note (III) 24 and Note (V) 36 for details.

## Descriptions of allocation to the remaining performance obligations:

As of December 31<sup>st</sup> 2021, all the remaining performance obligations are part of the contracts with original expected contract term not exceeding one year. The Group expects to recognize all of them as revenue within the next year.



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## 46. Business Taxes and Surcharges

		Unit: RMB
Items	2021	2020
City construction and maintenance tax	271,005,144.60	189,386,771.55
Education surcharges	118,219,501.03	82,442,008.19
Local education surcharges	78,812,578.90	54,915,581.40
Stamp duty	48,719,842.95	30,560,972.35
Real estate tax	38,218,345.28	20,330,766.80
Tax on use of land	5,747,583.10	3,992,258.37
Vehicle and vessel tax	156,562.97	151,291.55
Others	100,448.69	34,483,699.34
Total	560,980,007.52	416,263,349.55

## 47. Selling Expenses

Items	2021	2020
Payroll	5,548,436,481.61	4,322,277,210.83
Marketing Expenses	1,351,499,107.82	1,156,331,130.68
Shipping, transportation, and vehicle expense	300,539,153.45	711,448,510.07
Travelling expenses	272,916,031.74	216,729,012.52
Office expenses	206,708,742.81	201,748,056.17
Business hospitality expenses	251,571,190.72	183,005,835.09
Rental expenses	66,296,932.66	193,697,802.86
Professional Intermediary expenses	192,080,083.00	158,620,553.03
Depreciation and amortization expenses	208,955,480.02	89,216,922.78
Others	187,440,464.19	144,715,710.55
Total	8,586,443,668.02	7,377,790,744.58

## 48. Administrative Expenses

		Unit: RMB
Items	2021	2020
Payroll	1,320,787,327.54	1,155,570,756.22
Office expenses	228,196,179.10	180,626,249.71
Depreciation and amortization expenses	194,491,716.47	164,558,720.85
Professional Intermediary expenses	95,361,861.47	74,792,204.76
Travelling expenses	39,132,306.65	37,760,312.22
Shipping, transportation, utility expense	48,723,035.15	41,419,386.33
Rental expenses	10,375,238.03	6,827,268.39
Business hospitality expenses	11,296,053.97	9,193,300.21
Others	183,886,745.58	119,264,890.07
Total	2,132,250,463.96	1,790,013,088.76

## 49. R&D Expenses

Unit: RMB

Items	2021	2020
Payroll	6,809,382,000.63	5,154,824,934.62
Consumables and service fees	556,631,898.14	533,761,090.55
Depreciation and amortization expenses	299,364,107.17	218,167,957.47
Office expenses	167,582,498.45	190,693,619.45
Intermediate testing fees	144,910,134.48	145,698,114.33

# Unit: RMB



For the reporting period from January 1st 2021 to December 31st 2021

Travelling expenses	108,265,517.40	68,264,094.55
New product design fees	106,964,625.53	20,416,472.49
Rental expenses	5,329,594.73	10,791,884.40
Others	53,214,724.86	36,033,594.56
Total	8,251,645,101.39	6,378,651,762.42

## 50. Financial Expenses

		Unit: RMB
Items	2021	2020
Interest expenses	231,787,858.92	223,386,660.79
Interest expense on lease liabilities	17,607,723.12	-
Less: Interest income	885,545,988.62	722,845,909.92
Foreign exchange losses	354,146,744.37	927,956,362.97
Less : Capitalized specific loan interests and foreign exchange differences on specific loan	(124,649,345.63)	58,884,747.25
Others	24,011,058.74	26,642,405.97
Total	(133,343,257.84)	396,254,772.56

## 51. Other Income

Unit: RMB

Items	2021	2020
VAT Rebates	2,054,594,872.37	1,739,193,206.86
Special subsidies	558,717,940.38	530,334,411.76
Tax reduction	14,829,396.58	32,596,557.71
Value-added tax deduction	418,611.13	1,457,529.48
Total	2,628,560,820.46	2,303,581,705.81

## 52. Investment Income

Unit: RMB

Items	2021	2020
Long-term equity investment gains based on equity method	114,137,281.18	6,361,388.74
Investment income from other non-current financial assets during the holding period	115,644,801.97	150,000,000.00
Investment income from disposal of held-for-trading financial assets	113,608,106.10	12,915,660.21
Investment losses from disposal of subsidiaries and other business units	(169,184,641.43)	-
Total	174,205,547.82	169,277,048.95

## 53. Gains(Losses) from Changes in Fair Values

Unit: RMB

Sources of gains (losses) from changes in fair values	2021	2020
Held-for-trading financial assets	11,711,591.07	22,814,664.19
Including: gains on the changes in fair value of derivative financial instruments	11,711,591.07	22,814,664.19
Gains(Losses) from changes in fair value of other non-current financial assets	(53,214,895.05)	69,478,784.83

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#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

Held-for-trading financial liabilities	3,303,279.51	(6,835,239.48)
Including: gains (losses) on the changes in fair value of derivative financial instruments	3,303,279.51	(6,835,239.48)
Total	(38,200,024.47)	85,458,209.54

### 54. Credit Impairment Loss

		Unit: RMB
Items	2021	2020
Credit impairment losses of accounts receivable	(566,389,266.23)	(106,051,544.54)
Credit impairment reverses (losses) of other receivables	25,231,443.14	(27,043,173.31)
Credit impairment losses of long-term receivables	(28,600,342.41)	(52,845,607.89)
Total	(569,758,165.50)	(185,940,325.74)

## 55. Impairment Losses of Assets

		Unit: RMB
Items	2021	2020
Losses on inventory devaluation	(434,614,231.94)	(361,227,476.20)
Contract assets impairment loss	(13,075,174.66)	(1,882,037.79)
Total	(447,689,406.60)	(363,109,513.99)

### 56. Non-operating Income

			Unit: RMB
Items	2021	2020	The amount booked into current period non-recurring profits and looses
Fines and confiscations	59,586,645.03	66,127,109.32	59,586,645.03
Government subsidies	2,653,472.98	8,472,687.83	2,653,472.98
Income from business combination of enterprises not under the same control (Note)	1,163,932.96	281,193.50	1,163,932.96
Others	12,340,318.32	24,392,312.85	12,340,318.32
Total	75,744,369.29	99,273,303.50	75,744,369.29

Government subsidies included in current profit and loss:

			Unit: RMB
Item	2021	2020	Related to assets/Related to incomes
Tax reduction	341,525.58	138,798.93	Related to incomes
Other subsidies	2,311,947.40	8,333,888.90	Related to incomes
Total	2,653,472.98	8,472,687.83	

Note: On September 23rd 2021, the Group acquired Epcom MX. The fair value of the identifiable net assets obtained in the acquisition less than the combination cost is included in the current profit and loss, which is equivalent to RMB 1,163,932.96. See Note (VI) 1 for details.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

# 57. Non-operating Expenses

			Unit: RMB
Items	2021	2020	The amount booked into current period non-recurring profits and looses
Losses on disposal of non-current assets	8,156,134.63	6,465,180.38	8,156,134.63
Local water conservancy construction fund	1,347,569.92	1,672,431.96	1,347,569.92
Donation expenses	51,489,848.19	1,887,772.40	51,489,848.19
Others	20,560,553.01	12,951,586.67	20,560,553.01
Total	81,554,105.75	22,976,971.41	81,554,105.75

## 58. Income Tax Expenses

58.1 Details of Income tax expenses

		Unit: RMB
Items	2021	2020
Income tax for the current reporting period	1,912,421,635.04	2,140,449,306.26
Deferred income tax expenses	(385,068,762.95)	(89,684,430.19)
Differences in filing and payment of income tax in previous reporting years	(569,862,219.93)	(456,113,070.38)
Total	957,490,652.16	1,594,651,805.69

## 58.2 Reconciliation of income tax expenses to the accounting profit

		Unit: RMB
Item	2021	2020
Total profit	18,468,211,862.63	15,272,971,277.86
Income tax expenses calculated at applicable tax rates of 15%	2,770,231,779.39	2,290,945,691.68
Impact of non-deductible costs, expenses and losses	13,462,549.85	30,860,096.48
Tax effect of non-taxable income	(20,994,120.30)	(3,054,060.62)
Impact of deductible temporary differences or deductible losses for which no deferred income tax assets is recognized for the current period	126,889,022.94	160,270,373.80
Impact of using deductible temporary differences or deductible losses for which no deferred income tax assets was recognized for the prior periods	(124,304,097.81)	(27,124,409.54)
Differences of income tax annual filing (Note)	(569,862,219.93)	(456,113,070.38)
Impact by different tax rates applicable to different subsidiaries	117,262,283.11	65,427,121.90
Impact of additional deduction of R&D expenses	(853,993,809.22)	(498,716,838.03)
Others	(501,200,735.87)	32,156,900.40
Income tax expenses	957,490,652.16	1,594,651,805.69

Note: Pursuant to the *Notice on Printing the List of Key Software Enterprises and Integrated Circuit Design Enterprises under the National Planning Layout between 2013 and 2014* (Fa Gai Gao Ji [2013] No. 2458), the Company was identified as a national key software enterprise in December 2013. Pursuant to the *Notice on Relevant Issues Concerning the Preferential Policies for Enterprise Income Tax on Software and Integrated Circuit Industry* (Finance and Taxation [2016] No. 49), the Company was approved by the tax authorities in May 2021 to apply enterprise income tax of 10% for 2020, therefore, the enterprise's 2020 income tax expenses was reduced by RMB 569, 111,492.62 (2020: RMB 456,113,070.38).

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## 59. Notes to Consolidated Cash Flow Statement Items

59.1 Other cash receipts relating to operating activities

		Unit: RMB
Items	2021	2020
Interest income	747,643,940.57	639,105,287.46
Government subsidies	1,108,737,358.14	503,207,004.05
Withdrawal of restricted currency funds	870,118,675.99	183,586,082.31
Others	71,926,963.35	101,691,979.83
Total	2,798,426,938.05	1,427,590,353.65

59.2 Other cash payments relating to operating activities

		Unit: RMB
Item	2021	2020
Advertising and Selling services	1,209,668,231.40	1,106,345,645.08
Office expenses and business expenses	1,244,593,584.01	997,386,647.41
Shipping and transportation expense	380,408,948.15	778,093,845.68
R&D expense	702,435,895.72	561,674,056.35
Travelling expense	420,313,855.79	322,753,419.29
Outsourcing service fees, fees for hiring intermediaries, etc.	406,476,311.46	301,671,589.85
Rental expense	82,001,765.42	211,316,955.65
Deposits to restricted monetary funds	553,153,948.19	62,196,400.89
Others	298,285,736.64	34,657,044.75
Total	5,297,338,276.78	4,376,095,604.95

59.3 Other cash receipts relating to investing activities

		Unit: RMB
Item	2021	2020
Receipts of financing lease payments	-	46,196,873.80
Total	-	46,196,873.80

59.4 Other cash payments related to investing activities

		Unit: RMB
Item	2021	2020
Cash payments for investment intention funds	4,000,000.00	1,000,000.00
Net cash payment for disposal of subsidiaries and other business units	6,196,658.79	-
Total	10,196,658.79	1,000,000.00

59.5 Other cash payments relating to financing activities

		Unit: RMB
Item	2021	2020
The consideration paid for the acquisition of minority shareholders' equity	-	64,290,000.00
Repurchase of restricted shares	122,644,057.28	13,417,417.35
Repayment of lease liabilities	190,296,810.23	-
Total	312,940,867.51	77,707,417.35

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## 60. Supplementary Information about Cash Flow Statement

60.1 Supplementary information about cash flow statement

Supplementary information	2021	Unit: RMI 2020
1. Reconciliation of net profit to cash flows from operating activities:	2021	2020
Net profit	17,510,721,210.47	13,678,319,472.17
Add: Impairment of assets	447,689,406.60	363,109,513.99
Provision for credit losses	569,758,165.50	185,940,325.74
Fixed assets depreciation	685,029,204.28	713,633,074.93
Amortization of intangible assets	140,708,108.57	87,014,571.01
Long-term deferred expenses amortization	66,502,221.67	44,742,828.97
Right-of-use assets depreciation	198,362,376.40	-
Gains on disposal of fixed assets, intangible assets and other long-term assets	(34,225,603.81)	(628,505.02)
Fixed asset scrapping losses	8,156,134.63	6,465,180.38
Losses (gains) from changes in fair value	38,200,024.47	(85,458,209.54)
Financial expenses	302,351,912.74	598,966,581.29
Investment income	(174,205,547.82)	(169,277,048.95)
Share-based payment based on equity settlement	369,329,250.11	818,106,623.19
Decrease of restricted funds	316,964,727.80	121,389,681.42
Increase in deferred income tax assets	(390,473,424.46)	(131,576,150.12)
Increase in deferred income tax liabilities	335,327.28	41,891,719.93
Increase in inventories	(5,936,053,632.80)	(496,228,965.62)
Decrease (increase) of operating other non- current assets	(497,739,824.36)	151,065,258.42
Increase in operating receivables	(5,478,863,810.65)	(2,794,429,636.26)
Increase in operating payables	4,019,434,922.97	3,098,102,287.85
Increase (decrease) in deferred income	547,707,470.36	(142,710,843.61)
Others	(1,163,932.96)	(281,193.50)
Net cash flows from operating activities	12,708,524,686.99	16,088,156,566.67
<ol> <li>Significant investing and financing activities not involving cash receipts and payments:</li> </ol>		
3. Net changes in cash and cash equivalents:		
Closing balance of cash	34,603,944,429.20	35,024,837,878.31
Less: Opening balance of cash	35,024,837,878.31	26,515,668,008.40
Add: Closing balance of cash equivalents		· · · · · ·
Less: Opening balance of cash equivalents	-	
Net Increase (decrease) in cash and cash equivalents	(420,893,449.11)	8,509,169,869.91



Unit: RMB

## Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

#### 60.2 Net cash paid for obtaining subsidiaries and other business units during the current year

	Amounts
Cash or cash equivalents paid for the business combination in this year	395,838,055.75
Including: Daishan Hailai	-
Syscom MX	378,698,267.92
Epcom MX	17,139,787.83
Less: Cash and cash equivalents held by the Company on the acquisition date	72,233,525.01
Including: Daishan Hailai	44,354,803.41
Syscom MX	26,037,489.00
Epcom MX	1,841,232.60
Net cash paid for obtaining the subsidiary	323,604,530.74

#### 60.3 Constituents of cash and cash equivalents

		Unit: RMB
Item	Closing balance	Opening balance
Cash	34,603,944,429.20	35,024,837,878.31
Including: Cash on hand	1,851,273.53	1,105,047.51
Bank deposit for payment at any time	34,573,786,777.26	34,968,013,389.43
Other monetary capital for payment at any time	28,306,378.41	55,719,441.37
Cash equivalents	-	-
Closing balance of cash and cash equivalents	34,603,944,429.20	35,024,837,878.31

Among the total balance of RMB 146,232,880.57 of the other monetary fund(s) at the end of the reporting period (December 31<sup>st</sup> 2020: RMB 490,610,671.33), RMB 117,926,502.16 are various guarantee deposits and other restricted funds, etc. (December 31<sup>st</sup> 2020: RMB 434,891,229.96), not cash and cash equivalents.

## 61. Assets with Restriction in Ownership or Use Rights

		Unit: RMB
Item	Book value at the end of the current reporting period	Cause of restriction
Cash and bank balances	117,926,502.16	Various guarantee deposits and other restricted funds
Notes receivable	711,238,103.83	Endorsed to suppliers
Receivables for financing	4,337,929.69	Pledged for issuing bank acceptance bills
Accounts receivable	197,358,387.51	Pledged for long-term borrowings
Contract assets	104,842,914.69	Pledged for long-term borrowings
Intangible assets	62,497,900.00	Pledged for long-term borrowings
Other non-current assets	1,667,721,944.32	Pledged for long-term borrowings
Right-of-use assets	23,923,145.37	Fixed assets leased through financial lease
Total	2,889,846,827.57	



Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## 62. Monetary Items of Foreign Currencies

#### **62.1** Foreign currencies

Items	Balance in foreign currency at the end of the reporting period	Exchange rate for conversion	Balance of RMB converted at the end of the reporting period
Cash and bank balances	the end of the reporting period	conversion	the end of the reporting period
Including: USD	266,706,479.65	6.3757	1,700,440,502.30
EUR	85,252,747.73	7.2197	615,499,262.76
GBP	9,516,440.69	8.6064	81,902,295.18
RUB	317,813,616.47	0.0855	27,163,529.80
НКД	31,242,355.45	0.8176	25,543,749.82
JPY	345,648,715.88	0.0554	19,148,938.86
PLN	11,277,337.50	1.5717	17,724,929.67
KRW	2,491,866,911.68	0.0054	13,356,905.02
AED	4,973,251.64	1.7361	8,634,062.17
AUD	709,775.17	4.6220	3,280,580.85
SGD	1,628,647.85	4.7179	7,683,797.69
NZD	421,332.56	4.3553	1,835,029.69
ZAR	8,460.22	0.4004	3,387.05
TRY	359.24	0.4822	173.24
INR	1,699.58	0.0857	145.62
Accounts receivable			
Including: EUR	262,479,326.37	7.2197	1,895,021,992.59
USD	95,689,448.83	6.3757	610,087,218.91
HKD	42,720,682.35	0.8176	34,928,429.89
Short-term borrowings			
Including: EUR	58,208,782.93	7.2197	420,249,950.14
USD	14,347,704.66	6.3757	91,476,660.61
Accounts payable			
Including: USD	237,414,662.32	6.3757	1,513,684,662.55
HKD	1,460,345,721.20	0.8176	1,193,978,661.65
EUR	2,531,035.74	7.2197	18,273,318.73
Long-term borrowings			
Including: EUR	146,000,000.00	7.2197	1,054,076,200.00
USD	60,744,787.08	6.3757	387,290,538.98
Non-current liabilities due within one year - Long-term borrowings			
Including: EUR	4,036,666.67	7.2197	29,143,522.36
USD	87,929.17	6.3757	560,610.03

62.2 Details of Overseas Operational Entities



Name of overseas subsidiaries	Main overseas operational office	Recording Currency	Basis of selection
HDT International Ltd.	Hongkong China	HKD	Selection based on local economic environment
Hikvision Europe B.V.	Netherlands	USD	Selection based on local economic environment
Prama Hikvision Indian Private Limited	India	INR	Selection based on local economic environment
Hikvision UK Limited	UK	GBP	Selection based on local economic environment
Hikvision Italy (S.R.L.)	Italy	EUR	Selection based on local economic environment
Hikvision International Co., Limited	Hongkong China	USD	Selection based on local economic environment
Hikvision Australia PTY Ltd.	Australia	AUD	Selection based on local economic environment
Hikvision Spain, S.L.	Spain	EUR	Selection based on local economic environment
Hikvision France SAS	France	EUR	Selection based on local economic environment
Hikvision Singapore Pte. Ltd.	Singapore	SGD	Selection based on local economic environment
Hikvision South Africa (Pty) Ltd.	South Africa	ZAR	Selection based on local economic environment
Hikvision FZE	UAE	USD	Selection based on local economic environment
Hikvision Poland Spolka Z Ograniczona Odpowiedzialnoscia.	Poland	PLN	Selection based on local economic environment
Hikivision do Brasil Comercio de Equipamentos de Segurança Ltda.	Brazil	BRL	Selection based on local economic environment
Hikvision LLC	Russia	RUB	Selection based on local economic environment
Ezviz Inc.	USA	USD	Selection based on local economic environment
Cooperative Hikvision Europe U.A.	Netherlands	USD	Selection based on local economic environment
Hikvision Korea Limited	Korea	KRW	Selection based on local economic environment
Hikvision Colombia SAS	Columbia	COP	Selection based on local economic environment
Hikvision Kazakhstan Limited Liability Partnership	Kazakhstan	KZT	Selection based on local economic environment
Pyronix Ltd.	UK	GBP	Selection based on local economic environment
Microwave Solutions Limited	UK	GBP	Selection based on local economic environment
Hikvision Turkey Technology And Security Systems Commerce Corporation	Turkey	TRY	Selection based on local economic environment
Syscom MX	Mexico	MXN	Selection based on local economic environment
Epcom MX	Mexico	MXN	Selection based on local economic environment
Hikvision Chile SpA	Chile	CLP	Selection based on local economic environment
Hikvision Hungary Limited	Hungary	HUF	Selection based on local economic environment
Hikvision New Zealand Limited	New Zealand	NZD	Selection based on local economic environment
Hikvision Czech S.R.O.	Czech	CZK	Selection based on local economic environment
Hikvision Deutschland GmbH	Germany	EUR	Selection based on local economic environment
Hikvision Kenya (Pty) Ltd.	Kenya	KES	Selection based on local economic environment
LLC Hikvision Tashkent	Uzbekistan	UZS	Selection based on local economic environment
Hikvision (Malaysia) Sdn. Bhd.	Malaysia	MYR	Selection based on local economic environment
Hikvision USA,Inc.	USA	USD	Selection based on local economic environment
Hikvision Canada INC.	Canada	CAD	Selection based on local economic environment
Hikvision Mexico S.A.de C.V.	Mexico	MXN	Selection based on local economic environment
Hikvision Panama Commercial S.A.	Panama	USD	Selection based on local economic environment
Hikvision Pakistan (SMC-Private) Limited	Pakistan	PKR	Selection based on local economic environment
Hikvision Peru Closed Stock Company	Peru	PEN	Selection based on local economic environment
Hikvision Central America S.A.	Panama	USD	Selection based on local economic environment
		EGP	Selection based on local economic environment
Hikvision Technology Egypt JSC	Egypt		
PT. Hikvision Technology Indonesia	Indonesia	IDR BON	Selection based on local economic environment
Hikvision Technologies S.R.L.,	Romania	RON	Selection based on local economic environment
Hikvision IOT (Thailand) Co.,Ltd.	Thailand	THB	Selection based on local economic environment



For the reporting period from January  $1^{st}$  2021 to December  $31^{st}$  2021

Name of overseas subsidiaries	Main overseas operational office	Recording Currency	Basis of selection
Hikvision West Africa Limited	Nigeria	NGN	Selection based on local economic environment
EZVIZ International Limited	Hongkong China	HKD	Selection based on local economic environment
Hikvision Azerbaijan Limited Liability	Azerbaijan	AZN	Selection based on local economic environment
Hikvision Japan K.K.	Japan	JPY	Selection based on local economic environment
Hikvision Argentina S.R.L.	Argentina	ARS	Selection based on local economic environment
HIKVISION Morocco LLC	Morocco	MAD	Selection based on local economic environment
Hikvision Technology Israel Ltd	Israel	ILS	Selection based on local economic environment
EZVIZ Europe B.V.	Netherlands	EUR	Selection based on local economic environment
BK Grupė UAB	Lithuania	EUR	Selection based on local economic environment
BK EESTI AKTSIASELTS	Estonia	EUR	Selection based on local economic environment
SIA "BK Latvia"	Latvia	EUR	Selection based on local economic environment

## 63. Government Subsidies

### **63.1** Categories

			Unit: RMB
Category	Amount	Financial Report Items	Amount booked in current profit and loss
VAT Rebates	2,054,594,872.37	Other Income	2,054,594,872.37
Special subsidies	1,299,616,345.83		
Including: other special subsidies	1,222,781,210.39	Deferred income / Other income/ Non-operating income	524,912,433.68
Chongqing Manufacturing Base construction subsidies	76,835,135.44	Deferred income / Other income	36,117,454.10
Tax Refund/Reduction	15,589,533.29	Other income/ Non-operating income	15,589,533.29
Total	3,369,800,751.49		2,631,214,293.44

63.2 There was no refund of government subsidies during the current reporting period.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31th 2021

## **VI.** Changes in Consolidation Scope

### 1. Business Combination of Enterprises Not under the Same Control

1.1 Business combination of enterprises not under the same control

### Daishan Hailai

In June 2021, the Company's joint venture -Daishan Hailai's original shareholders Zhoushan Islands New District Penglai State-owned Assets Investment Group Co., Ltd. (hereinafter referred to as "Penglai SAI") and an independent third-party company, Daishan Haina Shuzhi Co., Ltd. (hereinafter referred to as "Haina Shuzhi") signed an equity transfer agreement, and Penglai SAI transferred its 33.4% stake in Daishan Hailai to Haina Shuzhi. After the completion of the equity transfer, the Company holds 66.6% equity of Daishan Hailai, and Haina Shuzhi holds 33.4% equity of Daishan Hailai. On June 30<sup>th</sup> 2021, the Company and Haina Shuzhi formed a common unanimous resolution to approve the *Articles of Association* of Daishan Hailai. Major matters involving the decision of the Company's development strategy and long-term planning must be approved by shareholders representing more than 1/2 of the voting rights. Daishan Hailai has a total of 5 board members, 3 from Hikvision and 2 from Haina Shuzhi. Matters involving major financial and operating decisions must be approved by more than 2/3 of the Board of Directors, changed to be approved by more than 1/2 of the consolidated financial and operating decisions of Daishan Hailai, and has substantial control over it, so Daishan Hailai is included in the scope of the consolidated financial statements.

## Syscom MX and Epcom MX (hereinafter collectively referred to as the "Subject Companies")

Hikvision Singapore Pte. Ltd., a wholly-owned subsidiary of the Company, and the original shareholders of the Subject Companies jointly signed the *STOCK PURCHASE AGREEMENT* on January 30<sup>th</sup> 2021, and signed three supplementary agreements between June and September 2021 (the above agreement and the supplementary agreements are collectively referred to as the "Acquisition Agreements"), agreeing to acquire 51% of the equity in the Subject Companies held by two independent third parties at USD 61,035,256; from November 2020 to May 2021, the above acquisition arrangements were field or approved by the Board of Directors of CETHIK Group Co., Ltd. (hereinafter referred to as "CETHIK"), the Ministry of Commerce of the People's Republic of China, the National Development and Reform Commission of the People's Republic of China (Branch of Zhejiang Province). The equity delivery of Syscom MX and Epcom MX have been completed on September 23<sup>rd</sup> 2021. Therefore, the Group took September 23<sup>rd</sup> 2021 as the acquisition date, and the Group incorporated the Subject Companies into consolidation scope from the acquisition date. As of December 31<sup>st</sup> 2021, the Company has completed the equity transfer payment of USD 61,035,256, which is equivalent to approximately RMB 395,838,055.75 exchanged at spot foreign exchange rate. As of the announcement date of the financial statements, the closing audit of the financial statements of the Subject Company on the acquisition date is in progress.

For the reporting period from January  $1^{st}\ 2021$  to December  $31^{th}\ 2021$ 

Name of the acquiree	Time of equity acquisition	Equity acquisition cost	Equity acquisition ratio (%)	Equity acquisition method	Date of acquisition	Basis for determining the acquisition date	Income of acquiree from acquisition data to the end of the reporting period	Net profit of acquiree from acquisition data to the end of the reporting period
Daishan Hailai	June 2021	14,899,444.96	66.60%	Change in voting rights	June 30 <sup>th</sup> 2021	Date for obtaining actual control of the purchased party	45,774,840.61	6,480,312.77
Syscom MX	September 2021	378,698,267.92	51.00%	Cash Payments	September 23 <sup>rd</sup> 2021	Equity delivery date for obtaining control of the purchased party	774,040,976.53	82,010,831.97
Epcom MX	September 2021	17,139,787.83	51.00%	Cash Payments	September 23 <sup>rd</sup> 2021	Equity delivery date for obtaining control of the purchased party	18,125,454.54	2,057,929.50

## 1.2 Cost of business combination and goodwill

Cost of business combination	Daishan Hailai	Syscom MX	Epcom MX	
-Cash	-	378,698,267.92	17,139,787.83	
- The acquisition-date fair value of the acquirer's previously held equity interest	14,899,444.96	-	-	
Total cost of business combination	14,899,444.96	378,698,267.92	17,139,787.83	
Less: The fair value share of identifiable net assets obtained	14,899,444.96	304,312,721.16	18,303,720.79	
Goodwill/The amount that the combination cost is less than the amount of the fair value share of the identifiable net assets acquired	-	74,385,546.76	(1,163,932.96)	

# 1.3 Acquiree's book value of assets and liabilities at the date of acquisition

	Daishan Hailai		Sysco	m MX	Epcom MX	
Book value on the date of acquisitionFair value on the date of acquisition		Book value on the date of acquisitionFair value on the date of acquisition		Book value on the date of acquisition	Fair value on the date of acquisition	
Assets:						
Cash and bank balances	44,354,803.41	44,354,803.41	26,037,489.00	26,037,489.00	1,841,232.60	1,841,232.60
Accounts receivable	5,950,728.47	5,950,728.47	49,173,526.80	49,173,526.80	5,369,076.00	5,369,076.00

For the reporting period from January 1st 2021 to December 31th 2021

	Daishar	1 Hailai	Syscol	m MX	Epcon	n MX
	Book value on the date of acquisition	Fair value on the date of acquisition	Book value on the date of acquisition	Fair value on the date of acquisition	Book value on the date of acquisition	Fair value on the date of acquisition
Prepayments	71,115.98	71,115.98	114,085,276.20	114,085,276.20	130,906.80	130,906.80
Other current assets	1,300,073.30	1,300,073.30	66,759,306.00	66,759,306.00	5,302,041.60	5,302,041.60
Inventories	2,339,888.20	2,339,888.20	928,380,591.00	928,380,591.00	7,321,927.20	7,321,927.20
Fixed assets	203,135.29	203,135.29	69,780,913.20	69,780,913.20	40,650,039.60	40,650,039.60
Right-of-use assets	18,417.19	18,417.19	21,205,636.80	21,205,636.80	-	-
Other assets	25,438,535.65	25,438,535.65	29,698,768.80	29,698,768.80	2,431,894.20	2,431,894.20
Liabilities:						
Notes payable	-	-	237,410,548.80	237,410,548.80	22,158,347.40	22,158,347.40
Accounts payable	55,313,400.79	55,313,400.79	182,758,540.80	182,758,540.80	80,314.80	80,314.80
Tax payable	(31,062.40)	(31,062.40)	11,272,213.80	11,272,213.80	2,962,161.60	2,962,161.60
Payroll payable	316,509.08	316,509.08	29,792,680.20	29,792,680.20	-	-
Dividend payable	-	-	168,383,380.27	168,383,380.27	-	-
Other payables	43.88	43.88	46,989,849.60	46,989,849.60	959,350.80	959,350.80
Lease liabilities	5,929.50	5,929.50	24,015,073.80	24,015,073.80	-	-
Other liabilities	1,700,337.66	1,700,337.66	7,807,610.41	7,807,610.41	997,294.80	997,294.80
Net assets acquired	22,371,538.98	22,371,538.98	596,691,610.12	596,691,610.12	35,889,648.60	35,889,648.60

1.4 The Group uses the market method and the income method to evaluate the fair value, and finally confirms the evaluation value on the basis of comparing the two evaluation methods.

1.5 The Group has no contingent liabilities of the purchased party that need to be assumed in this merger.

## 2. Disposal of a Subsidiary

2.1 Loss of control of a subsidiary due to a single disposal of investment in the subsidiary

In March 2021, The Group, CETHIK and EZVIZ Technology signed the *Entrusted Management Agreement Termination Agreement*, agreed that the *Entrusted Management Agreement* will be terminated on March 27<sup>th</sup> 2021. After the termination of the *Entrusted Management Agreement*, the Group no longer controls the business of EZVIZ Technology, no longer responsible for the production, operation and management of EZVIZ Technology, and no longer enjoy other rights to EZVIZ Technology as stipulated in the *Entrusted Management Agreement*", so the business of EZVIZ Technology is no longer be included in the consolidation scope of the consolidated financial statements.

For the reporting period from January 1st 2021 to December 31th 2021

	Unit: RMB
	Amount
Name of the subsidiary	EZVIZ Technology
Consideration of equity disposal	8,000,000.00
Ratio of equity disposal	100%
Method of equity disposal	Clear debt
Date of loss of control	March 27th 2021
Determination basis for the date of loss of control	Effective date of the Entrusted Management Agreement Termination Agreement
Disposal of net assets	8,945,308.50
The difference between the disposal consideration and the share that corresponding to the disposal of the subsidiary's net assets at the consolidated financial statement level	(945,308.50)

## **3.** Changes of Consolidation Scope due to Other Causes

## The subsidiaries newly established and incorporated in the consolidation scope during the current reporting period as follows:

Company Name	Time of establishment	Registered capital	Amount of contribution of the Group	Ratio of contribution (%)
Shanghe Smart City Technology Co., Ltd. ("Shanghe Smart City") (Note 1)	April 2021	RMB 44.0571 million	RMB 41.8542 million	95.00
Chongqing EZVIZ Electronics Co., Ltd. ("Chongqing EZVIZ) (Note 2)	June 2021	RMB 100 million	RMB 60 million	60.00
Hangzhou Hikrobot Automation Co., Ltd. ("Robotic Automation") (Note 3)	December 2021	RMB 300 million	RMB 180 million	60.00
Hikvision Chile SpA (Note 3)	December 2021	USD 300 thousand	USD 300 thousand	100.00
Hangzhou Haina Yuzhi Entrepreneurship Investment Partnership Co., Ltd. ("Haina Yuzhi Fund") (Note 4)	December 2021	RMB 600 million	RMB 400 million	66.67

Note 1: At the end of the current reporting period, Shanghe Smart City's paid-in capital was RMB 44,057,100.00, of which RMB 41,854,200.00 was paid up by the Group and RMB 2,202,900.00 was contributed by the minority shareholder, Shanghe Urban-Rural Integration Construction Co., Ltd.

Note 2: At the end of the current reporting period, the paid in capital of Chongqing EZVIZ was RMB 100,000,000.00, which was fully contributed by Hangzhou EZVIZ Network Co.,

### Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>th</sup> 2021

## Ltd., a subsidiary of the Group.

Note 3: At the end of the current reporting period, Robotic Automation and Hikvision Chile SpA have not yet completed the paid-in capital, so there is no paid-in capital.

Note 4: After the *Proposal on Investing in the Establishment of Entrepreneurship Investment Partnerships and Related Party Transactions* considered and approved at the 6<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors held on October 22<sup>nd</sup> 2021, the Group, CETHIK, Hangzhou Hi-tech Entrepreneurship Investment Management Co., Ltd. and CETHIK (Hangzhou) Equity Investment Management Co., Ltd. jointly invested and established Haina Yuzhi Fund Company. Haina Yuzhi Fund Company is in the form of a limited partnership. It completed the industrial and commercial registration procedures on December 8<sup>th</sup> 2021, and obtained the *Business License* issued by the Hangzhou High-tech Industrial Development Zone (Binjiang) Market Supervision Administration. As of December 31<sup>st</sup> 2021, Haina Yuzhi Fund Company has completed the fundraising, with a total of RMB 600 million, of which CETHIK (Hangzhou) Equity Investment Management Co., Ltd. acts as the fund manager and general partner. contributed RMB 1 million and held 0.1667% of the shares; the Group, Hangzhou Hi-Tech Venture Capital Management Co., Ltd. and CETHIK, as limited partners, contributed RMB 400 million, RMB 120 million in currency, holding 66.6666%, 20.0000% and 13.1667% of the shares respectively. According to the partnership agreement of Haina Yuzhi Fund, the resolution of the partners meeting shall be approved by the partners who hold more than 2/3 (including this amount) of the total paid-in capital of the partnership; in addition, the Investment Committee is composed of 5 members, all investment matters must be approved by more than half of the representatives to the Haina Yuzhi Fund's Investment Committee. Therefore, the Group included Haina Yuzhi Fund into the scope of consolidation.

### The subsidiaries cancelled in the current reporting period and no longer included in the scope of consolidation are as follows:

Company Name	Date of equity disposition	Proportion of shareholding (%)
Hundure Technology (Shanghai) Co., Ltd.	April 2021	100.00
Secure Holding Limited	October 2021	100.00
Guangzhou Hikvision Technology Co., Ltd.	November 2021	100.00
Hikvision Joint-Stock Company	December 2021	100.00

# **VII. Interest in Other Entities**

## 1. Equity in Subsidiaries

## (1) Composition of the corporate group

Nama	Location of Place of registration		Nature of business	Shareholding ratio (%)		Acquisition
Name	operation	Flace of registration	ivature of business	Direct	Indirect	Method
Hangzhou Hikvision System Technology Co., Ltd.	Hangzhou	Hangzhou, Zhejiang	System integration, Technology development	100.00	-	Establishment
Hangzhou Hikvision Technology Co., Ltd.	Hangzhou	Hangzhou, Zhejiang	manufacture	100.00	-	Establishment

Name	Location of operation	Place of registration	Nature of business	Shareholdin		Acquisition Method
Hangzhou Hikvision Security Equipment Leasing Services Co.,	operation			Direct	Indirect	Wiethou
Ltd.	Hangzhou	Hangzhou, Zhejiang	Finance lease	100.00	-	Establishment
Chongqing Hikvision System Technology Co., Ltd.	Chongqing	Chongqing	System integration	100.00	-	Establishment
Hikvision USA, Inc.	USA	Los Angeles	Sales	100.00	-	Establishment
HDT International Ltd.	Hong Kong China	Hong Kong China	Sales	95.00	5.00	Establishment
Prama Hikvision Indian Private Limited	India	Mumbai	Sales	58.00	-	Business combination of enterprises not under the same control
Hikvision Europe B.V.	Europe	Amsterdam	Sales	-	100.00	Establishment
Hikvision FZE	Dubai	Dubai	Sales	100.00	-	Establishment
Hikvision Singapore Pte. Ltd.	Singapore	Singapore	Sales	100.00	-	Establishment
Chongqing Hikvision Technology Co., Ltd.	Chongqing	Chongqing	Manufacture	100.00	-	Establishment
Hangzhou Fuyang Hik Baotai Security Technology Services Co., Ltd. (Note 1)	Hangzhou	Hangzhou, Zhejiang	Construction	-	51.00	Establishment
Hikvision South Africa (Pty) Co., Ltd.	South Africa	South Africa	Sales	100.00	-	Establishment
Hikvision Italy S.R.L.	Italy	Milan	Sales	-	100.00	Establishment
Hikvision do Brasil Comercio de Equipamentos de Segurança Ltda.	Brazil	Brazil	Sales	95.00	5.00	Establishment
Hikvision Australia PTY Co., Ltd.	Australia	Australia	Sales	100.00	-	Establishment
Hikvision International Co., Limited	Hong Kong China	Hong Kong China	Sales	100.00	-	Establishment
Hikvision France SAS	France	France	Sales	-	100.00	Establishment
Hikvision Spain,S.L.	Spain	Spain	Sales	-	100.00	Establishment
Shanghai Goldway Intelligent Transportation System Co., Ltd.	Shanghai	Shanghai	Manufacture	100.00	-	Business combination not involving enterprises under common control
Hikvision Joint-Stock Company (Note 2)	Russia	St. Peterburg	Sales	-	100.00	Business combination not involving enterprises under common control
Henan Hua'an Baoquan Intelligent Development Co., Ltd.	Zhengzhou	Zhengzhou Henan	Construction	93.86	-	Business combination not involving enterprises under common control
Henan Hua'an Security Services Co., Ltd.	Zhengzhou	Zhengzhou Henan	Services	-	84.47	Business combination not involving enterprises under common control

N	Name         Location of         Place of registration         Nature of business		Natura of husinosa	Shareholdin	g ratio (%)	Acquisition
Name	operation	Flace of registration	Nature of business	Direct	Indirect	Method
Hundure Technology (Shanghai) Co., Ltd. (Note 2)	Shanghai	Shanghai	Manufacture	100.00	-	Business combination not involving enterprises under common control
Hikvision UK Limited	UK	UK	Sales	-	100.00	Establishment
Hikvision Poland Spolka Z Ograniczona Odpowiedzialnoscia	Poland	Poland	Sales	-	100.00	Establishment
Hangzhou Electronics (Note 3)	Hangzhou	Hangzhou Zhejiang	Manufacture	73.30	-	Establishment
Cooperative Hikvision Europe U.A.	Netherlands	Netherlands	Sales	99.00	1.00	Establishment
Hikvision Canada Inc.	Canada	Canada	Sales	100.00	-	Establishment
Hikvision LLC	Moscow	Moscow	Sales	100.00	-	Establishment
Hikvision Korea Limited	Korea	Korea	Sales	100.00	-	Establishment
Hangzhou EZVIZ Network Co., Ltd. (Note 4)	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Ezviz Inc.	USA	Los Angeles	Sales	-	60.00	Establishment
Hangzhou Haikang Zhicheng Investment Development Ltd	Hangzhou	Hangzhou Zhejiang	System integration	80.00	-	Business combination not involving enterprises under common control
Hangzhou Hikrobot Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Hangzhou Hikauto Technology Co., Ltd. ("Hangzhou Auto Technology")	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Hangzhou Hikvision Communication Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	70.00	-	Establishment
Hangzhou Microimage Sensing	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Hikvision Turkey Technology And Security Systems Commerce Corporation	Turkey	Istanbul	Sales	100.00	-	Establishment
Hikvision Colombia SAS	Columbia	Santa Fe Bogota	Sales	100.00	-	Establishment
Hikvision Kazakhstan limited liability partnership	Kazakhstan	Astana	Sales	100.00	-	Establishment
Secure Holding Limited (Note 2)	British	Sheffield	Manufacture	-	100.00	Business combination not involving enterprises under common control
Pyronix Limited	British	Sheffield	Manufacture	-	100.00	Business combination not involving enterprises under common control
Microwave Solutions Limited	British	Sheffield	Manufacture	-	100.00	Business combination not involving enterprises

News	Name Location of Place of registration Nature of business		Natura of husiness	Shareholdin	ng ratio (%)	Acquisition
Name	operation	I face of registration	Nature of business	Direct	Indirect	Method
						under common control
Hikvision Hungary Limited	Hungary	Hungary	Sales	-	100.00	Establishment
Hikvision New Zealand Limited	New Zealand	Auckland	Sales	-	100.00	Establishment
Urumqi HaiShi Xin'An Electronic Technology Co., Ltd.	Urumqi	Urumqi, Xinjiang	Construction	-	90.00	Establishment
Hangzhou Ximu Intelligent Technology Co., Ltd.	Hangzhou	Hangzhou, Zhejiang	Manufacture	-	60.00	Business combination involving enterprises under common control
LLC Hikvision Tashkent	Uzbekistan	Tashkent	Sales	100.00	-	Establishment
Hikvision Kenya (Pty) Ltd.	Kenya	Kenya	Sales	-	100.00	Establishment
Hangzhou Auto Software	Hangzhou	Hangzhou, Zhejiang	Technology Development	-	60.00	Establishment
Hangzhou Haikang Intelligent Technology Co., Ltd.	Hangzhou	Hangzhou, Zhejiang	Technology Development	-	60.00	Establishment
Wuhan Hikstorage Technology Co., Ltd.("Wuhan Hikstorage")	Wuhan	Wuhan Hubei	Technology development	60.00	-	Establishment
Chengdu Hikvision Digital Technology Co., Ltd.	Chengdu	Chengdu Sichuan	Technology development	100.00	-	Establishment
MoYuHaiShi Electronic Technology Co., Ltd.	Hetian	Hetian Xinjiang	Construction	-	85.00	Establishment
Hangzhou EZVIZ Software Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment
PiShan HaiShi YongAn Electronic Technology Co., Ltd.	Hetian	Hetian Xinjiang	System integration	-	90.00	Establishment
Henan Haikang Hua'an BaoQuan Electronics Co., Ltd.	Zhengzhou	Zhengzhou Henan	Construction	93.86	-	Establishment
Hikvision Czech S.R.O.	Czech	Czech	Sales	-	100.00	Establishment
Hikvision (Malaysia) SDN. BHD	Malaysia	Malaysia	Sales	-	100.00	Establishment
Hikvision Deutschland GmbH	Germany	Germany	Sales	-	100.00	Establishment
Hikvision Xi'an Xueliang Construction Project Management Co., Ltd.	Xi'an	Xi'an Shanxi	Construction	-	99.00	Establishment
Luo Pu District HaiShi Ding Xin Electronic Technology Co., Ltd.	Hetian	Hetian Xinjiang	System integration	-	90.00	Establishment
Yu Tian HaiShi Mei Tian Electronic Technology Co., Ltd.	Hetian	Hetian	System integration	-	98.00	Establishment

News	Name Location of Place of registration Nature of business		Natura of business	Shareholdin	g ratio (%)	Acquisition
Name	operation		Nature of business	Direct	Indirect	Method
		Xinjiang		100.00		<b>D</b> . 1111
Xi'An Hikvision Digital Technology Co., Ltd.	Xi'An	Xi'an Shanxi	Technology development	100.00	-	Establishment
Wuhan Hikvision Technology Co., Ltd.	Wuhan	Wuhan Hubei	Technology development	100.00	-	Establishment
Wuhan Hikvision Science and Technology Co., Ltd.	Wuhan	Wuhan Hubei	Sales	100.00	-	Establishment
Wuhan Hiksafety Technology Co., Ltd.	Wuhan	Wuhan Hubei	Sales	-	60.00	Establishment
Hangzhou Hikimaging Technology Co., Ltd.	Hangzhou	Hangzhou, Zhejiang	Technology development	60.00	-	Establishment
Hikvision Mexico S.A.de C.V.	Mexico	Mexico	Sales	-	100.00	Establishment
Guizhou Hikvision Transportation Big Data Co., Ltd.	Guiyang	Guiyang, Guizhou	Technology development	55.00	-	Establishment
Xinjiang CET Yihai Information Technology Co., Ltd.	Urumqi	Urumqi, Xinjiang	System integration	60.00	-	Establishment
Hikvision Panama Commercial S.A	Panama	Panama	Sales	-	100.00	Establishment
Hikvision Pakistan (SMC-Private) Limited	Pakistan	Pakistan	Sales	-	100.00	Establishment
Hikvision Peru Closed Stock Company	Peru	Peru	Sales	95.00	5.00	Establishment
Hikvision Technology Israel Co., Ltd.	Israel	Israel	Sales	-	100.00	Establishment
Nanjing Hikvision Digital Technology Co., Ltd.	Nanjing	Nanjing, Jiangsu	Sales	100.00	-	Establishment
Shijiazhuang Hikvision Technology Co., Ltd.	Shijiazhuang	Shijiazhuang Hebei	Technology development	100.00	-	Establishment
Zhengzhou Hikvision Digital Technology Co., Ltd.	Zhengzhou	Zhengzhou Henan	Sales	100.00	-	Establishment
Hikvision Central America S.A.	Panama	Panama	Sales	-	100.00	Establishment
Hikvision West Africa Limited	Nigeria	Nigeria	Sales	94.00	6.00	Establishment
Hikvision Technology Egypt JSC	Egypt	Egypt	Sales	-	100.00	Establishment
EZVIZ Technology (Note 5)	Hangzhou	Hangzhou Zhejiang	Sales	-	60.00	Business combination of enterprises under the same control
Hangzhou Kuangxin Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	80.00	-	Business combination of enterprises not under the same control
Hikvision Digital Technology (Shanghai) Co., Ltd.	Shanghai	Shanghai	Technology development, sales	100.00	-	Establishment
Nanchang Hikvision Digital Technology Co., Ltd.	Nanchang	Nanchang Jiangxi	Technology development	100.00	-	Establishment

N	Location of	Place of registration	Nature of husiness	Nature of business Shareholding ratio (%)		Acquisition
Name	operation		Nature of business	Direct	Indirect	Method
Zhejiang Hiksafety Technology Co., Ltd.	Jiangshan	Jiangshan Zhejiang	Technology development	-	60.00	Establishment
Zhenping County Haikang Juxin Digital Technology Co., Ltd.	Zhenping	Zhenping Henan	System integration	-	90.00	Establishment
Hefei Hikvision Digital Technology Co., Ltd.	Hefei	Hefei Anhui	Technology development	100.00	-	Establishment
Tianjin Hikvision Information Technology Co., Ltd.	Tianjin	Tianjin	Technology development	100.00	-	Establishment
Fuzhou Hikvision Digital Technology Co., Ltd.	Fuzhou	Fuzhou Fujian	System integration	100.00	-	Establishment
Anhui Hikvision Urban Operation Service Co., Ltd.	Xuancheng	Xuancheng Anhui	System integration	-	100.00	Establishment
Zhejiang Haikang Urban Service Co., Ltd. (Note 4)	Ningbo	Ningbo Zhejiang	Technology development	70.00	-	Establishment
Guangzhou Hikvision Technology Co., Ltd. (Note 2)	Guangzhou	Guangzhou Guangdong	Technology development	100.00	-	Establishment
Hangzhou Hikfire Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
PT. Hikvision Technology Indonesia	Indonesia	Indonesia	Sales	-	100.00	Establishment
EZVIZ International Limited	Hongkong	Hongkong China	Sales	-	60.00	Establishment
Hikvision Technologies S.R.L.,	Romania	Romania	Sales	-	100.00	Establishment
Hikvision Azerbaijan Limited Liability	Azerbaijan	Azerbaijan	Sales	-	100.00	Establishment
Hikvision IOT (Thailand) CO.,LTD.	Thailand	Thailand	Sales	-	100.00	Establishment
Hikvision Japan K.K.	Japan	Japan	Sales	-	100.00	Establishment
Hikvision Argentina S.R.L.	Argentina	Argentina	Sales	95.00	5.00	Establishment
Hangzhou Hikstorage	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment
Hangzhou Rayin Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Kunming Hikvision Digital Technology Co., Ltd.	Kunming	Kunming Yunnan	Sales	100.00	-	Establishment
Hangzhou Microimage Software	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment
Hangzhou Microimage Intelligent Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment
Jinan Hikvision Digital Technology Co., Ltd.	Jinan	Jinan Shandong	Sales	100.00	-	Establishment

For the reporting period from January 1st 2021 to December 31th 2021

N	Location of	Place of registration	ace of registration Nature of business	Shareholdir	ng ratio (%)	Acquisition
Name	operation	Flace of Tegistration	Nature of business	Direct	Indirect	Method
Hikvision Morocco LLC	Morocco	Morocco	Sales	-	100.00	Establishment
EZVIZ Europe B.V.	Netherland	Netherland	Sales	-	60.00	Establishment
BK Grupė UAB	Lithuania	Lithuania	Sales	-	100.00	Business combination of enterprises not under the same control
BK EESTI AKTSIASELTS	Estonia	Estonia	Sales	-	100.00	Business combination of enterprises not under the same control
SIA "BK Latvia"	Latvia	Latvia	Sales	-	100.00	Business combination of enterprises not under the same control
Shanghe Smart City	Ji'nan	Ji'nan	System integration	-	95.00	Establishment
Chongqing EZVIZ	Chongqing	Chongqing	Manufacture	-	60.00	Establishment
Robotic Automation	Hangzhou	Hangzhou Zhejiang	Manufacture	-	60.00	Establishment
Hikvision Chile SpA	Chile	San Diego	Sales	100.00	-	Establishment
Haina Yuzhi Fund	Hangzhou	Hangzhou Zhejiang	Sales	66.67	-	Establishment
Daishan Hailai (Note 6)	Zhoushan	Zhoushan Zhejiang	Technology development and sales	66.60	-	Business combination of enterprises not under the same control
Syscom MX (Note 7)	Mexico	Mexico	Sales	-	51.00	Business combination of enterprises not under the same control
Epcom MX (Note 7)	Mexico	Mexico	Sales	-	51.00	Business combination of enterprises not under the same control

Note 1: Fuyang Baotai is a subsidiary controlled by Hangzhou System, who holds 51.00% equity interests. According to the Company's Articles of Association, Hangzhou System Company can control the major financial and operating decision-making matters of Fuyang Baotai, and the dividend ratio in this company is 50.00%.

Note 2: The business licenses of Hikvision Joint-Stock Company, Hundure Technology (Shanghai) Co., Ltd., Secure Holding Limited and Guangzhou Hikvision Technology Co., Ltd. have been cancelledin 2021.

Note 3: In August 2021, the Group redeemed 2% of the Company's shares held by China Development Bank Fund in Hangzhou Electronics. After the equity transfer was completed, the Group's shareholding in Hangzhou Electronics was changed to 73.30%, and China Development Bank Fund held 26.70% of the shares. Please refer to Note (V) 33 for details.

Unit: RMB

#### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31th 2021

Note 4:Hangzhou EZVIZ Network Ltd. was renamed Hangzhou EZVIZ Network Co., Ltd. in 2021 due to the completion of shareholding reform; Ningbo Haikang Parking System Operation Co., Ltd. was renamed Zhejiang Haikang Urban Service Co., Ltd. in 2021.

Note 5: The Group controlled EZVIZ Technology through the entrusted management agreement from April 2019 to March 2021, and terminated the entrusted management agreement on March 27<sup>th</sup> 2021, and no longer exercised the actual management right of EZVIZ Technology. From March 27<sup>th</sup> 2021, the Group no longer controlled EZVIZ Technology. Please refer to Note (VI) 2 for details.

Note 6: The Group included "Daishan Hailai" in the scope of the consolidated financial statements during the reporting period. Please refer to Note (VI) 1 for details.

Note 7: Hikvision Singapore Pte. Ltd., a wholly-owned subsidiary of the Group, acquired 51.00% equity in Syscom MX and Epcom MX through cash in 2021. Please refer to Note (VI) 1 for details.

## 2. During the current reporting period, the Group did not have any changes in the share of owners' equity in subsidiaries and still controls the transactions of subsidiaries.

### 3. Equity in Joint Ventures or Associates

(1) Aggregated financial information of insignificant joint-ventures and associates

	Closing balance / Amount for 2021	Opening balance / Amount for 2020
Associates:		
The aggregate carrying amount of investments in associates	235,962,431.82	193,646,038.77
The aggregate amount of the following items calculated based on the Company's equity share percentage of the associates		
- Net income (loss)	30,316,393.05	(5,199,282.72)
- Other comprehensive income	-	-
Net income (loss) and total comprehensive income (loss)	30,316,393.05	(5,199,282.72)
Joint Ventures:		
Total investment book value	746,203,114.63	670,380,671.46
The sum of the following items calculated according to the shareholding ratio		
- Net income	83,820,888.13	11,560,671.46
- Other comprehensive income	-	-
- Net income (loss) and total comprehensive income	83,820,888.13	11,560,671.46

### Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>th</sup> 2021

The Group uses the equity method to account for the aforementioned associates and joint ventures.

## (2) Unrecognized commitments related to investment in joint ventures

Unit: 000 RMB

Joint Venture	Capital Commitment (Note)	
Zhejiang City Digital Technology Co., Ltd.	11,500.00	
Shenzhen Hikvision Urban Service Operation Co., Ltd.	12,000.00	
Guangxi Haishi Urban Operation Management Co., Ltd.	11,000.00	

Note: The above capital commitments are the capital amounts that the Group has subscribed but not paid in to the above joint ventures.

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

# **VIII. Risks Associated with Financial Instrument**

The Group's principal financial instruments include cash and bank balances, other non-current financial assets, notes receivable, accounts receivable, receivables for financing, other receivables, long-term receivables, borrowings, notes payable, accounts payable, other payables, part of the other current liabilities, lease liabilities, long-term payables, other non-current liabilities(except for contract liabilities), derivative financial instruments, etc. Details of these financial instruments are set out in Note (V). Below are the risks associated with such financial instruments and the risk management policies adopted by the Group to mitigate such risks. The management of the Group manages and monitors such risk exposures to ensure such risks are contained within a prescribed scope.

## 1. Classification of Financial Instruments

Unit: RMB

Items	Closing balance of the current reporting period	Opening balance of the current year (restated)	
Financial assets:			
Measured at fair value through current profit and loss			
Held –for-trading financial assets	34,320,010.83	22,679,846.77	
Other non-current financial assets	438,724,172.22	491,939,067.27	
Measured at fair value through other comprehensive			
Receivables for financing	1,316,035,122.06	1,959,601,195.25	
Measured at amortized cost			
Cash and bank balances	34,721,870,931.36	35,459,729,108.27	
Notes receivable	1,522,760,905.30	1,303,252,705.19	
Accounts receivable	26,174,773,100.42	22,056,067,917.79	
Other receivables	359,620,445.88	519,026,062.82	
Long-term receivables	613,067,944.97	485,746,490.32	
Non-current assets due within one year	975,960,437.14	850,871,579.78	

Items	Closing balance of the current reporting period	Opening balance of the current year (restated)
Financial liabilities		
Measured at fair value through current profit and loss		
Held-for-trading financial liabilities	4,062,317.57	7,405,771.15
Measured at amortized cost		
Short-term borrowings	4,074,962,469.97	3,999,246,634.59
Notes payable	1,339,998,383.34	1,036,920,229.85
Accounts payable	15,889,694,981.12	13,593,884,790.19
Other payables	1,830,626,583.03	1,525,053,355.95
Non-current liabilities due within one year	596,915,360.58	3,644,798,414.28
Other current liabilities	511,611,642.53	560,959,368.73
Long-term borrowings	3,284,371,642.52	1,961,167,761.30
Lease liabilities	317,951,879.21	230,055,273.70
Long-term payables	9,009,331.50	16,542,466.08
Other non-current liabilities(excluding contract liabilities)	511,594,361.52	560,959,368.74

Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

The Group adopts sensitivity analysis techniques to analyze the possible effects of rational and probable changes in risk variables to profit or loss for the period or to the interests of shareholders. Since risk variables seldom change on a standalone basis, while the correlation between variables may have significant influence to the ultimate amount of change effected by the change in a single risk variable, the analysis below is based on the assumption that the changes in each variable occurred separately.

## 2. Objectives and Policies of Risk Management

The Group engages in risk management with the aim of achieving an appropriate balance between risk and return, where the negative effects of risks against the Group's operating results are minimized, in order to maximize the benefits of shareholders and other stakeholders. Based on such objective in risk management, the underlying strategy of the Group's risk management is to ascertain and analyze all types of risks exposures of the Group, establish appropriate risk tolerance thresholds, carry out risk management procedures and perform risk monitoring on all kinds of risks in a timely and reliable manner, thus containing risk exposures within a prescribed scope.

## 2.1 Market risks

## 2.1.1 Foreign exchange risks

Foreign exchange risks refer to the risk that losses will occur because of changes in foreign exchange rates. The Company is primarily exposed to risks relating to the currencies such as USD, EUR and etc. The Group's subsidiaries in the mainland of China whose procurement, sales and financing are denominated in RMB, USD and EUR. Other principal activities are settled in RMB. The Group's subsidiaries in Hong Kong and outside China are principally engaged in procurement, sales, financing and other major business activities in local currencies such as USD, EUR, GBP, INR, and etc.

As of December 31<sup>st</sup> 2021, except for monetary items of foreign currencies set out in Note (V) 62, the Group mainly adopted the functional currency of each of its subsidiary to present the balance of its assets and liabilities. The foreign exchange risks arising from assets and liabilities denominated in USD and EUR (which has been converted into RMB) as follows may generate significant impact on the operating results of the Group.

Currencies	Assets		Liabilities	
Currencies	Closing balance	Opening balance	Closing balance	Opening balance
USD	2,310,527,721.21	7,122,984,916.82	1,993,012,472.17	1,886,490,280.88
EUR	2,510,521,255.35	1,480,297,345.67	1,521,742,991.23	3,284,414,031.21

The Group has been paying close attention to the effect of fluctuation in exchange rate on the foreign exchange risks of the Group, and has purchased various financial derivative instruments, such as forward foreign exchange contracts, foreign exchange options contracts, interest rate swap contracts and etc., to mitigate the foreign exchange risk exposure.

## Sensitivity analysis on exchange rate risk

With other variables unchanged, the exchange rate might float within a reasonable range, and has the following beforetax effect on profit or loss and shareholders' equity for the current period:

Unit: RMR
For the reporting period from January  $1^{\,\text{st}}$  2021 to December  $31^{\,\text{st}}$  2021

				Unit: RMB	
		2021		2020	
Change in foreign exchange rates	Effect on profit	Effect on shareholders' equity	Effect on profit	Effect on shareholders' equity	
5% appreciation of USD against functional currency	15,875,762.45	15,875,762.45	261,824,731.80	261,824,731.80	
5% depreciation of USD against functional currency	(15,875,762.45)	(15,875,762.45)	(261,824,731.80)	(261,824,731.80)	
5% appreciation of EUR against functional currency	49,438,913.21	49,438,913.21	(90,205,834.28)	(90,205,834.28)	
5% depreciation of EUR against functional currency	(49,438,913.21)	(49,438,913.21)	90,205,834.28	90,205,834.28	

## 2.1.2. Interest rate risk

The risk of changes in cash flow of financial instruments due to changes in interest rates exposed to the Group are primarily related to bank borrowings bearing floating interest rate and bank deposits bearing floating interest rate.

At the end of the current reporting period, the amount of borrowings of the Group bearing floating interest rate is not significant, and the risk of changes in cash flow of financial instruments due to changes in interest rates is expected to be insignificant.

The Group expects that the risk exposure of cash flow generated from bank deposits bearing floating interest rate is insignificant.

The Group determines the relative proportion of fixed interest rate contracts and floating interest rate contracts based on the prevailing market environment. The Group's interest-bearing debts bearing floating interest rates were mainly RMB-denominated PPP pledged long-term borrowing contracts with an amount of RMB 1,455,221,540.20 (Note (V) 33) (December 31<sup>st</sup> 2020: RMB-denominated PPP pledged long-term borrowings with an amount of RMB 1,556,927,316.08 (Note (V) 33)).

The headquarter finance department of the Group continuously monitors the level of interest rate of the Group. Rising interest rates will increase the cost of newly incurred interest-bearing debts and the Group's interest expenses on outstanding interest-bearing debts with floating interest rates, and have a significant adverse impact on the financial performance of the Group. The management team would make adjustments on a timely basis based on the latest market conditions, including arrangements for interest rate swaps to reduce interest rate risk. As at December 31<sup>st</sup> 2021, the interest rate swap arrangements of the Group are detailed in Note (V) 2.

### 2.1.3. Other price risks

The Group's price risk mainly arises from investments in held-for-trading equity instruments and derivative financial instruments. Held-for-trading equity instrument investments are all investments in unlisted held-for-trading equity instruments.

The Group is exposed to price risk due to the holding of financial assets measured at fair value. The fair value of certain financial instruments is determined by the general pricing model based on discounted future cash flow method or other valuation techniques, while the valuation techniques are based on certain valuation assumptions. Therefore, the valuation results are highly sensitive to valuation assumptions. However, at the end of the current reporting period, the amount of investment in held-for-trading equity instruments and derivative financial instruments is not significant, and the risk exposure due to changes in price of financial instruments as a result of change in valuation assumptions is low, accordingly, no sensitivity analysis is conducted.

### 2.2 Credit Risk

As of December 31<sup>st</sup> 2021, the largest credit risk exposure that may result in financial losses of the Group is mainly due to the loss of the Group's financial assets arising from the failure of the counterparty to perform its obligations, including: cash and bank balances (Note (V) 1), notes receivable (Note (V) 3), accounts receivable (Note (V) 4), receivables for



For the reporting period from January 1st 2021 to December 31st 2021

financing (Note (V) 5), other receivables (Note (V) 7), non-current assets due within one year (Note (V) 10), long-term receivables (Note (V) 12), etc., and derivative financial assets that are not included in the scope of impairment assessment and are measured at fair value through current profit or loss (Note (V) 2). As of the balance sheet date, the book value of the Group's financial assets represents its maximum credit risk exposure.

In order to reduce credit risk, the Group has formed a team to determine the credit limit, conduct credit approval, and implement other monitoring procedures to ensure that necessary measures are taken to recover over-due debt. In addition, the Group reviews the recovery of financial assets on each balance sheet date to ensure that sufficient credit loss provisions are made for relevant financial assets. Therefore, the management of the Group believes that the credit risk exposure of the Group has been reduced significantly.

The credit risk on cash and bank balances of the Group is low as they are deposited with banks with high credit ratings.

For accounts receivable, contract assets and long-term receivables, the Group has put in place relevant policies to control credit risk exposure. The Group assesses credit quality of customers and sets corresponding credit period based on the customer's financial status, the possibility of obtaining guarantees from third parties, credit history and other factors such as current market conditions. The Group will regularly monitor the credit history of its customers. For customers with poor credit history, the Group takes various measures, such as written payment reminders, shorten or cancel the credit period, to ensure that the overall credit risk of the Group is maintained in a controllable range. For accounts receivable and contract assets, the Group uses a simplified method, that is, to measure the loss provision based on the amount equivalent to the expected credit loss for the entire duration. For details of the relevant expected credit loss measurement, see (Note (V) 4 & Note (V) 9). For long-term receivables, the Group calculates the expected credit loss based on the expected credit loss measurement, see (Note (V) 12).

The Group's notes receivable and receivables for financing are mainly bank acceptance notes and commercial acceptance notes with high credit ratings of the counterparties, which the Group does not consider to be subject to significant credit risk and will not incur any material loss due to default by the counterparties.

For other receivables, the Group regularly monitors the debtor's credit history. For debtors with poor credit history, the Group takes various measures such as written payment reminders to ensure that the Group's overall credit risk is maintained in a controllable range. For other receivables, the Group calculates the expected credit loss based on the expected credit loss ratio in the next 12 months or the entire duration based on the default risk exposure. For details of the relevant expected credit loss measurement, see (Note (V) 7).

The Group's risk exposure is distributed among multiple contractors and multiple customers, so the Group has no significant credit concentration risk.

### 2.3. Liquidity risk

The Group maintains and monitors a level of cash and cash equivalents deemed adequate by the management to meet the operation needs of the Group and to reduce the effect of cash flow movements when managing liquidity risk. The management of the Group monitors the usage of bank borrowings, and ensures compliance with borrowing agreements.

For the reporting period from January  $1^{st}$  2021 to December  $31^{st}$  2021

According to the term to maturity of non-discounted and remaining contract obligations, the financial liabilities held by the Group are analyzed as below:

				Unit: RMI			
December 31st 2021							
	Within one year	1-5 years	More than 5 years	Total			
Non-derivative financial liabilities							
Short-term borrowings	4,144,481,304.54	-	-	4,144,481,304.54			
Notes payable	1,339,998,383.34	-	-	1,339,998,383.34			
Accounts payable	15,889,694,981.12	-	-	15,889,694,981.12			
Other payables	1,830,626,583.03	-	-	1,830,626,583.03			
Other current liabilities	511,611,642.53	-	-	511,611,642.53			
Other non-current liabilities	-	511,594,361.52	-	511,594,361.52			
Long-term borrowings (including those due within one year)	439,797,310.64	2,585,483,339.61	1,123,671,498.12	4,148,952,148.37			
Lease liabilities (including those due within one year)	267,240,140.55	287,604,669.92	47,977,039.33	602,821,849.80			
Long-term payables (including those due within one year)	1,994,152.05	10,205,847.95	-	12,200,000.00			
Derivative financial instruments							
Forward foreign exchange contracts, foreign exchange option contracts and interest rate swap contracts- settled in the gross amount							
- Cash inflow	1,570,626,151.48	16,216,056.49	-	1,586,842,207.97			
- Cash outflow	1,544,987,718.59	11,441,895.59	-	1,556,429,614.18			
- Net cash inflow	25,638,432.89	4,774,160.90	-	30,412,593.79			

## IX. Fair Value Disclosure

## 1. The Financial Assets and Financial Liabilities Measured at Fair Value at the end of the Reporting Period

Unit: RMB **Closing fair value** Items Level 1 Level 2 Level 3 Total I. Continuous fair value 1,346,292,815.32 438,724,172.22 1,785,016,987.54 measurement (I) Financial assets measured at fair 34,320,010.83 438,724,172.22 473,044,183.05 value through profit and loss 1. Held-for-trading Financial 34,320,010.83 34,320,010.83 Assets



For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

Items		Closing f	air value			
items	Level 1	Level 2	Level 3	Total		
- Derivative financial assets	-	34,320,010.83	-	34,320,010.83		
2. Other non-current financial assets	-	-	438,724,172.22	438,724,172.22		
(II) Receivables for financing	-	1,316,035,122.06	-	1,316,035,122.06		
Total assets measured continuously at fair value	-	1,350,355,132.89	438,724,172.22	1,789,079,305.11		
(III) Financial liabilities measured at fair value through profit and loss		4,062,317.57	-	4,062,317.57		
1. Held-for-trading Financial Liabilities	-	4,062,317.57	-	4,062,317.57		
- Derivative financial liabilities	-	4,062,317.57	-	4,062,317.57		
Total liabilities measured continuously at fair value	-	4,062,317.57	-	4,062,317.57		

## 2. Information on the Estimation Technique and Important Parameters Adopted as for Continuous Level 2 Fair Value Measurement Items

	Fair value at December 31 <sup>st</sup> 2021	Estimation technique	Inputs	
Forward Foreign Exchange Contracts, Foreign Exchange Options Contracts and Interest Rate Swap Contracts (Assets)	34,320,010.83	Discounted cash flow approach	Exchange rate or interest rate Discounted rate that reflects the credit risk of counterparty	
Forward Foreign Exchange Contracts (Liabilities)	(4,062,317.57)	Discounted cash flow approach	Forward exchange rate Discounted rate that reflects the credit risk of counterparty	
Receivables for financing	1,316,035,122.06	Discounted cash flow approach	Discounted rate that reflects the credit risk of counterparty	

#### 3. The Third Level of Fair Value Measurement Item, the Valuation Techniques and Important Parameters Used Unit: RMB

Items	Fair value on December 31 <sup>st</sup> 2021	Valuation techniques	Inputs
Other non-current financial assets Investment in equity instruments of private companies	438,724,172.22	Market approach /Income approach	Comparable public companies' PB (price/book value) ratio within the same industry /Future cash flows, Discount rate

## 4. The Third Level of Fair Value Measurement Item, Adjustment Information between the Opening and Closing Book Value

	Unit: RMB
Other non-current financial assets	Amount
Book value on January 1st 2021	491,939,067.27
Increase in the current reporting period	-
Decrease in the current reporting period	-
Changes in fair value booked into profit and loss during the current reporting period	(53,214,895.05)
Book value on December 31 <sup>st</sup> 2021	438,724,172.22

The total amount included in profit or loss in 2021 includes unrealized losses of RMB 53,214,895.05 (2020: RMB 69,478,784.83) related to financial assets measured at fair value at the end of the current reporting period, and such gains or losses are included in the gains or losses from changes in fair value; the realized gains of financial assets measured at fair value at the end of the current reporting period which were included in investment income was RMB 115,644,801.97 (2020: RMB 150,000,000.00).

# 5. Items easured at continuous fair value. There were no transfers between levels for the current reporting period. There was no estimation technique change for the current reporting period

### 6. Fair Values of Financial Assets and Financial Liabilities that not Measured at Fair Value

The Group's management team believes that financial assets and financial liabilities measured at amortized cost mainly include cash and bank balances, notes receivable, accounts receivable, other receivables, non-current assets due within one year, long-term receivables, short-term borrowings, notes payable, accounts payable, other payables, other current liabilities (other than Output VAT to-be-transferred), non-current liabilities due within one year, long-term borrowings, long-term payables and other non-current liabilities, etc., carrying value of which approximates to its fair value.

## X. Related Party Relationships and Transactions

## 1. Information on Parent Company of the Company

Name	Place of registration	Nature of business	Registered capital	Shareholding ratio of parent company in the Company (%)	Percentage of voting rights of parent company to the Company (%)
China Electronics Technology HIK Group Co., Ltd. (CETHIK)	Hangzhou, Zhejiang	Industrial investment	RMB 660 million	36.46	36.46

The ultimate controlling party of the Company is China Electronics Technology Group Co., Ltd. ("CETC").

### 2. Information on the Subsidiaries of the Company

For details of the subsidiaries of the Company, see Note (VII).

### 3. Information on the Joint Ventures and Associated Companies of the Company

Joint ventures and associates that had related party transactions with the Group in the current reporting period, or in the prior periods and formed balances are as follows:

Name of the associates or joint ventures	Relationship with the Company
Wuhu Sensor Technology Co., Ltd. (Wuhu Sensor Tech) and its subsidiaries	Associated company
Maxio Technology (Hangzhou) Co., Ltd. and its subsidiaries (Maxio Technology) and its subsidiaries	Associated company
Zhiguang Hailian Big Data Technology Co., Ltd. (Zhiguang Hailian) and its subsidiaries	Associated company
Jiaxin Haishi JiaAn Zhicheng Technology Co., Ltd. (Haishi JiaAn)	Associated company
Qinghai Qingtang Big Data Co., Ltd. (Qingtang Big Data)	Associated company
Sanmenxia Xiaoyun Vision Technology Co., Ltd. (Xiaoyun Vision Technology)	Associated company
Daishan Hailai	(Note)
Guangxi Haishi City Operation Management Co., Ltd. (Guangxi Haishi) and its subsidiaries	Joint venture
Shenzhen Hikvision Urban Service Operation Co., Ltd. (Shenzhen Urban Service) and its subsidiaries	Joint venture
Xuzhou Kangbo City Operation Management Service Co., Ltd. (Xuzhou Kangbo)	Joint venture
Yunnan Yinghai Parking Service Co., Ltd. (Yunnan Yinghai)	Joint venture
Zhejiang City Digital Technology Co., Ltd. (Zhejiang City Digital Technology)	Joint venture
Zhejiang Haishi Huayue Digital Technology Co., Ltd. (Haishi Huayue)	Joint venture



For the reporting period from January  $1^{\,\text{st}}$  2021 to December  $31^{\,\text{st}}$  2021

Note: During the period from January 1<sup>st</sup> 2021 to June 30<sup>th</sup> 2021, Daishan Hailai waswas a joint venture of the Company. On June 30<sup>th</sup> 2021, the Company included Daishan Hailai in the scope of the consolidated financial statements, see Note (VI) 1 for details.

## 4. Information on Other Related Parties

Name	Relationship
Gong Hongjia	Major shareholder and director of the Company that holds more than 5% of the share of the Company
Shanghai Fullhan Microelectronics Co., Ltd. (Shanghai Fullhan Micro) and its subsidiaries	Gong Hongjia or his relative(s) serve(s) as the director(s)
Shenzhen Wanyu Security Service Technology Co., Ltd. (Shenzhen Wanyu Security Service) and its subsidiaries	The Group's senior management serve(s) as director(s) of this company
Confirmware Technology(Hangzhou) Co., Ltd. (Hangzhou Confirmware)	The Group's senior management serve(s) as director(s) of this company
Zhejiang Fast Line data fusion Information Technology Co.,Ltd (Zhejiang Fast Line data fusion) and its subsidiaries	The Group's senior management serve(s) as director(s) of this company
Chengdu Guoshengtianfeng Network Technology Co., Ltd. (Chengdu Guoshengtianfeng) and its subsidiaries	The Group's senior management serve(s) as director(s) of this company
Ruihua Innovation Management Research Institute (Hangzhou) Co., Ltd. (Ruihua Innovation)	The Group's independent director(s) serve(s) as director(s) of this company
INESA (Group) Co., Ltd. (INESA) and its subsidiaries	The Group's supervisor(s) serve(s) as director(s) of this company
Aurotek Corporation. (Aurotek) and its subsidiaries	The Group's former independent director(s) serve(s) as director(s) of this company (Note 1)
Subsidiaries of CETC (Note 2)	Under common control of the ultimate controlling party of the Company

Note 1: Due to the departure of the independent director of the Group in 2021, 2021 is the first year of him/her departure, therefore, Aurotek Corporation was still recognized as a related party of the Group in 2021.

Note 2: Subsidiaries of CETC, excluding Hikvision and its subsidiaries.

## 5. Related Party Transactions

(1) Related party transactions regarding sales and purchases of goods, provision of services and receiving services

### Purchase of commodities / receiving of services:

Turchase of commountes / receiving	5 of set vices.		Unit: RME
Related party	Transaction type	Amount occurred in 2021	Amount occurred in 2020
Subsidiaries of CETC	Purchase of materials and receiving of services	1,996,000,573.93	826,842,233.14
Shanghai Fullhan Micro and its subsidiaries	Purchase of materials and receiving of services	1,073,447,072.07	243,902,272.09
Maxio Technology and its subsidiaries	Purchase of materials and receiving of services	259,171,002.11	20,353,951.20
Wuhu Sensor Tech	Purchase of materials and receiving of services	120,154,019.26	61,712,356.51
Aurotek Corporation and its subsidiaries	Purchase of materials and receiving of services	3,277,839.15	-
Yunnan Yinghai	Purchase of materials and receiving of services	94,339.62	-
Chengdu Guoshengtianfeng and its subsidiaries	Purchase of materials and receiving of services	74,716.98	-
Shenzhen Urban Service and its subsidiaries	Purchase of materials and receiving of services	31,026.60	357,000.00
Ruihua Innovation	Purchase of materials and receiving of services	3,564.36	-
Zhejiang City Digital Technology	Purchase of materials and receiving of services	1,811.32	-
Haishi Huayue	Purchase of materials and receiving of services	-	1,743,775.22



For the reporting period from January 1st 2021 to December 31st 2021

Related party	Transaction type	Amount occurred in 2021	Amount occurred in 2020
Zhiguang Hailian and its subsidiaries	Purchase of materials and receiving of services	-	135,782.26
Total		3,452,255,965.40	1,155,047,370.42

## Sales of commodities / rendering of services:

Related party	Transaction content	Amount occurred in 2021	Amount occurred in 2020
Subsidiaries of CETC	Sales of products and rendering of services	434,709,999.06	350,558,721.59
Haishi JiaAn	Sales of products and rendering of services	53,229,545.96	38,199,938.50
Zhiguang Hailian and its subsidiaries	Sales of products and rendering of services	34,122,127.77	14,374,052.45
Zhejiang City Digital Technology	Sales of products and rendering of services	22,752,048.23	13,760,843.37
Shenzhen Urban Service and its subsidiaries	Sales of products and rendering of services	20,975,222.90	46,006.90
Daishan Hailai	Sales of products and rendering of services	16,858,777.71	29,854,444.59
Guangxi Haishi and its subsidiaries	Sales of products and rendering of services	11,494,038.20	1,769,911.50
Haishi Huayue	Sales of products and rendering of services	10,976,412.61	3,685,281.81
INESA and its subsidiaries	Sales of products and rendering of services	8,315,234.00	-
Chengdu Guoshengtianfeng and its subsidiaries	Sales of products and rendering of services	7,006,078.70	-
Hangzhou Confirmware	Sales of products and rendering of services	1,217,367.24	589,159.33
Wuhu Sensor Tech and its subsidiaries	Sales of products and rendering of services	841,349.20	1,906,811.54
Qingtang Big Data	Sales of products and rendering of services	540,138.06	1,492,966.38
Zhejiang Fast Line data fusion and its subsidiaries	Sales of products and rendering of services	293,172.58	-
Xuzhou Kangbo	Sales of products and rendering of services	165,779.30	3,150,603.57
Maxio Technology and its subsidiaries	Sales of products and rendering of services	118,306.02	153,465.93
Xiaoyun Vision Technology	Sales of products and rendering of services	5,663.71	3,748,314.02
Wanyu Security and its subsidiaries	Sales of products and rendering of services	-	198,230.06
Yunnan Yinghai	Sales of products and rendering of services	-	18,259,614.17
Total		623,621,261.25	481,748,365.71

## Statement of capital deposits:

	_				Unit: RMB
Related Party	Content of related party transaction	Amount occurred in 2021	Balance at the end of the current reporting period	Amount occurred in 2020	Opening Balance
Subsidiaries of CETC	Deposit into current deposits	500,006,734.20	500,006,734.20	-	-
Subsidiaries of CETC	Deposit into fixed deposits	-	4,000,000,000.00	-	4,000,000,000.00



For the reporting period from January 1st 2021 to December 31st 2021

Related Party	Content of related party transaction	Amount occurred in 2021	Balance at the end of the current reporting period	Amount occurred in 2020	Opening Balance
Total		500,006,734.20	4,500,006,734.20	-	4,000,000,000.00

Note: For the deposit deposited by the Group with China Electronics Technology Finance Co., Ltd., the deposit interest income was RMB 80,001,932.23.

The above transactions are executed at market prices.

(2) Guaranteed by the related party

As required by the project owner, China Electronics Technology Group Co., Ltd. has provided a joint guarantee to responsibility and duties of construction projects of "Safe Chongqing, Emergency Control System Digital Construction Project", including 41 districts and counties, signed by the Group's subsidiary Chongqing Hikvision System Technology Ltd. (Chongqing System) Meanwhile, the Company, Hikvision, provides a counter guarantee to China Electronics Technology Group Co., Ltd.

#### (3) Compensation for key managers

		Unit: RMB
Item	Amount occurred in 2021	Amount occurred in 2020
Compensation for key managers	40,571,163.91	38,952,000.00

(4) Other related party transactions Sale-leaseback

Pursuant to resolution of the Company's 7<sup>th</sup> meeting of the fourth session of the Board of Directors held on December 3<sup>rd</sup> 2018, the Group's subsidiary Hangzhou Microimage Sensing signed a financial leasing contract with a subordinate company of CETC, Hangzhou Microimage Sensing will carry out sale-leaseback business of part of its self-owned equipment with the CETC's subordinate company. The new financing amount in 2019 was RMB 70 million, with lease term of 48 months, and the annual lease rate is 3.8%. On December 31<sup>st</sup> 2021, Hangzhou Microimage Sensing confirmed right-of-use assets of RMB 23,923,145.37 and lease liabilities of RMB 22,591,498.84. In 2021, the interest on lease liabilities is RMB 2,087,283.49.

Entrusted management of the interest expenditure of borrowed funds

On April 19th 2019, CETHIK signed an entrusted management agreement with the holding subsidiary of the Company, Hangzhou EZVIZ Network Ltd. ("EZVIZ Network") to entrust EZVIZ Network to exercise the actual operating management right over Hangzhou EZVIZ Technology Ltd. ("EZVIZ Technology"), and be fully responsible for the production, operation and management of EZVIZ Technology, and EZVIZ Network shall not charge fixed entrusted management fees from CETHIK while EZVIZ Network is entitled to the 100% distributable profits generated by EZVIZ Technology prior to or after the entrusted management. At the same time, EZVIZ Network shall make a payment to CETHIK as occupying fund fees at the basis of paid-in capital of EZVIZ Technology of RMB 8,000,000.00 and at an interest rate up by 1% for loans over five years in the Central Bank. In 2021, EZVIZ Network intends to terminate the entrusted management of EZVIZ Technology. In March 2021, EZVIZ Network signed the Termination Agreement of the Entrusted Management Agreement with CETHK and EZVIZ Technology, agreeing that the Entrusted Management Agreement shall be terminated on March 27<sup>th</sup> 2021. After the termination of the Entrusted Management Agreement, EZVIZ Network will no longer exercise the actual operation and management rights over EZVIZ Technology, or be responsible for the production, operation and management of EZVIZ Technology, or enjoy other rights over EZVIZ Technology as agreed in the Entrusted Management Agreement. The Group ceased to control EZVIZ Technology since March 27th 2021 and therefore ceased to include the operations of EZVIZ Technology in the scope of consolidation of the consolidated financial statements. The interest expenses on the above-mentioned capital possession incurred in the current reporting period amounts to RMB 131,659.87.

### 6. Receivables from Related Parties and Payables to Related Parties

## (1) Receivables from related parties

		Closing	balance	Opening	Unit: RMB
Item	Related Party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Accounts receivable	Subsidiaries of CETC	756,888,051.10	209,305,306.47	694,163,118.90	108,859,842.53
Accounts receivable	Haishi JiaAn	64,817,786.83	1,830,797.36	29,762,113.04	975,776.51
Accounts receivable	Zhiguang Hailian and its subsidiaries	11,797,104.73	310,298.49	9,436,662.00	111,434.71
Accounts receivable	Xiaoyun Vision Technology	9,326,361.72	1,319,097.41	10,929,211.22	412,855.37
Accounts receivable	Zhejiang City Digital Technology	9,022,181.94	102,459.57	12,427,421.59	561,604.39
Accounts receivable	Shenzhen Urban Service and its subsidiaries	5,850,573.44	287,926.66	-	-
Accounts receivable	Chengdu Guoshengtianfeng and its subsidiaries	2,504,232.29	23,633.21	-	-
Accounts receivable	Haishi Huayue	2,403,342.00	39,213.42	2,112,591.44	42,509.22
Accounts receivable	Guangxi Haishi and its subsidiaries	2,068,681.99	101,978.52	-	-
Accounts receivable	INESA and its subsidiaries	1,503,248.00	51,765.16	-	-
Accounts receivable	Wuhu Sensor Tech and its subsidiaries	821,865.40	153,442.27	823,165.40	37,207.08
Accounts receivable	Xuzhou Kangbo	517,419.71	60,722.44	786,702.90	35,558.97
Accounts receivable	Qingtang Big Data	330,000.00	13,959.00	660,000.00	29,832.00
Accounts receivable	Zhejiang Fast Line data fusion and its subsidiaries	231,399.50	2,013.17	-	-
Accounts receivable	Hangzhou Confirmware	113,381.69	3,535.91	83,150.00	981.17
Accounts receivable	Maxio Technology and its subsidiaries	-	-	45,667.50	538.88
Accounts receivable	Daishan Hailai	Not applicable	Not applicable	16,387,257.40	194,920.07
Total		868,195,630.34	213,606,149.06	777,617,061.39	111,263,060.90

Unit: RMB

Item	Deleted Derty	Closing balance		Opening balance	
Item	Related Party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Notes receivable	Subsidiaries of CETC	78,858,666.10	-	78,876,284.35	-
Notes receivable	Haishi JiaAn	5,000,000.00	-	9,147,466.00	-
Notes receivable	Zhejiang City Digital Technology	1,444,385.00	-	-	-
Notes receivable	Zhiguang Hailian and its subsidiaries	-	-	1,120,000.00	-
Total		85,303,051.10	-	89,143,750.35	-

Note: The RMB 17,267,512.00 (2020: RMB 4,000,000.00) notes receivable are the acceptance bills of which the drawer is the related party, and the former endorsers are unrelated third parties.



For the reporting period from January  $1^{\,\rm st}\,2021$  to December  $31^{\,\rm st}\,2021$ 

Item Related Party		Closing balance		Opening balance	
nem	Related Faity	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Other receivables	Subsidiaries of CETC	645,000.00	99,483.50	132,459.00	1,563.02
Other receivables	Shenzhen Urban Service and its subsidiaries	140,000.00	1,218.00	140,000.00	1,652.00
Other receivables	Haishi Huayue	104,182.74	906.39	279,452.11	3,297.53
Other receivables	Wuhu Sensor Tech and its subsidiaries	10,485.27	91.22	-	-
Total		899,668.01	101,699.11	551,911.11	6,512.55

					Unit: RMB
Item	Related Party	Closing	balance	Opening	balance
Item	Related Faity	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Long-term receivables (including those due within one year)	Subsidiaries of CETC	38,579,578.71	2,451,642.33	73,512,305.64	2,015,923.07
Long-term receivables (including those due within one year)	Yunnan Yinghai	16,992,563.72	147,251.94	21,444,096.16	253,040.33
Long-term receivables (including those due within one year)	Shenzhen Urban Service and its subsidiaries	16,408,408.03	223,709.40	-	-
Long-term receivables (including those due within one year)	Guangxi Haishi and its subsidiaries	3,818,141.12	42,188.14	-	-
Long-term receivables (including those due within one year)	Xuzhou Kangbo	441,719.03	18,684.71	1,581,135.63	29,277.25
Long-term receivables	Xiaoyun Vision Technology	-	-	2,295.00	103.73
Total		76,240,410.61	2,883,476.52	96,539,832.43	2,298,344.38

Item	Related Party	Closing balance		Opening balance	
Item	Related Farty	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Prepayments	Maxio Technology and its subsidiaries	49,300,000.00	-	-	-
Prepayments	Subsidiaries of CETC	2,705,210.05	-	4,339,675.60	-
Total		52,005,210.05	-	4,339,675.60	-

## (2) Payables to related parties

			Unit: RMB
Item	Related Party	Closing balance	Opening balance
Accounts payable	Subsidiaries of CETC	570,856,498.41	360,026,227.41
Accounts payable	Shanghai Fullhan Micro and its subsidiaries	407,876,541.15	117,676,674.67
Accounts payable	Maxio Technology and its subsidiaries	72,307,405.55	545,124.36
Accounts payable	Wuhu Sensor Tech and its subsidiaries	4,968,239.42	6,286,164.42
Accounts payable	Aurotek Corporation and its subsidiaries	1,434,619.91	-
Accounts payable	Chengdu Guoshengtianfeng and its subsidiaries	22,641.51	-
Total		1,057,465,945.95	484,534,190.86

Unit: RMB

Item	Related Party	Closing balance	Opening balance
Notes Payable	Subsidiaries of CETC	40,579,368.55	17,301,547.82
Notes Payable	Shanghai Fullhan Micro and its subsidiaries	24,314,184.13	3,648,820.00
Total		64,893,552.68	20,950,367.82

#### Unit: RMB

Item	Related Party	Closing balance	Opening balance
Contract liabilities	Subsidiaries of CETC	3,446,311.89	10,507,934.92
Contract liabilities	Hangzhou Confirmware	960,682.66	-
Contract liabilities	Zhiguang Hailian and its subsidiaries	195,416.40	57,630.00
Contract liabilities	INESA and its subsidiaries	687.00	-
Contract liabilities	Xuzhou kangbo	-	201,887.56
Contract liabilities	Daishan Hailai	Not applicable	688.00
Total		4,603,097.95	10,768,140.48

Item	Related Party	Closing balance	Opening balance
Other payables	Subsidiaries of CETC	56,252,811.73	47,056,334.07
Other payables	Qingtang Big Data	9,310,000.00	-
Other payables	Shanghai Fullhan Micro and its subsidiaries	200,000.00	100,000.00
Other payables	Wuhu Sensor Tech and its subsidiaries	52,040.00	-
Other payables	Chengdu Guoshengtianfeng and its subsidiaries	50,000.00	-
Other payables	Haishi JiaAn	33,110.00	-
Other payables	Zhejiang City Digital Technology	10,000.00	-
Other payables	Zhiguang Hailian and its subsidiaries	2,000.00	-
Total		65,909,961.73	47,156,334.07



For the reporting period from January 1st 2021 to December 31st 2021

Item	Related Party	Closing balance	Opening balance (restated)
Long-term payables (including those due within one year)Subsidiaries of CETC		-	8,000,000.00
Total		-	8,000,000.00

Unit: RMB

Item	Item Related Party Closing balance		Opening balance (restated)		
Lease liabilities (including those due within one year)	Subsidiaries of CETC	22,591,498.84	41,213,376.81		
Lease liabilities (including those due within one year)	Shenzhen Urban Service and its subsidiaries	1,074,683.57	-		
Total		23,666,182.41	41,213,376.81		

## **XI. Share-based Payments**

#### 1. Overview of Share-based Payments

### Restrictive Share Incentive Scheme

According to the *Approval of the Implementation of the Restrictive Share Incentive Scheme of Hangzhou Hikvision Digital Technology Co., Ltd.* (关于杭州海康威视数字技术股份有限公司实施限制性股票激励计划的批复) (Guo Zi Fen Pei [2012] No. 426) issued by the State-owned Assets Supervision and Administration Commission of the State Council and the *Opinion the Restrictive Share Incentive Scheme of Hangzhou Hikvision Digital Technology Co., Ltd.* (关于杭州海康 威视数字技术股份有限公司实施限制性股票激励计划的批复) (Shang Shi Bu Han [2012] No. 353) issued by China Securities Regulatory Commission, the Company convened the ninth meeting of the second session of the Board of Directors on July 25<sup>th</sup> 2012 and the first extraordinary general meeting for 2012 on August 13<sup>th</sup> 2012, whereat the Proposal Relating to the Restrictive Share Scheme (Amendments to the Draft) of the Company and Highlights was reviewed and passed. The purpose of the Share Incentive Scheme is to: further improve the Company's governance structure to establish a good and balanced value allocation system; establish a profit-sharing and restriction mechanism among shareholders, the Company and its employees, so as to provide shareholders with sustainable return; fully mobilize the positivity of core employees to support the Company in realizing its strategies and long-term sustainable development; attract and retain core employees to ensure the Company's long-term development.

The Scheme shall be effective for a term of 10 years commencing from the date of approval by general meeting of the Company, during which the Company may grant restricted shares to grantees under the Scheme. In principle, each grant should be at an interval of two years. After the expiry of the Scheme, no restricted shares could be granted to grantees under the Scheme. However, all the provisions of the Scheme remain valid to the restricted shares granted under the Scheme.

Each batch of restricted shares shall not be unlocked unless fulfilling, each time, by the Company its unlock performance criteria (including net asset yield and operating income growth rate), and by grantees' individual performance criteria simultaneously. Where, during the unlocking period, any one or more unlock criteria for the Company or individuals is or are not fulfilled, such portion of subject shares shall be cancelled. The cancelled restricted shares will be repurchased by the Company based on the grant price.

On December 23<sup>rd</sup> 2016, after consideration and approval by the general meeting, the Company granted 52,326,858 restricted shares to grantees at a grant price of RMB 12.63 per share ("2016 Share Incentive Scheme"). The Lock-up Period of the Subject Shares shall last for a period of 24 months commencing on the grant date, during which the Subject Shares granted to grantees under the scheme shall be subject to lock-up and shall not be transferable. The Unlocking Period shall be the 24 to 60 months following the grant of restricted shares (including Lock-up Period), during which grantees may, subject to unlocking conditions stipulated by the scheme being satisfied, apply for unlocking in 3 tranches: the first unlocking period shall be the 24 to 36 months following the grant date and the number of shares to be unlocked shall be 40% of the aggregate number of the Subject Shares to be unlocked shall be 30% of the aggregate number of the Subject Shares to be unlocked shall be 48 to 60 months following the grant date and the number of shares to shares of the Subject Shares granted; the third unlocking period shall be the 48 to 60 months following the grant date and the number of shares of the Subject Shares granted; the scheme following the grant date and the number of shares to be unlocked shall be the 30% of the aggregate number of the Subject Shares granted; the third unlocking period shall be the 48 to 60 months following the grant date and the number of shares to shares to be unlocked shall be the 30% of the aggregate number of shares to shares to be unlocked shall be the 30% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggregate number of shares to be unlocked shall be 50% of the aggr



For the reporting period from January 1st 2021 to December 31st 2021

to be unlocked shall be 30% of the aggregate number of the Subject Shares granted. As of December 31<sup>st</sup> 2020, all restricted shares awarded in 2016 have been closed.

On December 20<sup>th</sup> 2018, authorized by the 2<sup>nd</sup> extraordinary general meeting of 2018 and reviewed by the Board of Directors, the Company granted 121,195,458 restricted shares to grantees at a grant price of RMB 16.98 per share ("2018 Share Incentive Scheme"). The Lock-up Period of the Subject Shares shall last for a period of 24 months commencing on the grant date, during which the Subject Shares granted to grantees under the scheme shall be subject to lock-up and are not transferable. The Unlocking Period shall be the 24 to 60 months following the grant of restricted shares (including Lock-up Period), during which grantees may, subject to unlocking conditions stipulated by the scheme being satisfied, apply for unlocking in 3 tranches: the first unlocking period shall be the 24 to 36 months following the grant date and the number of shares to be unlocked shall be 40% of the aggregate number of the Subject Shares granted; the second unlocking period shall be the 36 to 48 months following the grant date and the number of shares to be unlocked shall be 30% of the aggregate number of shares to be unlocked shall be 30% of the aggregate number of shares to be unlocked shall be 30% of the aggregate number of the Subject Shares granted. The Company has completed the equity registration work in January 2019.

		Unit: share
2016 Share Incentive Scheme	2021	2020
Total of equity instruments outstanding at the beginning of the reporting period	-	21,974,740
Total of equity instruments granted during the current reporting period	-	-
Total of equity instruments vested during the current reporting period	-	21,204,645
Total of equity instruments forfeited during the current reporting period (Note)	-	770,095
Total of equity instruments outstanding at the end of the reporting period	-	-
The exercise price (ex-rights) of the outstanding Share-based payments of the Company at the end of the reporting period and the remaining period of the contract		-

Note: On December 25<sup>th</sup> 2020, pursuant to the revised *Articles of Association* and resolution of the 20<sup>th</sup> geneal meeting of 4<sup>th</sup> session of the Board, and approved by the second extraordinary general meeting of 2018, the Company repurchased and cancelled 770,095 granted and unvested restricted RMB treasury shares in cash. The Company has completed the registration procedures of equity changes as of July 2<sup>nd</sup> 2021.

		Unit: share
2018 Share Incentive Scheme	2021	2020
Total of equity instruments outstanding at the beginning of the reporting period	68,762,683	121,195,458
Total of equity instruments granted (share dividend) during the current reporting period	-	-
Total of equity instruments vested during the current reporting period	-	45,591,794
Total of equity instruments forfeited during the current reporting period (Note)	-	6,840,981
Total of equity instruments outstanding at the end of the reporting period	68,762,683	68,762,683
The exercise price (ex-rights) of the outstanding Share-based payments of the Company at the end of the reporting period and the remaining period of the contract	RMB 16.98/share & 24 months	RMB 16.98/share & 36 months

Note: On December 25<sup>th</sup> 2020, authorized by the Company's second extraordinary shareholders' meeting in 2018 and according to the resolutions and the revised *Articles of Association* of the 20<sup>th</sup> meeting of the 4<sup>th</sup> session of the Board of Directors, the Company repurchased and cancelled the granted and unvested 6,840,981 restricted RMB treasury shares in cash. The Company has completed the registration procedures of equity changes as of July 2<sup>nd</sup> 2021.



#### Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

#### Share Incentive Scheme of Staff Co-Investment in Innovative Businesses

On October 22<sup>nd</sup> 2015, Hikvision considered and approved *Management Measures for Core Staff Co-Investment in Innovative Businesses (Draft)* (hereafter referred to as "Management Measures") at the 2<sup>nd</sup> extraordinary general meeting. On March 7<sup>th</sup> 2016, representative congress of labor union of Hikvision passed Implementation *Provisions for Management Measures for Core Staff Investment in Innovative Businesses* (hereafter referred to as "Provisions"), to initiate and implement the incentive mechanism of staff co-investment (hereafter referred to as "Staff Co-Investment Plan") in innovative business subsidiaries. Staff who participate in the Staff Co-Investment Plan (hereafter referred to as "Co-Investment Staff") signed an *Entrusted Investment Agreement* with the labor union committee of Hikvision Labor Union, as a principal, shall cooperate with a trust company, which shall be a limited partner (LP) of a partnership enterprise, to establish a trust plan, and to invest trust funds into innovative business subsidiaries. (Investment Form described above is referred to as "Co-Investment Platform").

Staff Investment Plan is classified as plan A and plan B according to applicable grantees. Grantees of plan A are comprised of medium-and-senior level management personnel and core competent staff from Hikvision, its wholly-owned subsidiaries, and innovative business subsidiaries, and are able to invest in all innovative businesses. Grantees of plan B are comprised of core and full-time staff from innovative business subsidiaries, and could participate in investment on innovative business subsidiaries where they serve. The Co-Investment Platform will increase capitals annually, the corresponding increased equity of which will be distributed to core staff who meets investment conditions pursuant to particular rules. The lock-up period shall be five years after equity of Co-Investment Platform is held by the staff, which will be unlocked in one-off manner when due. Within the lock-up period, if the labor relationship between the grantees and the Company or its subsidiaries is released or terminated, equity of Co-Investment Platform held by the grantees shall be refunded and settled by the labor union at an agreed price pursuant to the Provisions.

The Co-Investment Platform grants Co-Investment Staff additional equity annually. The Group determines whether sharebased payment shall be constituted based on the fair value of equity instruments newly obtained by the Group's staff in Co-Investment Platform on each granting date. During the current reporting period, the Group recognized share-based payment expenses of RMB 221,463,007.99 in aggregate based on the fair value of services obtained by the Group.

### 2. Information of the Share-based Payment through Equity Settlements

		Unit: RMB		
	2016 Share Incentive Scheme	2018 Share Incentive Scheme		
Method of determine the fair value of equity instruments at the grant date	Determined based on stock price at the grant date and the costs of restricted shares during Lock-up Period	Determined based on stock price at the grant date and the costs of restricted shares during Lock-up Period		
Recognition basis of the number of the equity instruments qualified for vesting	Determined based on the results estimation of each vesting period	Determined based on the results estimation of each vesting period		
Reasons of the significant difference between the estimates of the current reporting period with that of the prior year	None	None		
Accumulative amount of share-based payment through equity settlement and further included in the capital reserve	345,213,163.42	1,000,614,626.81		
Total amount of the expenses recognized according to share-based payment through equity settlement in the current reporting period	-	147,866,242.12		

Unit. DMD

Lat DMD

#### Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

## Share Incentive Scheme of Staff Co-Investment in Innovative Businesses

	Unit: RMB		
	Share Incentive Scheme of Staff Co-Investment in Innovative Businesses		
Method of determining the fair value of equity instruments at the grant date	Evaluated and determined based on income method at the grant date		
	Estimated and determined based on the performance result conditions of each vesting period		
Accumulative amount of share-based payment through equity settlement and further included in the capital reserve	316,479,067.19		
Total amount of the expenses recognized according to share-based payment through equity settlement in the current reporting period	221,463,007.99		

Among total amount of the expenses recognized according to share-based payment through equity settlement during the current reporting period, amount of RMB 21,602,201.66 was due to share distributions to minority shareholders; As of December 31<sup>st</sup> 2021, accumulative amount of share-based payment through equity settlement of RMB 57,237,201.85 was included in the equity of minority shareholders.

## 3. There is no share-based payment through cash settlements

## 4. There is no modification or termination of share-based payment during the current reporting period.

## XII. Commitments and Contingencies

### 1. Significant Commitments

### (1) Capital commitments

		Unit: RMB'000				
	Closing balance Opening					
Contracted but not yet recognized in financial statements						
- Commitment on construction of long-term assets	11,659,026	9,573,577				
- Commitment on external investments	34,500	42,400				
Total	11,693,526	9,615,977				

### 2. Contingencies

The Group has no significant contingencies to be disclosed.

## XIII. Events after the Balance Sheet Date

### 1. Significant Unadjusted Events

### **Restricted Share Incentive Scheme**

On January 18<sup>th</sup> 2022, according to the first extraordinary general meeting of shareholders in 2022, after consideration and approval by the Board of Directors, the Company granted 99,417,229 restricted shares to grantees at a grant price of RMB 29.71 per share. The Lock-up Period of the Subject Shares shall last for a period of 24 months commencing on the grant date, during which the Subject Shares granted to grantees under the scheme shall be subject to lock-up and shall not be transferable. The Unlocking Period shall be the 24 to 60 months following the grant of restricted shares (including Lock-up Period), during which grantees may, subject to unlocking conditions stipulated by the scheme being satisfied, apply for unlocking in 3 tranches: the first unlocking period shall be the 24 to 36 months following the grant date and the number of shares to be unlocked shall be 40% of the aggregate number of the Subject Shares granted; the second unlocking period



Notes to Financial Statements For the reporting period from January 1st 2021 to December 31st 2021

shall be the 36 to 48 months following the grant date and the number of shares to be unlocked shall be 30% of the aggregate number of the Subject Shares granted; the third unlocking period shall be the 48 to 60 months following the grant date and the number of shares to be unlocked shall be 30% of the aggregate number of the Subject Shares granted. The Company completed the equity registration in February 2022.

### 2. Profit Distribution

Pursuant to the proposal of the 9<sup>th</sup> meeting of the 5<sup>th</sup> session of the Board of Directors on April 14<sup>th</sup> 2022, the Company proposed to distribute cash dividend of RMB 9 (tax inclusive) per each 10 shares to all shareholders. The above dividend distribution plan is still subject to the approval of the general meeting of shareholders.

## **XIV. Other Significant Events**

### **1. Segment Information**

1.1 Report segment determining and accounting policy

According to the Group's internal organization structure, management requirements and internal report principles, the Group has only one operating segment, which is the research and development, production and sales of AIoT products and services.

#### 1.2 Segment financial reporting

External revenue by geographical area & non-current assets by geographical location

		Unit: RMB		
Item	2021	2020		
External revenue generated in domestic area	59,434,989,705.17	45,806,567,913.73		
External revenue generated in overseas area	21,985,063,834.10	17,696,882,978.05		
Total	81,420,053,539.27	63,503,450,891.78		

Unit: RMB

Item (Note)	On December 31 <sup>st</sup> 2021	On January 1 <sup>st</sup> 2021	
Non-current assets in domestic area	13,823,326,864.88	9,202,175,652.66	
Non-current assets in overseas area	777,156,474.79	454,684,509.48	
Total	14,600,483,339.67	9,656,860,162.14	

Note: the non-current assets above did not include other non-current financial assets, long-term receivables, long-term equity investment, and deferred tax assets.

## XV. Notes to Major Items of Financial Statements of the Parent Company

## 1. Accounts Receivable

## 1.1 Disclosure by age

Unit: RMB

. ·	Closing Balance						
Aging	Accounts receivable	Credit loss provision	Proportion (%)				
Within credit period	8,936,084,715.17	25,327,231.42	0.28				
Within 1 year after exceeding credit period	14,489,234,463.94	92,968,853.56	0.64				
1-2 years after exceeding credit period	514,871,132.91	102,072,248.63	19.82				
2-3 years after exceeding credit period	225,519,710.96	95,892,762.79	42.52				
3-4 years after exceeding credit period	93,895,841.82	65,226,696.98	69.47				
Over 4 years after exceeding credit period	107,141,106.30	107,141,106.30	100.00				
Subtotal	24,366,746,971.10	488,628,899.68	2.01				

## 1.2 Classification and disclosure of by credit loss provision methods

		v	L							Unit: RMB
	Closing balance			Opening balance						
Catalan	Carrying ba	lance	Credit loss pro	ovision	Book value	Carrying bala	nce	Credit loss pr	ovision	Book value
Category	Amount	Percentage (%)	Amount	Percentage (%)	Amount	Amount	Percentage (%)	Amount	Percentage (%)	Amount
Provision										
for credit										
loss on a	-	-	-	-	-	-	-	-	-	-
single basis										
Provision										
for credit	24,366,746,971.10	100.00	488,628,899.68	2.01	23,878,118,071.42	24,550,291,739.99	100.00	356,899,560.63	1.45	24,193,392,179.36
loss by	24,300,740,971.10	100.00	400,020,099.00	2.01	25,676,116,071.42	24,330,231,733.33	100.00	550,899,500.05	1.45	24,193,392,179.30
portfolios										
Total	24,366,746,971.10	100.00	488,628,899.68	2.01	23,878,118,071.42	24,550,291,739.99	100.00	356,899,560.63	1.45	24,193,392,179.36

Accounts receivable provision for credit loss by portfolios

For the reporting period from January 1st 2021 to June 30th 2021

			Unit: RMB			
Customer	Closing balance					
Customer	Carrying balance	Credit loss provision	Proportion (%)			
Subsidiaries' customers	20,638,547,619.01	-	-			
Portfolio A	669,111.20	183,382.38	27.41			
Portfolio B	3,727,329,323.46	488,244,599.87	13.10			
Portfolio C	200,917.43	200,917.43	100.00			
Total	24,366,746,971.10	488,628,899.68	2.01			

#### Description of accounts receivable for credit loss provision by portfolios

As part of the Company's credit risk management, the Company uses the ageing of accounts receivable to assess the expected credit losses of accounts receivable formed by domestic and overseas sales businesses, and the risk characteristics are divided according to different business area and target into portfolio A, portfolio B and portfolio C. For the accounts receivable generated by the Group's related parties, because the payment time is arranged by the Group according to the cash flow of the companies in the Group, the Company believes that the credit risk is low and no provision for credit loss is required. The aging information can reflect the solvency of these three types of customers when the accounts receivable are due.

#### **1.3 Credit loss provision**

The provision for credit loss in the current reporting period is RMB 141,724,671.73.

The actual write-off of accounts receivable for the current reporting period is RMB 11,090,513.58, and RMB 1,095,180.90 is recovered after write-off.

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

#### 1.4 Top five debtors based on corresponding closing balance of accounts receivable

				Unit: RMB
				Proportion (%) of
				the total balance
Nome of the Dorty	Deletionship with the Compony	Book value balance of accounts receivable	Closing belongs for gradit loss provision	of accounts
Name of the Party	Relationship with the Company	Book value balance of accounts receivable	Closing balance for credit loss provision	receivable at the
				end of the current
				reporting period
Subsidiary A	Subsidiary	20,569,980,734.09	-	84.42
CETC's subsidiary company A	Related party	116,346,635.88	24,526,386.65	0.48
Third party J	Third party	103,678,553.16	4,384,276.62	0.43
Third party K	Third party	47,227,654.27	1,172,554.78	0.19
Third party L	Third party	45,281,235.64	3,970,652.08	0.19
Total		20,882,514,813.04	34,053,870.13	85.71

1.5 As of December 31st 2021, there is no termination of accounts receivable booking due to transfer of a financial asset.

1.6 As of December 31st 2021, the Company has no assets/liabilities booked due to transferred accounts receivable that the Company still continue to be involved in.

### 2. Other Receivables

### 2.1 By categories

Category	Closing balance	Opening Balance
Dividends receivable	22,910,404.14	22,910,404.14
Other receivables	1,491,231,959.91	703,792,729.51

Unit RMB

IL.: A DMD

#### Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

Category	Closing balance	Opening Balance	
Total	1,514,142,364.05	726,703,133.65	

#### 2.2 Dividends receivable

		Unit: RMB
Investees	Closing balance	Opening Balance
Subsidiaries of Hikvision	22,910,404.14	22,910,404.14
Total	22,910,404.14	22,910,404.14

## 2.3 other receivables

## (1) Other receivables by aging

T.		Closing Balance	
Item	Other receivables	Credit loss provision	Proportion (%)
Within contract period	1,480,835,960.26	1,000,125.48	0.07
Within 1 year	10,346,083.28	437,322.07	4.23
1-2 years	955,013.17	173,633.46	18.18
2-3 years	1,186,026.50	488,761.52	41.21
3-4 years	28,300.00	19,580.77	69.19
Over 4 years	1,135,465.04	1,135,465.04	100.00
Subtotal	1,494,486,848.25	3,254,888.34	0.22

Notes to Financial Statements For the reporting period from January 1<sup>st</sup> 2021 to December 31<sup>st</sup> 2021

#### (2) Other receivables by nature of the payment

Unit: RMB

Nature	Closing balance	Opening balance
Payments by related parties within the Group	1,365,117,094.96	454,474,087.76
Temporary payments for receivables	61,128,645.72	219,103,746.42
Guarantee deposit	60,966,840.82	47,835,041.47
Others	7,274,266.75	3,797,396.93
Total	1,494,486,848.25	725,210,272.58

#### (3) Provision for credit losses

The amount of credit loss provision recovered in the current period was RMB 18,162,654.73.

## (4) The actual write-off of other receivables in the current reporting period was nil.

#### (5) Top 5 debtors of other receivables in terms of closing balance

						Unit: KNIB
The name of entity	Relationship with the Company	Nature	Closing balance	Aging	Percentage to total other receivables (%)	Closing balance for credit loss provision
Subsidiary B	Subsidiary	Internal Payment	607,297,582.50	Within contract period	40.64	-
Subsidiary C	Subsidiary	Internal Payment	149,859,672.76	Within contract period	10.03	-
Subsidiary D	Subsidiary	Internal Payment	134,839,322.43	Within contract period	9.02	-
Subsidiary E	Subsidiary	Internal Payment	67,617,485.89	Within contract period	4.52	-

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

The name of entity	Relationship with the Company	Nature	Closing balance	Aging	Percentage to total other receivables (%)	Closing balance for credit loss provision
Subsidiary F	Subsidiary	Internal Payment	54,423,585.97	Within contract period	3.64	-
Total			1,014,037,649.55		67.85	-

(6) At the end of the current reporting period, the Company had no other receivables involving government subsidies.

(7) At the end of the current reporting period, there were no other receivables derecognized due to the transfer of financial assets.

(8) At the end of the current reporting period, there were no assets or liabilities formed by continuing involvement in transferred other receivables.

### **3.** Long-term Equity Investment

Item	C	Closing Balance Opening Balance		Opening Balance		
nem	Carrying Balance	Provisions	Book Value	Carrying Balance	Provisions	Book Value
Investment in subsidiaries	6,870,285,292.68	-	6,870,285,292.68	5,912,831,208.01	-	5,912,831,208.01
Investments in associated enterprises and joint ventures	915,631,339.20	-	915,631,339.20	814,542,245.96	-	814,542,245.96
Total	7,785,916,631.88	-	7,785,916,631.88	6,727,373,453.97	-	6,727,373,453.97

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

## 3.1 Investment in subsidiaries

						Unit: RMB
Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
Hangzhou Hikvision System Technology Co., Ltd.	848,272,492.62	12,239,987.55	-	860,512,480.17	-	-
Hangzhou Hikvision Security Equipment Leasing Services Co., Ltd.	200,000,000.00	-	-	200,000,000.00	-	-
Shanghai Goldway Intelligent Transportation System Co., Ltd.	23,000,000.00	-	-	23,000,000.00	-	-
Chongqing Hikvision System Technology Co., Ltd.	700,000,000.00	167,518.60	-	700,167,518.60	-	-
Hundure Technology (Shanghai) Co., Ltd.	37,247,790.28	-	37,247,790.28	-	-	-
Hangzhou EZVIZ Network Co., Ltd.	61,742,747.98	1,500,903.88	-	63,243,651.86	-	-
Hangzhou Haikang Zhicheng Investment and Development Co., Ltd.	24,000,000.00	-	-	24,000,000.00	-	-
Hangzhou Hikrobot Technology Co., Ltd.	138,957,632.99	3,434,654.51	-	142,392,287.50	-	-
Hangzhou Auto Technology	186,488,555.60	782,202.37	-	187,270,757.97	-	-

Notes to Financial Statements

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
Hangzhou Hikvision Communication Technology Co., Ltd.	7,000,000.00	-	-	7,000,000.00	-	-
Hangzhou Microimage Sensing	182,201,437.54	417,723.87	-	182,619,161.41	-	-
HDT INTERNATIONAL LIMITED	87,786.14	-	-	87,786.14	-	-
Prama Hikvision India PVT	1,585,696.80	-	-	1,585,696.80	-	-
Hikvision International Co., Limited	79,423.52	-	-	79,423.52	-	-
Hikvision Australia	2,866,850.00	-	-	2,866,850.00	-	-
Hikvision Singapore	1,900,590.00	-	-	1,900,590.00	-	-
Hikvision South Africa	1,578,650.00	-	-	1,578,650.00	-	-
Hikvision FZE	1,870,351.40	-	-	1,870,351.40	-	-
HIKVISION DO BRASIL	4,579,750.50	-	-	4,579,750.50	-	-
LIMITED LIABILITY COMPANY	647,249.19	-	-	647,249.19	-	-
Hikvision Coop.	65,485.53	-	-	65,485.53	-	-
Hikvision Korea Limited	1,535,850.00	-	-	1,535,850.00	-	-

Notes to Financial Statements

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
Hikvision Colombia SAS	1,337,440.00	-	-	1,337,440.00	-	-
HIKVISION KAZAKHSTAN LIMI	4,758.69	-	-	4,758.69	-	-
HIKVISION TURKEY TECHNOLO	1,148,115.83	-	-	1,148,115.83	-	-
Chongqing Hikvision Technology Co., Ltd.	102,318,598.74	437,957.57	-	102,756,556.31	-	-
HIKVISION USA INC.	1,546,160.00	-	-	1,546,160.00	-	-
Hikvision Canada Inc	994,442.54	-	-	994,442.54	-	-
Henan Hua'An Bao Quan Intelligent Development Co., Ltd.	98,334,200.00	-	-	98,334,200.00	-	-
Henan Haikang Hua'An Bao Quan Electronics Co., Ltd.	33,940,800.00	-	-	33,940,800.00	-	-
Hangzhou Hikvision Technology Co., Ltd.	1,066,917,232.70	7,129,722.90	-	1,074,046,955.60	-	-
Hangzhou Hikvision Electronics Co., Ltd.	411,410,425.15	15,280,878.75	-	426,691,303.90	-	-
Wuhan Hikstorage	60,869,464.15	-	-	60,869,464.15	-	-
Chengdu Hikvision Digital Technology Co.,	540,086,104.32	194,989.56	-	540,281,093.88	-	-

Notes to Financial Statements

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
Ltd.						
Hangzhou Auto Software	14,536,174.60	2,038,154.06	-	16,574,328.66	-	-
Hangzhou Haikang Intelligent Technology Co., Ltd.	8,689,143.96	1,510,998.55	-	10,200,142.51	-	-
Hangzhou EZVIZ Software Co., Ltd.	35,084,155.82	5,020,897.29	-	40,105,053.11	-	-
Hangzhou Hikstorage	2,843,875.79	637,380.59	-	3,481,256.38	-	-
HIKVISION TASHKENT	833,014.00	-	-	833,014.00	-	-
Xi'An Hikvision Digital Technology Co., Ltd.	85,000,000.00	115,000,000.00	-	200,000,000.00	_	-
Wuhan Hikvision Technology Co., Ltd.	12,600,000.00	187,400,000.00	-	200,000,000.00	-	-
Wuhan Hikvision Science and Technology Co., Ltd.	150,250,000.00	33,002,487.50	-	183,252,487.50	-	-
Hangzhou Hikimaging Technology Co., Ltd.	50,948,433.82	561,393.63	-	51,509,827.45	-	-
Guizhou Haikang Transportation Big Data Co., Ltd.	22,000,000.00	22,000,000.00	-	44,000,000.00	-	-

Notes to Financial Statements

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	during the current Closing balance reporting		Balance of impairment loss provision at the end of the current reporting period
Xinjiang CET Yihai Information Technology Co., Ltd.	24,000,000.00	-	-	24,000,000.00	-	-
Nanjing Hikvision Digital Technology Co., Ltd.	80,000,000.00	-	-	80,000,000.00	-	-
Hangzhou Kuangxin Technology Co., Ltd.	112,000,000.00	-	-	112,000,000.00	-	-
Zhengzhou Hikvision Digital Technology Co., Ltd.	65,000,000.00	15,000,000.00	-	80,000,000.00	-	-
Nanchang Hikvision Digital Technology Co., Ltd.	80,000,000.00	-	-	80,000,000.00	-	-
Hikvision Digital Technology (Shanghai) Co., Ltd.	80,000,000.00	-	-	80,000,000.00	-	-
Hefei Hikvision Digital Technology Co., Ltd.	35,000,000.00	45,000,000.00	_	80,000,000.00	-	-
Tianjin Hikvision Information Technology Co., Ltd.	50,348,846.40	509,239.06	-	50,858,085.46	-	-
Zhejiang Hikvision City Service Co., Ltd.	35,000,000.00		-	35,000,000.00	-	-

Notes to Financial Statements

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
Hikvision Peru Closed Stock Company	1,598,042.50	-	-	1,598,042.50	-	-
Shijiazhuang Hikvision Technology Co., Ltd.	45,000,000.00	5,897,589.14	-	50,897,589.14	-	-
Zhejiang Haikang Fire Protection and Control Co., Ltd.	84,004.82	60,763.40	-	144,768.22	-	-
Hikvision Argentina S.R.L	1,793,559.15	-	-	1,793,559.15	-	-
Fuzhou Hikvision Digital Technology Co., Ltd.	50,814,676.49	329,895.30	-	51,144,571.79	-	-
Hangzhou Hikfire	61,871,362.21	710,145.93	-	62,581,508.14	-	-
Hangzhou Rayin Technology	60,702,536.80	349,581.59	-	61,052,118.39	-	-
Hangzhou Microimage Software	2,090,633.38	1,425,368.56	-	3,516,001.94	-	-
Kunming Hikvision Digital Technology Co., Ltd.	126,666.06	50,174,365.52	-	50,301,031.58	-	-
Jinan Hikvision Digital Technology Co., Ltd.	-	51,433,533.78	-	51,433,533.78	-	-
Hanghou Hikmicro Intelligent Technology Co., Ltd.		52,154.57	-	52,154.57	-	-

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

Name of investee	Opening balance	Increase during the current reporting period	Decrease during the current reporting period	Closing balance	Write-off of impairment provision during the current reporting period	Balance of impairment loss provision at the end of the current reporting period
HIKVISION WEST AFRICA LIMITED	-	101,941.96	-	101,941.96	-	-
Daishan Hailai		14,899,444.96		14,899,444.96	-	-
Haina Yuzhi Fund	-	400,000,000.00	-	400,000,000.00	-	-
Total	5,912,831,208.01	994,701,874.95	37,247,790.28	6,870,285,292.68	-	-

## 3.2 Investments in associated enterprises and joint ventures

		<b>I</b>								Unit: RMB
				Increase/Decrease	during the curren	reporting period				Balance of
										impairment
										loss
Nama af				Investment	Other	Declared cash				provision
Name of investee	Opening balance	Additional	Reduced	income (losses)	comprehensive	dividends or	Provision		Closing Balance	at the end
investee		Investments	Investments	recognized under	income	profit	for	Others		of the
				the equity method	adjustment	distribution	impairment			current
										reporting
										period
1.Joint Ventur	1.Joint Ventures									

			Increase/Decrease during the current reporting period							Balance of
Name of investee	Opening balance	Additional Investments	Reduced Investments	Investment income (losses) recognized under the equity method	Other comprehensive income adjustment	Declared cash dividends or profit distribution	Provision for impairment	Others	Closing Balance	impairment loss provision at the end of the current reporting period
Daishan Hailai	15,253,091.76	-	-	645,353.20	-	(999,000.00)	-	(14,899,444.96)	-	-
Hangzhou Haikang Intelligent Industrial Equity Investment Fund Partnership (L.P.)	612,479,371.62	-	-	89,889,968.33	-	-	-	-	702,369,339.95	-
Zhejiang Haishi Huayue Digital Technology Co., Ltd.	9,985,577.32	-	-	1,944,935.34	-	-	-	-	11,930,512.66	-

			Increase/Decrease during the current reporting period							Balance of
Name of investee	Opening balance	Additional Investments	Reduced Investments	Investment income (losses) recognized under the equity method	Other comprehensive income adjustment	Declared cash dividends or profit distribution	Provision for impairment	Others	Closing Balance	impairment loss provision at the end of the current reporting period
Xuzhou Kangbo City Operation Management Service Co., Ltd.	4,631,286.58	4,900,000.00	-	(298,084.91)	-	-	-	-	9,233,201.67	-
Shenzhen Hikvision Urban Service Operation Co., Ltd.	6,029,569.69	-	-	(4,764,911.31)	-	-	-	-	1,264,658.38	_
Yunnan Yinghai Parking Service Co., Ltd.	4,841,060.76	-	-	(282,179.67)	-	-	-	-	4,558,881.09	-

				Increase/Decrease	during the current	reporting period				Balance of
Name of investee	Opening balance	Additional Investments	Reduced Investments	Investment income (losses) recognized under the equity method	Other comprehensive income adjustment	Declared cash dividends or profit distribution	Provision for impairment	Others	Closing Balance	impairment loss provision at the end of the current reporting period
Zhejiang City Digital Technology Co., Ltd.	11,864,018.37	-	-	350,301.92	-	-	-	-	12,214,320.29	-
Guangxi Haishi City Operation Management Co., Ltd.	5,296,695.36	3,000,000.00	-	(3,664,494.77)	-	-	-	-	4,632,200.59	-
Subtotal	670,380,671.46	7,900,000.00	-	83,820,888.13	-	(999,000.00)		(14,899,444.96)	746,203,114.63	-
2.Associated l	Enterprises									
Wuhu Sensor Tech	58,491,264.42	-	-	16,975,212.42	-	-	-	-	75,466,476.84	-
Maxio Technology	54,621,802.54	-	-	8,105,646.99	-	-	-	-	62,727,449.53	-
Zhiguang	21,253,058.87	-	-	32,784.40	-	-	-	-	21,285,843.27	-

For the reporting period from January 1st 2021 to December 31st 2021

				Increase/Decrease	during the curren	t reporting period				Balance of
Name of investee	Opening balance	Additional Investments	Reduced Investments	Investment income (losses) recognized under the equity method	Other comprehensive income adjustment	Declared cash dividends or profit distribution	Provision for impairment	Others	Closing Balance	impairment loss provision at the end of the current reporting period
Hailian										
Qingtang Big Data	9,795,448.67	-	-	153,006.26	-	-	-	-	9,948,454.93	_
Subtotal	144,161,574.50	-	-	25,266,650.07	-	-	-	-	169,428,224.57	-
Total	814,542,245.96	7,900,000.00	-	109,087,538.20	-	(999,000.00)	-	(14,899,444.96)	915,631,339.20	-

Note: The original joint venture of the Company, Daishan Hailai, was converted from the equity method to the cost method for accounting. For details, please refer to Note VI (1).

3.3 As of December 31<sup>st</sup> 2021, there were no restrictions on the capability of transferring fund to the Company from investees in which the Company held long-term equity investment.



## 4. Operating Income and Operating Cost

<b>.</b> .	I O			Unit: RMB
Iterne	20	21	20	20
Item	Income	Cost	Income	Cost
Operating income	24,756,059,967.30	5,102,605,625.81	24,051,359,607.67	7,010,347,837.77
Other operating income	3,316,533,294.57	138,183,248.51	2,260,627,739.73	167,059,377.68
Total	28,072,593,261.87	5,240,788,874.32	26,311,987,347.40	7,177,407,215.45

## 5. Investment Income

		Unit: RMB
Item	2021	2020
Long-term equity investment income (losses) calculated by cost method	16,316,000.00	80,360,404.14
Long-term equity investment income measured by equity method	109,087,538.20	13,424,897.92
Investment losses from disposal of long-term equity investments	(3,387,647.37)	(2,215.23)
Investment income of other non-current financial assets during the holding period	115,644,801.97	150,000,000.00
Investment income (losses) from disposal of held of trading financial assets	(461,953.09)	3,552,279.56
Investment income from disposal of asset group	-	848,151,116.16
Total	237,198,739.71	1,095,486,482.55

## 6. Related Party Transactions

### 6.1 Sales and purchase of goods, provision of services and receiving services

## Purchase of goods/receiving of services:

			Unit: RMB
Related party	Transaction type	2021	2020
Subsidiaries of Hikvision (Note)	Purchase of materials and receiving of services	6,136,340,294.33	7,995,299,074.64
Subsidiaries of CETC	Purchase of materials and receiving of services	23,888,681.71	11,773,724.55
Maxio Technology and its subsidiaries	Purchase of materials and receiving of services	36,783,800.00	7,875,600.00
Aurotek Corporation and its subsidiaries	Purchase of materials and receiving of services	1,787,764.68	-
Wuhu Sensor Tech and its subsidiaries	Purchase of materials and receiving of services	-	1,000.00
Total		6,198,800,540.72	8,014,949,399.19

Note: Subsidiaries of Hikvision are subsidiaries of the Company. See Note (VII) for details.



## Sales of goods/rendering of services:

			Unit: RMB
Related party	Transaction type	2021	2020
Subsidiaries of Hikvision	Sales of products and rendering of services	22,294,952,493.31	18,507,772,746.27
Haishi JiaAn	Sales of products and rendering of services	20,696,334.95	-
Subsidiaries of CETC	Sales of products and rendering of services	20,263,330.33	71,968,472.76
Chengdu Guoshengtianfeng and its subsidiaries	Sales of products and rendering of services	7,006,078.70	-
Shenzhen Urban Service and its subsidiaries	Sales of products and rendering of services	905,309.73	13,868.14
Guangxi Haishi and its subsidiaries	Sales of products and rendering of services	578,334.10	1,769,911.50
Haishi Huayue	Sales of products and rendering of services	516,471.00	263,634.07
Wuhu Sensor Tech Service and its subsidiaries	Sales of products and rendering of services	13,008.86	1,150.44
Zhiguang Hailian and its subsidiaries	Sales of products and rendering of services	-	2,191,071.97
Xiaoyun Vision Technology	Sales of products and rendering of services	-	2,629,911.49
Qingtang Big Data	Sales of products and rendering of services	-	7,092.92
Total		22,344,931,360.98	18,586,617,859.56

## Statement of capital deposits:

Related Party (Note)	Content of related party transaction	Amount occurred during the current reporting period	Closing balance at the end of the current reporting period	Amount occurred during the prior reporting period	Opening Balance at the beginning of the current reporting period
Subsidiaries of CETC	Deposit into current deposits	500,006,734.20	500,006,734.20	-	-
Subsidiaries of CETC	Deposit into fixed deposits	-	4,000,000,000.00	-	4,000,000,000.00
Total		500,006,734.20	4,500,006,734.20	-	4,000,000,000.00



Note: For the deposit that the Company deposited into China Electronics Technology Finance Co., Ltd., the deposit interest income was RMB 80,001,932.23.

Those transactions above were executed at market prices or at the prices agreed by both parties.

6.2 Guarantees with related parties

In the current reporting period, the Company has provided guarantees for its 27 wholly-owned and majority-owned subsidiaries in an amount not exceeding an equivalent of RMB 16.10 billion (2020: RMB 32.80 billion), including the joint liability guarantee for the payment obligations on purchase from suppliers in an amount not exceeding an equivalent of RMB 370 million (2020: RMB 3.125 billion), and the joint liability guarantee for the general credit limit applied from commercial banks and other financial institutions or other financing methods through agreed methods in an amount not exceeding an equivalent of RMB 15.73 billion (2020: RMB 29.67 billion).

For details of the Company's guarantees on Safety Chongqing project, please refer to Note X (5).

6.3 Funding from related parties

In April 2021, the Company proposes to provide amounts of no more than RMB 500 million, RMB 500 million, RMB 100 million and RMB 50 million to five innovative business holding subsidiaries, namely Wuhan Hikstorage, Hangzhou Auto Technology, Hangzhou Hikfire, Hangzhou Rayin Technology and Hangzhou Hikimaging Technology, respectively. It is used to supplement the operating capital needs of each innovative business holding subsidiary. The actual amount of funds will be provided based on the actual business needs of each innovative business holding subsidiary. The actual amount of funds will be provided based on the actual business needs of each innovative business holding subsidiary. The period of financial funds will take effect during 3 years after the date of approval by the general meeting of the Company (May 14<sup>th</sup> 2021), during which the limit (balance) can be utilized in circulation by batches. The annual borrowing rate of financial assistance shall be negotiated and determined by both parties to the agreement without violating relevant laws and regulations. The interest rate is determined according to the principle of marketization, and the specific contract shall prevail. The method of repayment is to repay the principal and interest in one lump sum upon maturity.

In July 2020, the Company provided financial assistance of no more than RMB 1,000 million to Hangzhou Robotic Technology, an innovative business subsidiary. The specific assistance amount will be provided according to actual business needs. The valid financial assistance period is 3 years from the date of deliberation and approval at the 18<sup>th</sup> meeting of the 4<sup>th</sup> session of the Board of Directors of the Company (July 24<sup>th</sup> 2020), during which the limit (balance) can be utilized in circulation by batches. The annual borrowing rate of financial assistance shall be negotiated and determined by both parties to the agreement without violating relevant laws and regulations. The interest rate is determined according to the principle of marketization, and the specific contract shall prevail. The method of repayment is to repay the principal and interest in one lump sum upon maturity.

In April 2020, the Company provided no more than RMB 300 million, RMB 50 million RMB 100 million and RMB



Unit: RMB

Notes to Financial Statements

For the reporting period from January 1st 2021 to December 31st 2021

500 million to the four holding subsidiaries of Hangzhou Auto Technology, Hangzhou Hikstorage, Hangzhou HikFire and Hangzhou Microimage Sensing respectively. The specific assistance amount will be provided according to actual business needs. The period of financial funds will take effect during 3 years after the date of approval by the general meeting of the Company (May 15<sup>th</sup> 2020), during which the limit (balance) can be utilized in circulation by batches. The annual borrowing rate of financial assistance shall be negotiated and determined by both parties to the agreement without violating relevant laws and regulations. The interest rate is determined according to the principle of marketization, and the specific contract shall prevail. The method of repayment is to repay the principal and interest in one lump sum upon maturity.

### 7. Receivables from Related Parties and Payables to Related Parties

#### 7.1 Receivables from related parties

Item Related party		Closing balance		Opening balance	
Item	Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Accounts receivable	Subsidiaries of Hikvision	20,638,547,619.01	-	20,623,636,081.76	-
Accounts receivable	Subsidiaries of CETC	232,683,754.63	59,533,322.73	224,340,023.89	28,804,106.29
Accounts receivable	Xiaoyun Vision Technology	7,937,469.72	1,067,451.69	9,522,614.22	349,200.54
Accounts receivable	Chengdu Guoshengtianfeng and its subsidiaries	2,504,232.29	23,633.21	-	-
Accounts receivable	Haishi JiaAn	2,784,000.00	24,220.80	-	-
Accounts receivable	Zhiguang Hailian and its subsidiaries	-	-	7,074.00	83.47
Accounts receivable	Wuhu Sensor Tech and its subsidiaries	-	-	1,300.00	58.76
Total		20,884,457,075.65	60,648,628.43	20,857,507,093.87	29,153,449.06

Item Related party		Closing balance		Opening balance	
Item	Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Notes receivable	Subsidiaries of Hikvision	37,441,937.40	-	-	-
Notes receivable	Subsidiaries of CETC	12,417,231.80	-	15,740,985.15	-



Itam	Delated morty	Closing balance		Opening balance	
nem	Item Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Total		49,859,169.20	-	15,740,985.15	-

Item Deleted a setu		Closing balance		Opening balance	
Item	Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Other receivables	Subsidiaries of Hikvision	1,365,117,094.96	-	454,474,087.76	-
Other receivables	Subsidiaries of CETC	145,000.00	6,133.50	145,000.00	1,711.00
Other receivables	Haishi Huayue	104,182.74	906.39	279,452.11	3,297.53
Total		1,365,366,277.70	7,039.89	454,898,539.87	5,008.53

Item Related party		Closing balance		Opening balance	
		Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Prepayments	Subsidiaries of Hikvision	3,274,287.66	-	3,646,828.69	-
Prepayments	Maxio technology and its subsidiaries	49,300,000.00	-	-	-
Prepayments	Subsidiaries of CETC	26,700.00	-	-	-
Total		52,600,987.66	-	3,646,828.69	-

Item	Deleted neutry	Closing	balance	Opening balance	
nem	Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Long-term receivables (including those due within one year)	Subsidiaries of CETC	18,579,578.71	161,642.33	53,512,305.64	1,446,519.44
Total		18,579,578.71	161,642.33	53,512,305.64	1,446,519.44



For the reporting period from January  $1^{st}$  2021 to December  $31^{st}$  2021

Item	Deleted neutry	Closing balance		Opening balance	
Item	Related party	Carrying balance	Credit loss provision	Carrying balance	Credit loss provision
Dividends receivable	Subsidiaries of Hikvision	22,910,404.14	-	22,910,404.14	-
Total		22,910,404.14	-	22,910,404.14	-

## 7.2 payables to related parties

			Unit: RMB
Item	Related party	Closing balance	Opening balance
Accounts payable	Subsidiaries of Hikvision	441,107,077.18	329,639,516.11
Accounts payable	Subsidiaries of CETC	5,000,503.43	3,010,132.22
Accounts payable	Aurotek Corporation and its subsidiaries	648,139.19	-
Total		446,755,719.80	332,649,648.33

Item	Related party	Closing balance	Opening balance
Contract liabilities	Subsidiaries of Hikvision	10,138,872.51	5,755.28
Contract liabilities	Subsidiaries of CETC	242,618.30	382,332.53
Contract liabilities	INESA and its subsidiaries	687.00	-
Contract liabilities	Daishan Hailai	Not Applicable	688.00
Total		10,382,177.81	388,775.81

Item	Related party	Closing balance	Opening balance
Other payables	Subsidiaries of Hikvision	793,064,398.78	289,914,770.68
Other payables	Qingtang Big Data	9,310,000.00	-
Other payables	Subsidiaries of CETC	190,790.00	337,710.00
Other payables	Shanghai Fullhan Micro	100,000.00	100,000.00
Other payables	Zhejiang City Digital Technology	10,000.00	-
Other payables	Wuhu Sensor Tech and its subsidiaries	2,040.00	1,200.00
Total		802,677,228.78	290,353,680.68

## 8. Supplementary Information to the Cash Flow Statement

8.1 Supplementary information to the cash flow statement



Supplementary information	2021	2020
1. Reconciliation of net profit to cash flows from operating activities:		
Net profit	14,088,727,668.02	12,671,388,440.50
Add: Assets impairment provision	2,669,913.88	(2,397,952.77)
Credit loss provision	119,440,900.17	35,765,705.73
Depreciation of fixed assets	271,966,196.58	256,698,165.42
Amortization of intangible assets	42,715,421.78	51,580,512.51
Depreciation of right of use assets	35,547,052.78	-
Amortization of long-term deferred expenses	66,502,221.67	21,910,527.64
Gains on disposal of fixed assets, intangible assets and other long-term assets	(30,917,301.16)	(16,966.03)
Financial expenses	138,779,449.86	270,249,113.29
Losses (gains) from change in fair value	48,725,796.17	(69,478,784.83)
Investment income	(237,198,739.71)	(1,095,486,482.55)
Share-based payment through equity settlement	238,045,712.93	523,901,019.53
Decrease (increase) in restricted funds	195,005,634.49	(16,350,637.05)
Decrease (increase) in deferred income tax assets	(171,826,866.94)	16,291,195.35
Increase of inventories	(145,289,110.09)	(30,574,481.99)
Decrease (increase) in operating receivables	(651,204,315.31)	941,257,584.66
Increase in operating payables	1,539,868,467.24	974,737,516.48
Increase (decrease) in deferred income	243,243,770.27	(39,562,793.01)
Net cash flow from operating activities	15,794,801,872.63	14,509,911,682.88
2. Major investing and financing activities not involving cash receipt and payment:		
3. Net change in cash and cash equivalents:		
Closing balance of cash	26,639,582,696.49	23,264,693,578.70
Less: Opening balance of cash	23,264,693,578.70	16,656,028,410.72
Add: Closing balance of cash equivalents	-	
Less: Opening balance of cash equivalents	-	
Net increase in cash and cash equivalents	3,374,889,117.79	6,608,665,167.98



For the reporting period from January  $1^{st}\,2021$  to December  $31^{st}\,2021$ 

### 8.2 Composition of cash and cash equivalents

1 1		Unit: RMB
Item	Closing balance	Opening balance
I. Cash	26,639,582,696.49	23,264,693,578.70
Including: Cash on hand	261,314.61	264,936.39
Bank deposit for payment at any time	26,639,219,718.83	23,264,326,122.65
Other monetary funds for payment at any time	101,663.05	102,519.66
II. Cash equivalents	-	-
III. Closing balance of cash and cash equivalents	26,639,582,696.49	23,264,693,578.70

On December 31<sup>st</sup> 2021, the Company's closing balance of other monetary funds was RMB 17,008,779.94 (December 31<sup>st</sup> 2020: RMB 212,015,271.04), of which RMB 16,907,116.89 were all various guarantee deposits (December 31<sup>st</sup> 2020: RMB 211,912,751.38), not cash or cash equivalents.

## **XVI. Supplementary Information**

## 1. Details of Current Non-recurring Gains and Losses

		Unit: RMB
Item	Amount	Description
Profit or loss from disposal of non-current assets	26,069,469.18	/
The government subsidies included in the current profits and losses (excluding the government subsidy closely related to regular course of business of the Company and government subsidy based on standard quota or quantitative continuous enjoyment according to the state industrial policy)	576,619,421.07	/
Investment losses from disposal of subsidiaries and other business units	(169,184,641.43)	
The gains generated when the investment cost of acquiring a subsidiary, an associate or joint venture is less than the income derived from the fair value of the identifiable net assets of the investee	1,163,932.96	/
In addition to the Company's normal business related to the effective hedging business, gains and losses on changes in fair value arising from holding derivative financial assets, derivative financial liabilities, other non-current financial assets, and investment gains from the disposal of the above-mentioned financial assets/financial liabilities and receivables financing	75,408,081.63	/
Other non-operating income and expense except the items mentioned above	(1,471,007.77)	/
Impact of income tax	(29,930,824.64)	/
The impact of minority equity	(122,987,029.92)	/
Total	355,687,401.08	/



For the reporting period from January  $1^{st}\ 2021$  to December  $31^{st}\ 2021$ 

## 2. Return on Net Assets and Earnings Per Share

The return on net assets and earnings per share have been prepared by Hangzhou Hikvision Digital Technology Co., Ltd. in accordance with the Information *Disclosure and Presentation Rules for Companies Making Public Offering of Securities No. 9 – Calculation and Disclosure of Return on Net Assets and Earnings per Share (Revised in 2010)* issued by China Securities Regulatory Commission.

			Unit: RMB
	Weighted average return on net assets (%)	Earnings per share	
Profit for the reporting period		Basic earnings per share	Diluted earnings per share
Net profit attributable to ordinary shareholders of the Company	28.99%	1.810	1.806
Net profit excluding non-recurring items of profit or loss attributable to ordinary shareholders of the Company	28.38%	1.772	1.767



## Section XI Documents Available for Reference

1. The financial report was signed and sealed by the person in charge of the Company, the person in charge of accounting work and person in charge of accounting organization (Accounting Supervisor);

2. The original audit report containing the seal of the accounting firm and the signature and seal of the certified public accountant;

3. Original versions and copies of all the Company's documents and announcements that were publicly disclosed on the website designated by CSRC during the reporting period.

The above documents are completely placed at the Company's board of directors' office.

Hangzhou Hikvision Digital Technology Co., Ltd. Chairman: Chen Zongnian April 16<sup>th</sup> 2022

Note:

This document is a translated version of the Chinese version 2021 Annual Report ("2021 年年度报 告"), and the published announcements in the Chinese version shall prevail. The complete published Chinese 2021 Annual Report may be obtained at <u>www.cninfo.com.cn</u>.