

Hangzhou Hikvision Digital Technology Co., Ltd.

2019 Annual Report

HIKVISION

April 25th 2020

To shareholders

As a technology-driven company, technological innovation has been the major approach to operations for the Company's sustainable development. Over the past two years, in response to technological advancements and changes in the external environment, the R&D expenses ratio of the Company has risen from 7.62% in 2017 to 8.99% in 2018, and further to 9.51% in 2019. The Company will continue to make further R&D investments to address increasing uncertainties, create value for customers, provide platforms for employees, and drive returns for the Company's shareholders. We will maintain our commitment to technological innovation regardless of macro-economic conditions.

In the domestic market, the Company has completed the initiative to integrate its business into Public Business Group (PBG), Enterprise Business Group (EBG) and Small and Medium Enterprise Business Group (SMBG). The three BGs focus on their respective target markets and leverage various technologies, such as artificial intelligence, big data and cloud computing etc., to help customers connect the physical and information worlds, and achieve the fusion of data of the Internet of Things with the Information Network. In our overseas markets, we have largely completed the construction of country-specific marketing and service systems, enabling the rendering of better service to local markets. After five years of cultivation, the innovative businesses have also made satisfactory progress. In our 2017 annual report, we disclosed the single-line revenue of the EZVIZ (smart home) business, and this year, we disclosed the single-line revenue of the robotic business. We expect to see more growth of our innovative businesses in the future and look forward to better development of these particular businesses.

In 2020, the external environment is currently undergoing significant changes. Similarly, the security industry is also seeing many changes. Taken together, these twin dynamics have created increased uncertainties in the Company's operation. The Company's management team

is committed to taking various risk-mitigation measures and adapting to environmental and industrial changes to ensure the continued healthy development of the Company. The Company will continue to optimize its operations and management, enhancing its operational effectiveness and efficiency. The Company, along with its leadership team, is confident in its ability to calmly address and navigate the current unique challenges it faces. As always, the Company will continue to be honest, transparent, and open in all its affairs with an eye towards earning the trust of all parties and stakeholders.

Last but not the least, we would like to extend our sincere gratitude to all shareholders for their trust and confidence in the Company's management team.

See far, go further!

Hangzhou Hikvision Digital Technology Co., Ltd.

Board of Directors

2020.04

Section I Important Notes, Contents and Definitions

The Board of Directors, Board of Supervisors, directors, supervisors and senior management of Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as the “Company”) hereby guarantee that the information presented in this report shall be together be wholly liable for the truthfulness, accuracy and completeness of its contents and free of any 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 report are authentic, 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: Based on the Company's current total share capital of 9,345,010,696 shares, the Company proposed to distribute cash dividend of RMB 7 (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 2019 Annual Report (“2019 年年度报告”), and the published announcements in the Chinese version shall prevail. The complete published Chinese 2019 Annual Report may be obtained at www.cninfo.com.cn.

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

- 1) **Global COVID-19 epidemic risk:** Amidst the sustained transmission of COVID-19 epidemic around the world, and the heightened uncertainties in economic development, the Company will maintain its business strategy focusing on stable and healthy development and closely monitor the impact of the epidemic. If the epidemic leads to further deterioration of the domestic and overseas economies, the adverse impact on the Company's business will escalate accordingly.
- 2) **Global business risks:** The Company operates in more than 150 countries and regions around the world. As the potential risks of pandemic, debt issues, political conflicts, and exchange rate fluctuations in various countries around the world are difficult to eliminate, the Company's overseas business operations may be adversely affected.
- 3) **Legal and compliance risk:** The world's multilateral trading system is facing an impact. The local laws and regulations that business activities need to comply with are very complicated. The worldwide data protection regulations are stricter, which require higher compliance requirements. If the Company's compliance ability cannot keep up with the situation, it will bring risks to the Company's operations.
- 4) **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, purchase and financing, which can likely affect the profitability level of the Company.
- 5) **Supply chain risks:** The global supply system is suffering from an array of adverse impacts. The Company has been making efforts to enhance arrangements for our supply chain and optimize inventory adjustments and controls. However, if systemic risks arise in the global supply chain, the Company's operating capabilities may be affected.
- 6) **Risk of technology upgrade:** Technologies such as artificial intelligence (AI), big data, cloud computing, and edge computing are developing rapidly, with technology diffusion seeing the most rapid developments. If the Company is unable to adapt to the changes in cutting-edge technologies, or fails to quickly realize business innovation, the risks of ongoing uncertainties will increase.
- 7) **Risk of internal management:** The continual expansion of business scale, the continuous increase of new products and new businesses, the continuous growth in total number of employees, and the significant rise of internal management complexity have posed challenges to the Company's management work and

raised higher requirements on the Company's management system. The Company's sustainable development will face certain risks if the management level fails to proportionally address the Company's business expansion.

- 8) **Capital risk arising from the decline in customers' ability to pay:** The liquidity of different business links is subject to economic conditions. Despite the cash reserves accumulated from the Company's historically healthy operation and low financing costs, accounts receivable of the Company will be adversely affected once liquidity risks increase.
- 9) **Risk of cybersecurity:** The Company has always attached 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.
- 10) **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

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Definitions

Term	Definition
Reporting Period	From January 1 st 2019 to December 31 th 2019
Articles of Associations	<i>Articles of Associations for Hangzhou Hikvision Digital Technology Co., Ltd</i>
Hikvision, our Company, the Company	Hangzhou Hikvision Digital Technology Co., Ltd
CETC	China Electronics Technology Group Ltd. is the actual controller of the company
CETHIK	CETHIK Group Co., Ltd. Controlling Shareholder of the Company
Innovative Co-investment Partnership	Hangzhou Hikvision Equity Investment Partnership (Limited Partnership)
EZVIZ, EZVIZ Network	Hangzhou Ezviz Network Ltd. (According to the context, also refers to the corresponding business)
HikRobot	Hangzhou Hikrobot Technology Ltd. (According to the context, also refers to the corresponding business)
HikAuto	Hangzhou HikAuto Technology Ltd. (According to the context, also refers to the corresponding business)
HikMicro	Hangzhou Hikmicro Sensing Technology Ltd. (According to the context, also refers to the corresponding business)
HikSemi	Wuhan Hikstorage Technology Ltd. (According to the context, also refers to the corresponding business)
HikImaging	Hangzhou Hikmed Imaging Technology Ltd. (According to the context, also refers to the corresponding business)
HikFire, HikSafety	Hangzhou Hikfire Technology Ltd. (According to the context, also refers to the corresponding business)
Rayin	Hangzhou Rayin Technology Ltd.
Hangzhou Innovation Industrial Base	Located in Binjiang District, Hangzhou, Zhejiang Province, the planned use is for R&D, office space and supporting facilities. It was first disclosed in the Company's <i>Announcement on Investment and Construction of Hangzhou Innovation Industrial Base Project in Hangzhou</i> (No: 2017-034).
Chengdu Science and Technology Park	Located in Chengdu, Sichuan Province, the planned use is for R&D, office space and supporting facilities. It was first disclosed in the Company's <i>Announcement on Investment and Construction of Chengdu Science and Technology Park Project in Chengdu</i> (No: 2017-033).
Chongqing Science and Technology Park	Located in Chongqing, the planned use is for production plants, warehouses and supporting facilities. It was first disclosed in the Company's <i>Announcement on Investment and Construction of Chongqing Science and Technology Park Project in Chongqing</i> (No. 2017-035).
Chongqing Manufacture Base	Located in Chongqing, purposes for manufacturing facility, initially disclosed in <i>Announcement about Resolution of the 20th Meeting of the 3rd Session Board</i> (No: 2016-068)

Term	Definition
Xi'an Science and Technology Park	Located in Xi'an, Shaanxi Province, the planned use is for R&D, office space and supporting facilities. It was first disclosed in the Company's <i>Announcement on Investment and Construction of Xi'an Science and Technology Park Project in Xi'an</i> (No: 2017-031).
Wuhan Science and Technology Park	Located in Wuhan, Hubei Province, the planned use is for R&D, office space and supporting facilities. It was first disclosed in the Company's <i>Announcement on Investment and Construction of Wuhan Science and Technology Park Project in Wuhan</i> (No. 2017-032).
Wuhan Intelligence Industry Park	Located in Wuhan, Hubei Province, the planned use is for production plants, warehouses and supporting facilities. First disclosed in the Company's <i>Announcement on Investment and Construction of Wuhan Intelligence Industry Park Project in Wuhan</i> (No. 2017-036).
Innovative Business	<p>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 <i>Announcement about Management Measures for Core Staff Investment in Innovative Business</i> (《核心员工跟投创新业务管理办法》) (www.cninfo.com.cn).</p> <p>In this report, innovative business also refers to EZVIZ, HikvisionRobot, HikAuto, HikMicro, HikSemi, HikImaging, HikFire, Rayin and their related business or products.</p>

Section II Corporate Profile & Key Financial Data

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 (if any)	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 TECHNOLOGY 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		
Business address	No. 518 WuLianWang Street, Binjiang District, 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	
Address	No. 518 WuLianWang Street, Binjiang District, Hangzhou	
Tel.	0571-88075998; 0571-89710492	
Fax	0571-89986895	
E-mail	hikvision@hikvision.com	

III. Information disclosure and place of the report

Newspaper designated by the Company for information disclosure	<i>Securities Times, Shanghai Securities Journal</i>
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

Organization code	91330000733796106P
Changes in principle business activities since the Company was listed (if any)	During the reporting period, the Company operating range newly added R&D and production of electronic products (transmission and display equipment), big data and Internet of Things hardware and software products, intelligent equipment and intelligent systems, real-time communication systems, servers and supporting hardware and software products. After the change, the Company's business scope is: research and development (R&D) and production of electronic products (including explosion-proof electrical products, communication equipment and related ancillary equipment, multimedia equipment, transmission and display equipment), fire protection products, big data and Internet of Things hardware and software products aircrafts, robots, intelligent equipment and intelligent systems, real-time communication systems, auto parts and accessories, automotive electrical signal equipment, servers and supporting hardware and software products; Sales of self-produced products; provide technical services, electronic technology consulting service, training service (excluding the organizational training), electronic equipment installation; electrical engineering, design, construction and maintenance of intelligent system projects. (except country prohibited and restricted items, relating to the specific mandatory license certificate) (subject to ratification in accordance with the project, approved by the relevant departments to operate)
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, Zhang Shushu

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

Applicable Inapplicable

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

Applicable Inapplicable

VI. Key accounting data and Financial Indicators

Whether the Company performed a retrospective adjustment or restatement of previous accounting data

√Yes □No

Retrospective adjustment or restatement reasons: business merger under the common control

Unit: RMB

	2019	2018		YoY Change (%)	2017	
		Before adjustments	After adjustments	After adjustments	Before adjustments	After adjustments
Operating income (RMB)	57,658,110,065.22	49,837,132,481.61	49,837,132,481.61	15.69%	41,905,476,572.07	41,905,476,572.07
Net profits attributable to shareholders of the Company (RMB)	12,414,587,690.45	11,352,869,241.32	11,352,132,255.21	9.36%	9,410,855,084.82	9,410,855,084.82
Net profits attributable to shareholders of the Company excluding non-recurring gains and losses (RMB)	12,037,518,321.42	10,983,228,170.60	10,983,228,170.60	9.60%	9,177,116,964.06	9,177,116,964.06
Net cash flows from operating activities (RMB)	7,767,720,171.14	9,114,013,286.06	9,113,286,027.76	-14.76%	7,373,160,250.68	7,373,160,250.68
Basic earnings per share (RMB/share)	1.343	1.240	1.240	8.31%	1.030	1.030
Diluted earnings per share (RMB/share)	1.343	1.234	1.234	8.83%	1.024	1.024
Weighted average ROE	30.53%	33.99%	33.99%	-3.46%	34.96%	34.96%
	At December 31 st 2019	At December 31 st 2018		YoY Change (%)	At December 31 st 2017	
		Before adjustments	After adjustments	After adjustments	Before adjustments	After adjustments
Total assets (RMB)	75,358,000,240.29	63,484,352,233.42	63,491,508,747.79	18.69%	51,570,963,466.61	51,570,963,466.61
Net assets attributable to shareholders of the Company (RMB)	44,904,033,876.83	37,590,154,638.46	37,589,417,652.35	19.46%	30,358,072,874.22	30,358,072,874.22

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)	9,345,010,696
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Fully diluted earnings per share calculated with the latest share capital

Fully diluted earnings per share (RMB/share) calculated with the latest share capital	1.328
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Whether there is a corporate bond:

Yes No

Whether the Company has continuous losses in the last two years

Yes No Not applicable

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

Applicable 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

Applicable 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

Applicable Inapplicable

VIII. Key Quarterly Financial Indicators

Unit: RMB

	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
Operating income	9,942,448,619.42	13,980,824,805.08	15,915,642,804.35	17,819,193,836.37
Net profit attributable to shareholders of the Company	1,536,118,222.96	2,680,636,987.28	3,810,578,954.89	4,387,253,525.32
Net profit attributable to shareholders of the Company excluding non-recurring gains and losses	1,482,828,488.96	2,639,367,040.07	3,667,114,061.94	4,248,208,730.45
Net cash flows from operating activities	-3,038,198,689.80	2,607,134,896.62	555,379,028.58	7,643,404,935.74

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

Yes No

IV. Items and Amounts of Non-recurring Gains and Losses

Applicable Inapplicable

Unit: RMB

Item	2019	2018	2017
Profit or loss from disposal of non-current assets (including the write-off for the impairment provision of assets)	-2,053,875.22	4,975,825.83	1,585,222.50
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.)	413,790,429.84	319,304,315.50	184,557,043.27
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	-736,986.11	-42,070.90
Profits and losses attributed to change in fair value for held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, and derivative financial liabilities; and investment income from disposal of held-for-trading financial assets, derivative financial assets, held-for-trading financial liabilities, derivative financial liabilities and other debt investments, excluding the effective hedging business related to the regular business operation of the Company.	26,872,639.66	62,153,461.82	86,740,196.23
Other non-operating income and expenditures except the items mentioned above	52,155,026.79	94,651,413.78	30,044,820.52
Less: Impact of income tax	86,193,406.35	84,510,487.85	50,405,620.44
Impact of the minority interests (after tax)	26,616,307.04	26,933,458.36	18,741,470.42
Total	377,069,369.03	368,904,084.61	233,738,120.76

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

Applicable Inapplicable

In the reporting period, the Company did not classify an item as a non-recurring gain/loss according to the definition in 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 Corporate Business Summary

1. Business scope and status

Hikvision is a video-centered intelligent IoT solutions and big data services provider, whose businesses are focused on comprehensive security, big data services and intelligent business. It builds open cooperation ecosystems, serves the users in public service sectors, enterprises and public institutions and medium/small enterprises and strives to build smart city and digitized enterprises with cloud-edge fusion, IoT-information network fusion and big data-AI fusion.

In the field of comprehensive security, as reported by Omdia¹, Hikvision has ranked first in the world in the video surveillance industry for eight consecutive years and owns 24.1%² share of the video surveillance market. In the "World's Top 50 Security Companies" list published by a&s Automation and Security, Hikvision has ranked first for four consecutive years.

In the field of big data services, Hikvision has created the IoT-information network fusion data platform to provide multiple industries with "multi-network aggregation and cross-domain fusion" big data aggregation, governance and mining services.

In the field of intelligent business, Hikvision is deeply dedicated to the development of industrial intelligent business and supporting smart city, safe city, smart transportation, digital enterprise, and smart community initiatives.

2. Technological accumulation and innovation

Since its founding, Hikvision has always viewed technological innovation as the driving force for enterprise development. This is represented by a number of factors, including the increasing nature of its R&D input, the expansion of its R&D team, and the consistent results produced by various R&D initiatives. Hikvision implements the "Cloud-Edge Fusion" concept throughout its security business. This has immensely pushed fusion application of edge computing and cloud computing. Further, Hikvision has proposed the "IoT-Information Network Fusion"

¹ Omdia is a global science and technology industry consulting firm. This brand is comprised of the consulting firms (Ovum, Heavy Reading and Tractica) owned by Informa Tech and the scientific research team of IHS Markit which was purchased in 2019.

² This report is based on the global video surveillance market report published by Omdia (then known as IHS Markit) in June 2019 and uses statistics from 2018.

series products include "Two Pools, One Library and Four Platforms"³, i.e. computing resource pool, data resource pool, algorithm warehouse, management and scheduling platform, data resource platform, intelligent application platform and maintenance service platform.

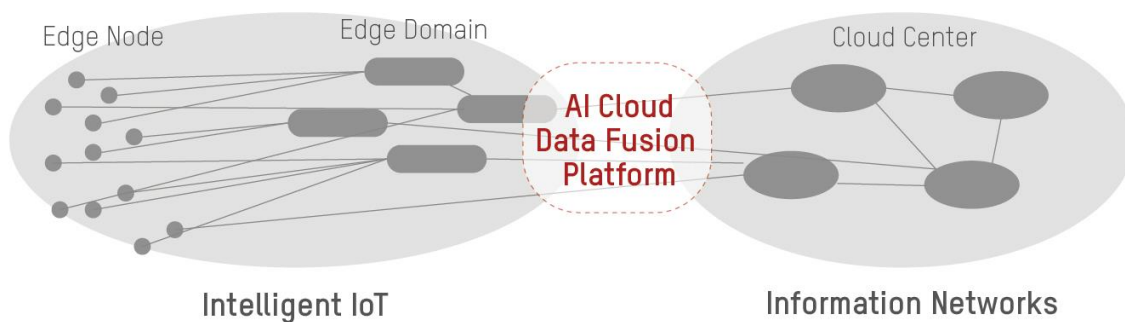
Based on AI, the AI Cloud solves problems in front-end intelligent collection of perception data. Centered on data, it solves the problems in on-demand data convergence among the different edge nodes. Oriented for application, it solves the problems in intelligent applications across various scenarios. Supported by maintenance service, it solves the problems in integrated operation and maintenance in large complex IoT perceptive network environments.

Through the AI Cloud concept and the launch of relevant products and extensive applications in relevant industries, Hikvision has evolved from a single sensor (video) to multi-dimensional sensors, from non-intelligent sensor to intelligent sensor, and from products of sensors to three-layered architecture intelligent IoT. It has also evolved from a video surveillance products manufacturer to an intelligent IoT products and solutions provider.

2.2 IoT-information network fusion, data services supported by data technology innovation

In March 2019, Hikvision proposed the "IoT-information network fusion" data architecture based on big data and AI technologies, first set forth the path and method for large-scale systematic data fusion between intelligent IoT and information network, and launched the AI Cloud Data Fusion Platform.

Data Architecture: IoT-Information Network Fusion



The IoT-information network fusion data platform provides the governance capability for perceptive resources. By drawing on years of technological achievements in the field of IoT, Hikvision has established the evaluation

³ Refers to "Computing Resource Pool, Data Resource Pool, Algorithm Warehouse, Data Resource Platform, Intelligent Application Platform, Resource Scheduling Platform, Operation and Service Platform.

index system for IoT perceptive resources development and provided the perceptive resources governance and evaluation tools to enhance the quality of perceptive data through source governance and provides crucial support to industrial users for building and upgrading their perceptive systems.

The IoT-information network fusion data platform provides the capability in multi-source data convergence. Access and intelligent processing of multiple types of perception data firstly enables the fusion of multi-dimensional perception data; tools for collection of information network data are available, supporting expandable data types, data formats and data interfaces; finally, intensive fusion of perception data and information network data is enabled through combination, integration and aggregation.

IoT-information network fusion data platform provides governance capability in the fusion data. Over 30 components, such as data standard, unified certification, data authority, resources management center, strategy center, operation center and data security etc., constitute the data governance toolset for IoT-information network fusion, to adapt to the data governance scenarios of different projects as needed. In order to support implementation of data governance projects, the Company has organized professional data engineers, data analysts, and data application R&D team; the headquarters and regional divisions work together on data business application research, data investigation, access solution design, data fusion implementation, data governance implementation, data model building and general data applications implementation, etc.

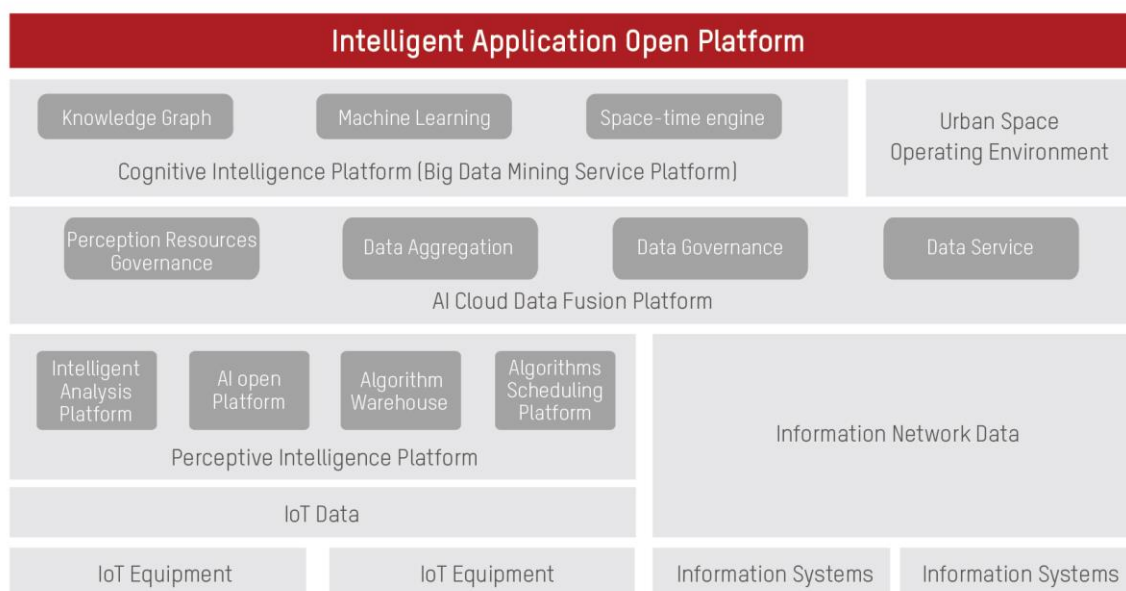
IoT-information network fusion data platform provides data service capability. By providing standard interfaces oriented for the application layer, it enables unified configuration, publishing and management of data service interfaces; it has over 420 preset general interfaces to be directly called by third-party developers. It also supports development of new data service interfaces. This platform provides core functions such as centralized resources request, allocation and control etc., and adapts to Hikvision big data intelligent storage and computing platform HBP, open-source Hadoop and third-party PaaS open platforms.

Hikvision intensively explores the value of data resources. The Company has established internal normalized data models contests and data application innovation appraisal mechanism, and has created a range of city-level and industry-level big data applications. Currently, the data projects cover 29 domestic provinces and cities and some foreign regions. By the end of 2019, there were over 100 large data projects already.

Through the IoT-information network fusion data platform, Hikvision has evolved from merely providing data collection services to providing data governance and application services, and from merely providing intelligent IoT data services to providing data services across intelligent IoT and information network, and has become a big data services provider with independent technological advantages.

2.3 Big Data-AI fusion, intelligent business supported by AI innovation

Entering 2020, Hikvision proposed the concept of "Big Data-AI Fusion Base" of smart city, integrating years of technological achievements in AI and big data into a unified technological base for building intelligent industries and smart cities.



Hikvision builds intelligent perception capability. The perceptive intelligence platform, including intelligent analysis platform, AI open platform, algorithm warehouse and algorithms scheduling platform, provides users with full-stack capabilities of algorithm training, storage, analysis and scheduling. In 2019, Hikvision continuously iterates the capability of AI open platform to help users develop the intelligent algorithms for their own industries in a simple and quick way, solving the problems of scenario variations and fragmentation in the process of industrial intelligentization. The AI open platform is open to all partners for free, which significantly reduces the barrier and cost of medium/small/micro enterprises and developers participating in AI development. The AI open platform currently offers over 40 general functions and is on average accessed approximately 35,000,000+ times per day; it has accumulatively trained over 10,000 models, where the fragmented scenario models of vertical industries account for over 95% of all models. The Company has organized over 30 training and certification activities, continuously developed and cultivated the industrial ecosystem, trained over 5,000 technicians and helped the industrial developers quickly master the development skills; it has made significant progress in building the ecosystem in tens of sectors such as transparent kitchen, properties management, unmanned retailing, work safety, production aid and park management, etc.

Hikvision builds the capability in intelligent cognition. The intelligent cognition platform, including knowledge mapping, machine learning and space-time engine, provides users with the data mining service capability based on big data and AI. Through management, classification and association of information based on the knowledge structure, the large volume of unorganized information is further mined and analyzed to become organized and correlated knowledge, to finally create the intelligent cognition service system centered on knowledge and solve the problems such as inaccuracy of traffic congestion prediction, inability to identify potential customer base in marketing, and inability to provide early warning on default risks in financial risk control.

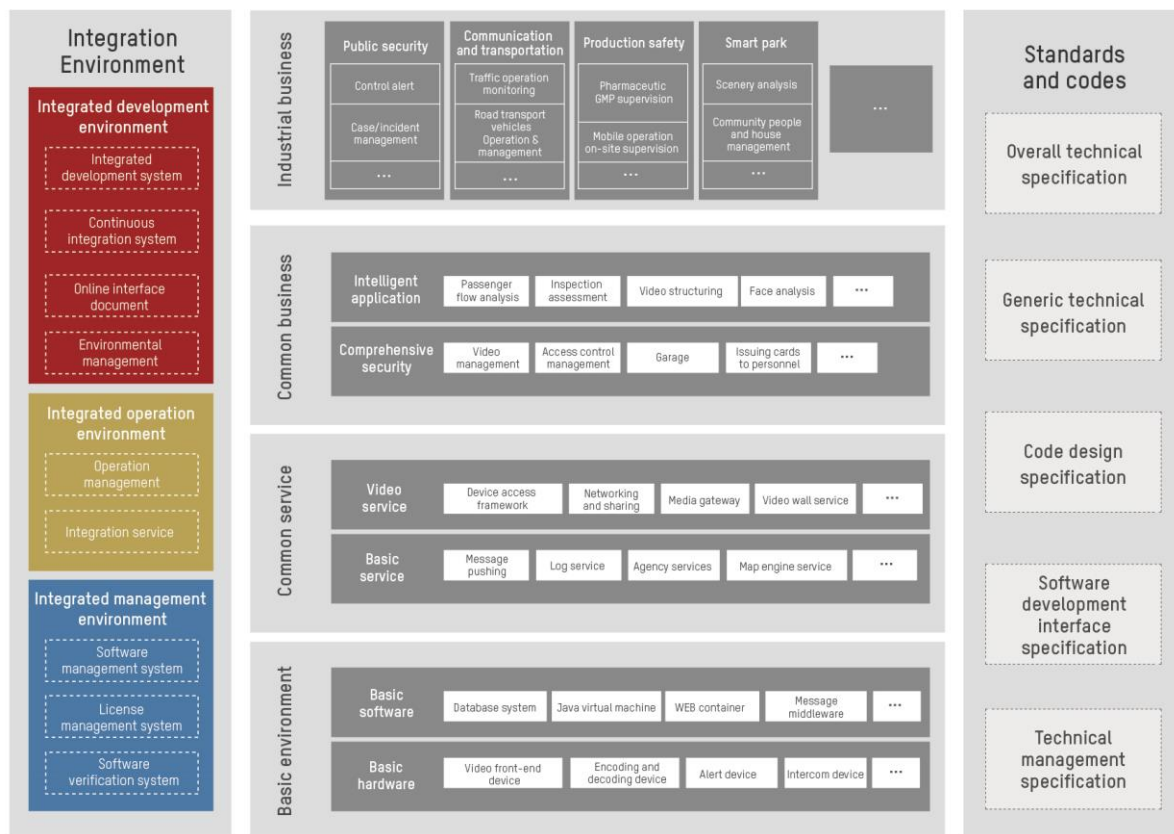
The technical framework of "Big Data-AI Fusion Base" signifies the combination of perception data and AI and the combination of fusion big data and AI expansion based on Hikvision's capability in intelligent IoT solutions and big data services. Extending from focusing on products to focusing on systems, from focusing on technologies to focusing on businesses development, from focusing on single business to focusing on businesses across multiple industries, Hikvision has built a cooperative ecosystem through its open platform to provide users with complete intelligent industry and smart city solutions.

2.4 Software-hardware fusion, products innovation supported by unified R&D system

Since its establishment, Hikvision has created an industry-leading hardware R&D, manufacture and sales system, which enables the Company to maintain its competitive advantage across industries. Since 2016, Hikvision has emphasized hardware-software fusion and synergetic development; oriented by meeting market demands and based on the component-based development mode, it has created the unified software R&D system intended for multiple industries and multiple R&D teams. The core of the unified software R&D system is the Company's unified software technology architecture. In 2019, the advantages of the unified software technology architecture started to manifest, where it supported quick development and iteration of industrial applications, materialized the value of software reuse and improved the compatibility of software.

2.4.1 Unified R&D system

Hikvision uses componentized software technology to solve the problem in mass production of software and has established the software products development and management standards to maintain software consistency. Within the unified software architecture, R&D teams can conduct back-to-back synergized development, so that the software stays consistent in terms of platform, interface and style and can be quickly integrated.



Under the unified R&D system, Hikvision uses the "architecture + components = products" model to create software products. A component is defined as a software unit that is able to independently complete a technological or business task. Software components are designed to be separable for the purpose of reusability. The source of components can be self-developed, third parties or open sourced. Component types include basic environmental component, general service component, common business component and industrial business component. Hikvision's number of components increased from 275 in 2018 to 1,644 in 2019. The reusable basic environmental components, general service components and common business components have passed field operation verification of over 24,000 delivered software products. The architecture is the fundamental environment in which the components are integrated and operated. The Hikvision iSee and Hikvision iFar are two big architectures that support various business scenarios. These two designs are gradually maturing and have supported development of many software products and customized applications. Under the development mode of unified software technology architecture, the reuse rate of the component in software products is up to 93%, where each product averagely needs only 5 new components.

Under the unified R&D system, Hikvision has created a trinity of integration development environment,

integration management environment and integration operation environment. The integration development environment provides the development-oriented online software production line, provides a complete standardized process of production, circulation and management; by solidifying standards and automatic execution of key steps to ensure that software production specifications are integrated into various management processes throughout the entire lifecycle of software planning, development, testing, and release. The integration management environment provides the software market that oriented for marketing, aggregates the all stages information of the software from planning to releasing and provides support for the scenarios such as pre-sale consultation and exhibition, solutions evaluation, technical data acquisition, after-sale services and maintenance, and etc. The integration operation environment provides the operation and maintenance management environment oriented for project site operation/maintenance personnel, and implements comprehensive maintenance of the software at project site.

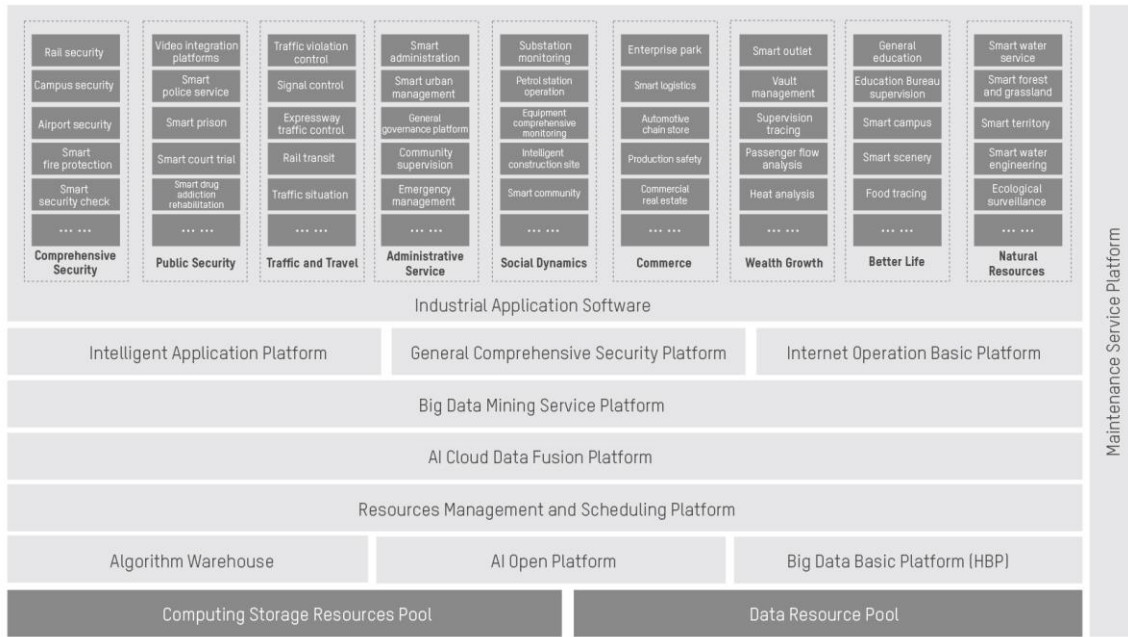
Under the unified R&D system, Hikvision has established the software R&D teams that operate in the domestic provincial-level business centers and certain foreign regions. All R&D teams use the unified technological architecture and reusable components, and share the software development, management and operation environment as well as the configuration management strategies, to enable large-scale synergized software production.

Under the unified R&D system, design and production of software and hardware can proceed with better synergy and fusion. Many software and hardware products are synergized in design, development and deployment. The hardware design already takes into account the software access driver development and application functions development, and application software development is meant to support the relevant hardware, thus avoiding the situation of "hardware waiting for software" or "software waiting for hardware".

2.4.2 Software product family

In 2019, Hikvision continued using the unified software architecture to restructure the software products and gained large amount software achievements in the software assets library; the AI Cloud products continued improving, over 60 industrial application software products were restructured and successfully released, and all products were generated from the unified architecture. These software products were mutually compatible and synergized, to minimize the costs of integrating and synergizing different systems.

Hikvision's software product family consists of two categories, one is the common software platform products and the other is the industrial application software products.

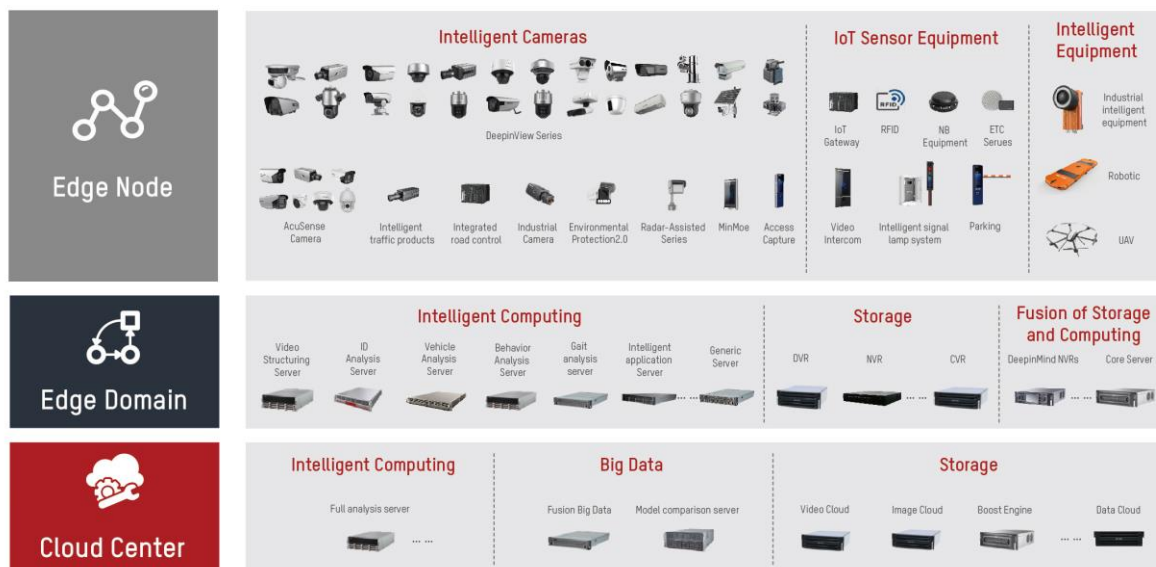


The general software platform products exist in the computing storage resources pool and the data resources pool, and include AI open platform, algorithm warehouse, big data basic platform (HBP), resources management and scheduling platform, AI Cloud data fusion platform, big data mining service platform, maintenance service platform, intelligent application platform, general comprehensive security platform and Internet operation basic platform.

The industrial application software products include industrial comprehensive security products and also the application software oriented for various industries such as public security, traffic and travel, governmental service, social dynamics, commerce, wealth growth, better life and natural resources, etc.

2.4.3 Hardware product family

In 2019, by drawing on the AI Cloud architecture, Hikvision integrated AI into more products, continued improving the product strategy in edge node, edge domain and cloud center, and continued its market-leading position through technological innovation and product innovation.



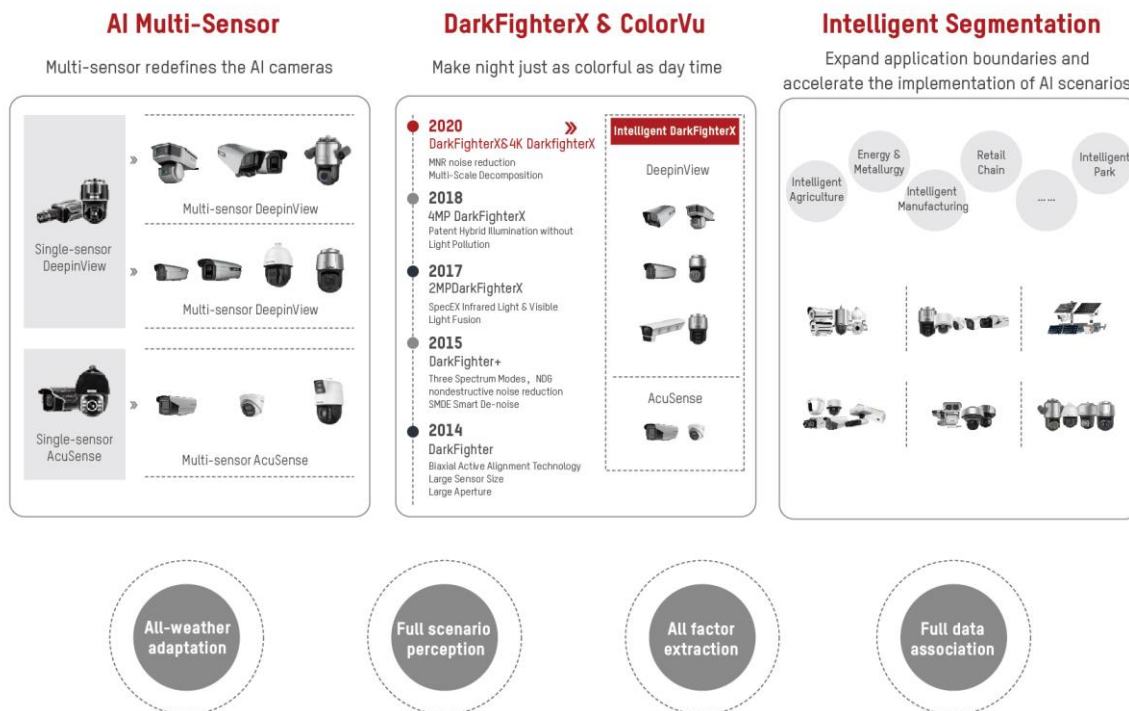
Rapid development of AI technology launched a new chapter of intelligent products. Hikvision's intelligent products represented by DarkFighterX, ColorVu, and Multi-Sensor series of intelligent cameras, the full analysis intelligent server, Hikvision DeepinMind Series AI NVR, Capture Cameras, Environmental Protection and Radar-Assisted series of intelligent traffic products, and "MinMoe" series short distance ID recognition access control products have been extensively applied in government market, enterprise market and consumer market.

Front end products

With rapid development of AI, big data, cloud computing, Industrial Internet and IoT technologies, cameras have evolved from the traditional video surveillance terminals to the most important intelligent sensor in the IoT.

With continuous implementation of AI scenarios, the single-sensor technology cannot meet the intelligent application requirements such as balance of overall situation and details analysis and association of trajectories for multiple targets. Hikvision's multi-sensor camera is defined by the scenario. One device with multiple lenses that are linked and coordinated can meet the requirements of different view angles, different parameters and different functions. The edge node integrates multiple deep learning algorithms that are designed for complex scenarios and can associate the time-space relationship with target characteristics, so a single scenario is derived into the time-

space scenario, which enables the fusion and analysis of data from multiple scenarios.



4

Hikvision will continue exploring the low-light imaging technology system to enable the colored effect in both day and night, to make night just as colorful as day time. The intelligent DarkFighterX products have developed into a full-series product family that covers medium-end, low-end and high-end business requirements. These products are designed in the new hardware architecture with low power consumption and high performance. The performance of DarkFighterX products are enhanced through hybrid supplementary lighting, multi-lens multi-sensor fusion and high resolution etc. The Company continues increasing input in the products for subdivided applications, where products are defined by the scenario demands, solving the problem in business adaptability of products under special environment and special conditions; In the trend of opening and fusion development, the Company has created the open products system, accelerated implementation of fragmented AI and continued launching series of end-to-end product solutions for the vertical sectors such as work safety, intelligent power grid, intelligent agriculture, remote education, emergency management, and etc.

⁴ MNR noise reduction: Multilateral Noise Reduction enables noise reduction in various data domains (raw domain or YUV domain), to improve the noise reduction effect.

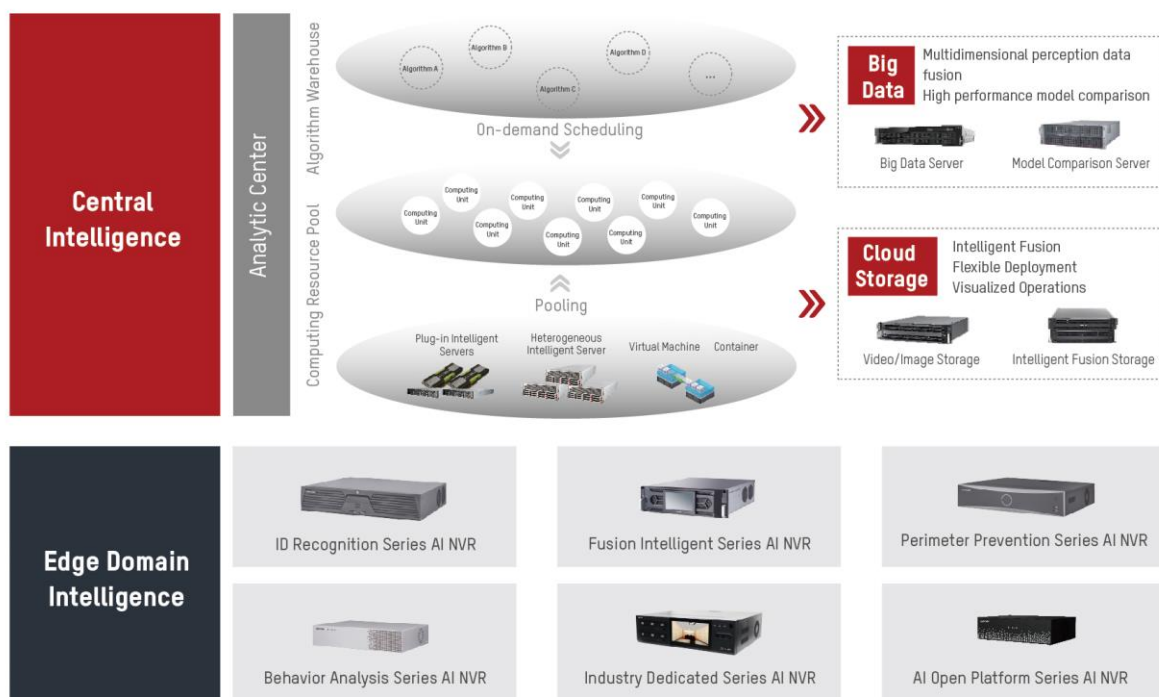
MSD pixel-level decomposition: Multi-Scale Decomposition decomposes image into multiple frequency components.

NDG nondestructive noise reduction: Nondestructive Digital Gain causes less noise compared with traditional digital gain and is effective at noise suppression.

SMDE Smart De-noise: Smart De-noise is a smart noise reduction technology which can automatically adjust the control parameters according to the illuminance in the scenario and the properties of noise points.

Edge domain and data center products

Among the edge domain products, the intelligent products represented by Hikvision DeepinMind have entered the 2.0 era. AI computing power has been significantly enhanced to meet the increasing edge computing power requirements. For the fragmented intelligent application requirements, the Company has launched the domain-end full series DeepinMind products and DeepinMind products dedicated for AI open platform to meet users' personalized and customized algorithm requirements and support efficient deployment of intelligent applications in the edge domain.



Hikvision's data center products are generated from an architecture capable of intelligent image full analysis, full compatibility in computing resources and full opening of engine and data. For central analysis products, the Company has created more diverse high-performance intelligent servers with the highest computing power, including the mainstream high-performance AI hardware platforms; further enhance the effects of algorithms, enable associated application of multiple algorithms and create the industry-leading algorithm ecosystem; enhance intelligentization and visualization of big data, to serve city-level and industry-level big data application and governance. For the full series of IoT central storage, it could meet the requirements of intelligent IoT storage, computing and application integration, and it uses fusion of multi-dimensional intelligence, data, application and storage to continuously create value for users; By drawing on the technological advantages in direct streaming storage and intelligent fusion storage, the Company's storage products maintains the leading position in the domestic

IP storage business.

Display and control products

Hikvision continues expanding the central display products, where diverse display modes such as seamless contiguity, transparency, curved surface, touch control and holographic display can enable interactive information acquisition, information intelligent placement and big data integrated presentation. Hikvision's fine-pitch LED products realize ultrahigh contrast and ultrahigh definition seamless contiguity display and have been extensively applied in monitoring center, command center and other scenarios.



Hikvision's LCD Display, based on the independently developed chip-level algorithm, realizes uniform color of entire video wall and multi-scenario display mode. It has also launched the Mini/Micro LED display product, which has been extensively applied in the scenarios that have high requirements for image quality.

The control products, based on technologies in audio/video processing, multimedia data fusion, ultrahigh resolution, AI, and concentrated and distributed structure etc., empowered decoder, splicing controller, video integrated platform and other classic products, which diversified the applications in monitoring center and command center and has maintained the industry-leading position.

Access control intercom products

For MinMoe series short distance ID recognition access control products, the new generation multi-modal ID recognition access control system was launched. This series does not only contain Hikvision's advantageous visual technologies such as high-accuracy ID recognition, fast pass, excellent dim light effect and freedom from white light contamination, but also supports voice interaction functions such as device activation and talkback; on-screen card swiping and thin body offer upgrade experience.



The access control intercom products also provide users with all-round support services covering products, product portfolio solutions and system solutions; the access control products have substantially enhanced system security and convenience in many projects such as intelligent community, construction site ID identification system, campus ID recognition pass, enterprise campus construction, office building renovation, tourist attraction, and station ticket checking, etc. Video intercom product, as an important product created by the Company for residence and real estate projects, integrates AI community and whole-house intelligence, to provide users with better intelligent life experience.

Intelligent traffic products

In the field of intelligent traffic, the Company has integrated the video and multi-dimensional perception technologies to create the edge domain fusion product package comprised of intelligent traffic cameras + road intelligent terminals. The Environmental Protection Checkpoint Capture Product Family, together with the same series products such as Environmental Protection Intersection Violation Capture System, Environmental Protection Micro Checkpoint/Smart Surveillance Capture System etc. have solved a problem that has vexed the industry for over a decade—the light pollution induced by white light sharp-flash, making contribution to eliminating light pollution. For comprehensive control of road traffic, the new business applications such as high beam light detection, warning of pedestrian running the red light, reminder of courtliness to pedestrians, whistling capture system and black smoke vehicle detection have been deeply integrated into urban civilization.



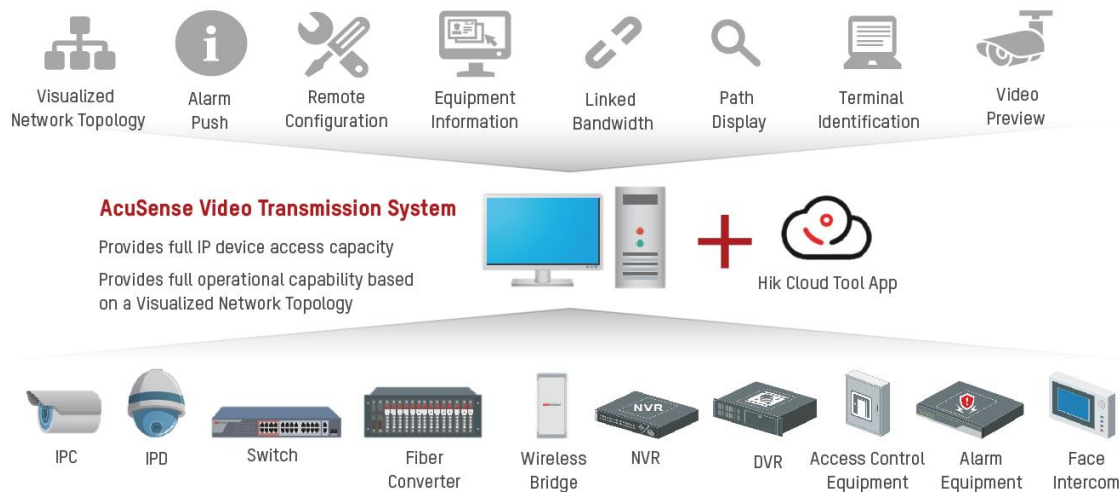
Through the deep fusion of millimeter wave radar and video technologies, the Company has launched the Radar-Assisted Series Product, which are capable of all-weather, multi-scenario, multi-target, multi-lane, high-accuracy and high-speed traffic information detection. They have overcome the technological bottleneck of the traditional one-dimensional video perception and enabled the implementation of applications such as traffic safety pre-warning, event detection and road scenario multi-dimensional information perception etc. In the field of traffic signals control, the Company enabled storage and analysis of multi-dimensional traffic big data at the platform end based on AI Cloud technological framework. Front-loading and optimization of signal control algorithms have enhanced stability, timeliness and reliability of the system and also are able to support more complex regional coordination and arterial coordination.

In the field of static traffic, the Company has integrated AI and RF technologies into the system, and launched the new-generation parking products and solutions which could improve parking management efficiency, thus creating value for customers. The radar detection products integrate the multi-dimensional IoT perceptive technology, without the need for ground induction coil, are able to simplify construction and maintenance process of projects, protect personnel and vehicles, and improve user experience. In the field of mobile law enforcement, Hikvision launched the independently designed dual-system intelligent collection station, which applies the embedded Linux + Android dual-system design and has substantially improved the system stability and guaranteed usability.

Transmission products

At the edge node, various security terminal products are connected through the transmission products such as

Smart Switch, Fiber Converter, Wireless Bridge and etc., to constitute a Smart Video Transmission System. Through the measures of Visualized Network Topology and Integrated Network Management, this system integrates the security system and network system into one system, ease the requirements for maintenance personnel's ability and improve the efficiency of problem detecting, problem positioning and problem analysis.



For edge domain and cloud center, Hikvision has launched the new generation data center level core switch product, which uses the CLOS architecture⁵ to separate data control hardware from transmission hardware and improve the reliability of core network. This product can support a project that maximally has 10,000 video channels.

Alarm products

Hikvision's alarm products have continuously upgraded the key technologies such as wireless RF transmission, passive infrared detection, microwave detection and pet detection etc., constantly improving multi-dimensional perception capability; based on AI technology, ID recognition and other intelligent technologies are applied in Intrusion Alarm Products and Public Alarm Products. Further integrating with the related technologies such as video, access control, intercom and thermal imaging, the alarm products and business management products have evolved from localized products to cloud-based portable products, in order to enable the online management, alarm cloud management, and help improve service provider's comprehensive operation and service capability, due to the opportunities in cloud business development.

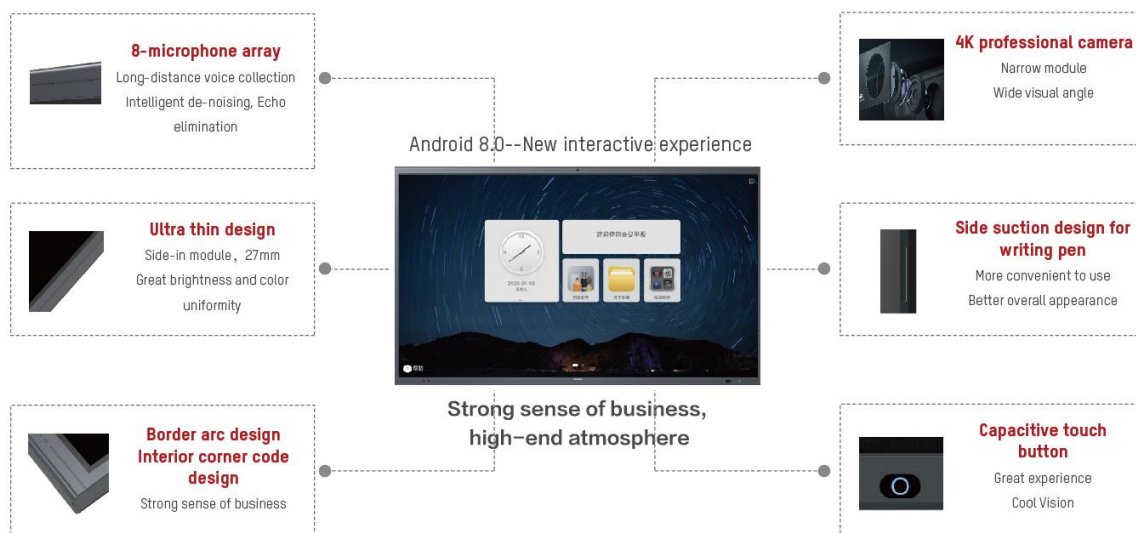
⁵CLOS architecture: this is a multilevel circuit switching architecture for frame type switches and can separate control hardware from retransmission hardware to enhance the reliability of the whole machine.



The Intrusion Alarm Products have strengthened the advantage of wireless RF technology, and the Hybrid Control Panel Products have been launched, further expanding into the low-end alarm market and enriching the product series. The Public Alarm Products have evolved from single emergency alarm to integrated product applications including emergency distress call, emergency response, rescue equipment/facilities management and medical assistance; with the fusion of various AI technologies, the Public Alarm Products enable the fast recognition, response and action.

Interactive flat panel displays (IFPD)

The Company's conference system offers the full-process solution that integrates conference doorplate, video conference, interactive flat panel display, and conference management system. Before conference: the system provides online appointment, data sharing, conference notification, non-inductive sign-in and doorplate synchronization. During conference: the system provides wireless screen projection, white board writing, interactive coordination, and voice minutes of meetings. After conference: the system provides centralized equipment control, statistical analysis of data, and sharing of minutes of meetings. Together, it offers users safe, intelligent and highly efficient conference experience.



The new IFPD products use high-accuracy infrared touch control/capacitive touch control technology to offer better touch control experience; the built-in 4K camera and 8-microphone array support voice recognition; the cloud conference system has been created, to make the video conference and coordinated cooperative office work more intelligent, more efficient, more convenient and safer.

To solve the problems of scenario variations and fragmentation of applications, Hikvision uses its abundant R&D resources, efficient and stable supply chain system, ample market channels and diversified product development to offer customers and users the optimal solutions and boost the trend of intelligentization. The Company will continue exploring technological researches on hardware, software, system, maintenance, security and other aspects, to gradually build the AI ecosystem of intelligent business and expand the fragmented AI application market.

3. Steady upgrade of core business

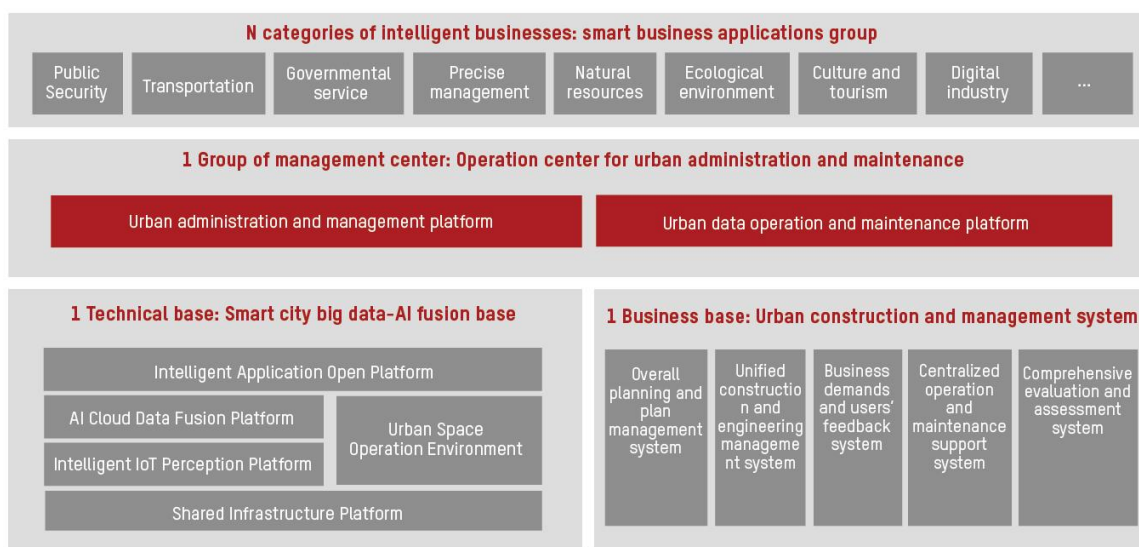
Hikvision has been offering various solutions since 2009, which cover more than 40 sub-industries encompassing seven major vertical industries, i.e. public security, transportation, law enforcement, finance, culture, education and healthcare, energy and buildings, driving the rapid growth of the Company’s business and leading the security industry into the solution-oriented era. In order to better adapt to the market demand of the industry and enhance the Company’s internal operating efficiency, Hikvision initiated the restructuring for its business structure in 2018, adjusted the allocation of business resources, and divided its domestic businesses into three business groups: Public Business Group (PBG), Enterprise Business Group (EBG) and Small and Medium Enterprise Business Group

(SMBG). Under the new business structure and based on three different business models, the Company explores further into market demands, coordinates company resources, and strengthens capacity in order to empower public services, help enterprises create value, and shape an industrial Internet.

3.1 Public Business Group (PBG): Empowering Public Service Optimization

3.1.1 Business Overview

With the continued deepening of and advancement in smart services for cities and various industries, such as smart cities, smart police, smart transportation, and smart urban management, especially as demand for modern governance of the urban areas continues to grow, public service has entered into the crucial stage of transition from “Internet +” era to “smart +” era. The typical business model of the “Internet +” era is “connectivity”, while that of the “intelligence+” era is “empowerment”. Undoubtedly, practitioners will opt to empower the public service optimization process by making full use of the Internet of Things (IoT), artificial intelligence, big data and other technologies.



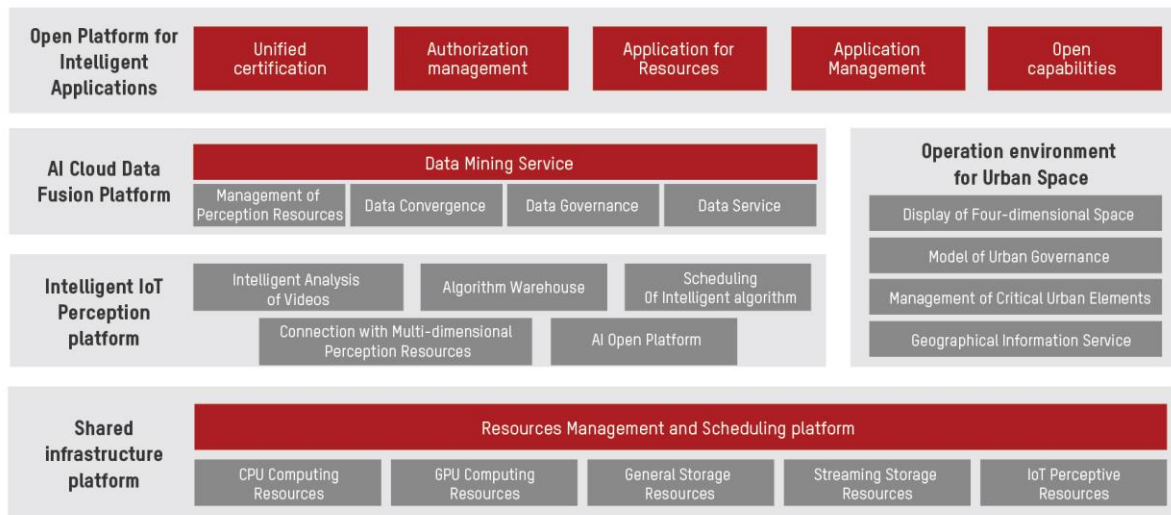
As part of its proactive efforts to seize the market opportunities in the industry generated from the optimization and upgrading of public services, Hikvision PBG provides government and governmental enterprise users with city-scale comprehensive solutions combining “perception + data + cognition” features to build the Big Data-AI Fusion Base for smart city and establish big data operation and maintenance centers and the operation and management centers for cities, offering data and application open-source capabilities, and supporting smart services in various aspects such as public security, transportation, precise governance, natural resources and ecological and

environmental protection and etc.

3.1.2 Core technologies: building a Big Data-AI Fusion Base to facilitate the intelligence of public services

Under the development model based on unified Big Data-AI Fusion Base, the smart industries and smart city development complement each other. The smart industries will be benefited from the development towards intelligent operation of a city, while smart city will be the inevitable outcome of the development towards intelligence of various industries.

Hikvision’s smart city Big Data-AI Fusion Base consists a Shared Infrastructure Platform, an Intelligent IoT Perception Platform, an AI Cloud Data Fusion Platform, the Urban Space Operation Environment, and an Intelligent Application Open Platform.



Shared Infrastructure Platform

By coordinating the cloud-edge computing facilities and transmission & storage facilities, we aim to build a unified resource management and scheduling platform, which is equipped with the capabilities of unified operation and maintenance management and resources integration for hardware resources, including computing resources, storage resources, network resources and security equipment, thus establishing capabilities of unified cloud platform management, integrated cloud storage, unified deployment of AI computing, etc.

Intelligent IoT Perception Platform

The platform provides the access of multi-dimensional perception data and the analysis capabilities of video

and image intelligent in order to achieve structured processing for video and image data. It also offers the AI Open Platform to realize the barrier-free training capabilities for users' scenario-based intelligent algorithms. Existing algorithms and algorithms created through training can be stored in the algorithm warehouse in a unified manner. In addition, the platform provides intelligent algorithm management and deployment capabilities, facilitating management and deployment of multiple types of intelligent analysis algorithms based on the standardized algorithm warehouse to achieve the optimal use of resources.

AI Cloud Data Fusion Platform

By integrating IoT perception data and governmental information data, the platform provides the capabilities in optimizing points governance and deployment plan of IoT perception resources, deepens capabilities in data governance and value mining, and provides users with unified management, convergence on demand, efficient governance, and data services of data resources, as well as data mining service capabilities based on knowledge maps and machine learning.

Urban Space Operation Environment

Based on geographic information services, offering formalized description capabilities in respective of ten types of elements involved in urban governance, such as areas, roads, places, buildings, facilities, network, environment, personnel, organizations, events etc. All elements can be connected with the spatiotemporal benchmark, thus creating public operating environment of a smart city, and serving as the technical basis for collaboration of urban business.

Intelligent Applications Open Platform

The Intelligent Applications Open Platform Provides a unified application framework, a series of business components, shields the difference between the underlying data model and artificial intelligence algorithms, provides an open interface for various capabilities, and supports the development of upper-layer business applications. It offers various capabilities such as unified authentication, access management, application for resources, application management as well as opening of capabilities etc.

3.1.3 Realizing industry value

Building on the basis of continuously deepened understanding of public security, urban governance, transportation, natural resources and other fields of business, Hikvision PBG is committed to developing solutions for a wide range of scenarios in various industries engaging in public service, and aspires to deliver safer environment, more precise service, more convenient transportation, and more habitable ecological environment.

Safer Environment

Hikvision provides security event monitoring and early warning as well as security protection capabilities tailored for public security, traffic safety, production safety and emergency management of natural disasters, with the goal to create a safer environment.

Hikvision provides industry solutions for public security. It provides a comprehensive application platform for public security videos and images, and provides a three-dimensional security prevention and control system for typical application scenarios such as street patrol, community security, prevention and control in security checkpoints, security management and control in entertainment facilities and for special industries, security of special service routes, while assisting public security officers and the police to carry out investigation and control at circle or layer levels, unit security and control, as well as element management and control, aggregating different kinds of security prevention and control data into a unified data platform, and conducting early warning, prediction and prevention of security risks through intelligence analysis and judgment, thus facilitating the creation of a safe and harmonious social security environment.

Hikvision provides industry solutions for traffic safety. It provides intelligent detection of road traffic violations, such as running red lights, opposite direction traffic, overloading, speeding, detection of plate discrepancy and driving non-permitted models, as well as capabilities such as off-site law enforcement, analysis of root causes of traffic accidents, control of disqualified drivers, investigation and control for highways, management of black points of road traffic violations, thus facilitating the creation of a safe and intelligent traffic safety environment.

Hikvision provides industry solutions for production safety. It provides various capabilities covering monitoring and early warning for safety production of enterprises engaging in production of hazardous chemical products, small and micro enterprise, coal mines, non-coal mines, tailings ponds, fireworks and firecrackers etc. It also offers capabilities such as smoke detection, fire point detection, recognition of obstruction of indoor and

outdoor fire passages, detection of uniforms compliance, detection of personnel on duty and absence from duty etc., with the aim of building a safe and efficient safe production environment.

Hikvision provides industry solutions for natural disasters. It provides capabilities such as comprehensive monitoring of natural disasters, early warning of disasters, comprehensive risk assessment of disasters, intelligent analysis, consultation, research and judgment on the evolution of disasters, etc., with the goal to build an emergency security environment to reduce disaster risks.

More precise services

Hikvision provides intelligent conditions detection and refined management service capabilities for urban management and comprehensive governance of public security such as urban landscape & appearance, street order, construction works, public facilities, landscaping, housing and land, etc., thus facilitating the provision of more precise services.

Hikvision provides industrial solutions for urban municipal management. Such solutions include: intelligent management applications for urban landscape, public facilities, housing and land, etc.; intelligent monitoring capabilities for the status of public facilities such as manhole covers, trash cans, etc.; landscape monitoring capabilities for inclination and falling down of ancient trees; intelligent monitoring capabilities for various types of road facilities; intelligent detection capabilities for various behaviors, such as illegal roadside stalls , operations outside the defined store boundaries, piling and storage of sundry items, road occupation for operation, illegal parking, etc.; intelligent identification capabilities for events having negative influence on the appearance of cities, such as identification of temporary roadblock incidents, detection of road congestion, detection of water accumulation on road, with the goal to build precise urban and municipal management service capabilities.

Hikvision provides industrial solutions for comprehensive management of social security. It provides event monitoring and early warning capabilities such as detection of crowd density in public places and early warning for trampling events, public security events, regional intrusions, and crossing warning lines, etc., with the aim of building capability of precise and comprehensive management of social security.

More convenient transportation

Hikvision provides smart service support capabilities for urban transportation, such as smart road networks, smart traffic management, smart public transportation and smart parking etc. , with the aim of making transportation

more convenient.

Hikvision provides industrial solutions for transportation networks. Such solutions include: intelligent support capabilities for road network facilities, e.g. expressways, roads, railways, rail transit and urban roads, including road network entrance and exit control, urban road intersection control, traffic safety intelligent monitoring, intelligent analysis of traffic conditions, intelligent detection of traffic flow, as well as optimization of traffic signal control based on the analysis of traffic big data; intelligent construction support capabilities for transportation hubs, such as ports, passenger and freight stations, airports and railway stations etc., with the aim of building “smart roads”.

Hikvision provides industrial solutions for traffic management. Such solutions include: dynamic lane management capabilities, e.g. variable lanes, tidal lanes and bus lanes etc.; key road management capabilities such as early event warning on key road sections, early behavior warning on dangerous driving behavior, examination of traffic parameters; key vehicles Management and control capabilities, such as key vehicle enterprises management and key vehicle traffic management; road traffic safety early warning and analysis capabilities such as early warning on road rights conflict, intersection safety scoring, real-time monitoring of road conditions, analysis in respect of effectiveness of early warning, etc.; traffic police patrol, AR real-world command, security of special service routes, green-light traffic of special service routes, with the goal to facilitate “smart traffic management”.

Hikvision provides industrial solutions for public transportation. Such solutions include: bus management and deployment capabilities, including preparation of bus schedules, vehicle deployment, vehicle operation deployment and statistical reports on bus deployment; safety management capabilities for public transportation, such as vehicle positioning, driver attendance, vehicle video inspection, operation and maintenance of vehicle terminals, active monitoring of driver safety as well as road risk management etc.; capabilities such as comprehensive management of bus station, electronic bus-stop board management, bus passenger flow data analysis, and etc.; taxi operation supervision capabilities; bus supervision data analysis capabilities, with an aim of shaping “smart public transportation”.

Hikvision provides industrial solutions for urban parking. It provides convenient parking fee payment channels that support human-free parking lots, provides automatic detection and recording of parking processes, integrates urban parking networks, unifies management of integrated operations, aggregates parking space data, establishes urban parking data centers, organizes and synthesizes data, in order to offer convenient and diversified vehicle owner service capabilities such as parking space searching, reservation, routes navigation, electronic payment, monthly parking package and bill query etc., with the goal to achieve “smart parking”.

More habitable ecological environment

Hikvision provides intelligent monitoring management and service capabilities for monitoring and management of natural resources, water resources and water services, and ecological environment, with the aim of creating a more habitable ecological environment.

Hikvision provides industrial solutions for monitoring and management of natural resources. Such solutions include: forest and grass fire intelligent monitoring and management capabilities such as early warning and positioning of fire risks, research and judgment on early warning of fire risks, analysis of fire spreading, fire management, management of documents on fire accidents etc.; smart territory monitoring capabilities such as providing video-based inspection for law enforcement on unauthorized construction on the territory, law enforcement supervision with satellite images, intelligent analysis and alarm on unauthorized construction, collection of event clues, research and judgment on alarming events, etc.; natural conservation area monitoring and management capabilities such as animal monitoring, disease and pest control, patrol and management, biodiversity monitoring, and etc.; national park big data service capabilities such as evaluation on survey & monitoring, regulatory decision analysis, emergency planning for geological disaster, service for forestry industry etc., with the aim of materializing intelligent supervision of natural resources.

Hikvision provides industrial solutions for monitoring and management of water resources and water services. Such solutions include: rivers and lakes intelligent supervision capabilities such as river and lake cleaning management, sand mining management, water area shoreline intelligent management, etc.; intelligent supervision capabilities for water conservancy project such as safety supervision of water projects under construction, visual transportation management of water engineering; water disaster prevention and supervision capabilities such as water and rain monitoring and early warning, visual operation and management of flood dispatching; cloud management platform for large- and small-scale water conservancy projects for the purposes of dam safety monitoring, water project inspection and supervision, etc., with the aim of achieving intelligent supervision of water resources and water services.

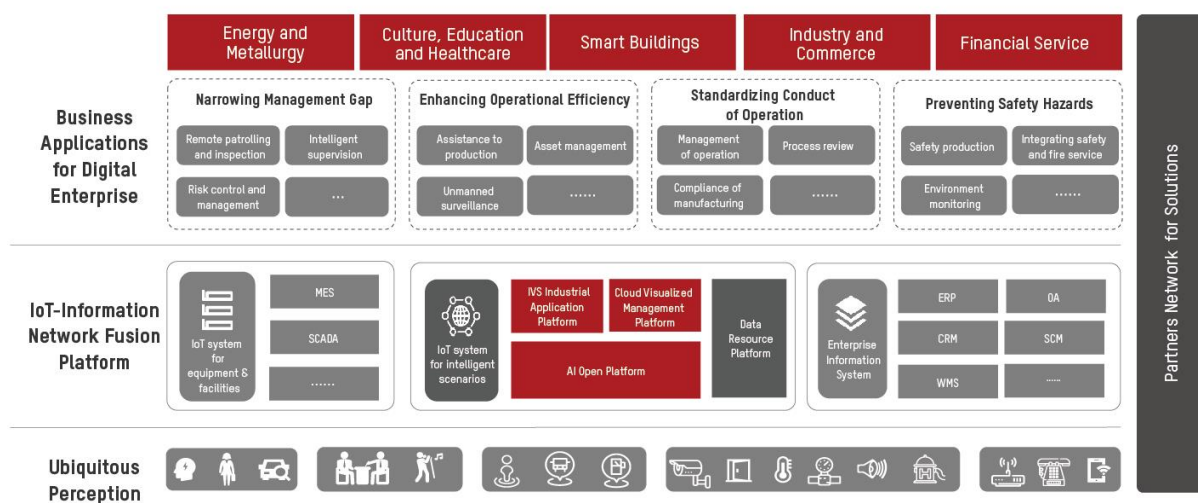
Hikvision provides industrial solutions for ecological environment monitoring and management. Such solutions include: intelligent monitoring capabilities for air pollution, such as management and control of smoky vehicles on road, monitoring of burning in open space, vehicle control under heavy polluted weather conditions, dust control of construction sites, etc.; enterprise pollution management capacities, such as monitoring of unauthorized discharge of sewage and waste gas, pollution source station management, and etc.; ecological environment big data analysis capabilities, such as water environment analysis, atmospheric environment analysis,

pollution source census analysis and etc., with the aim of achieving intelligent supervision of ecological environment.

3.2 Enterprise Business Group (EBG): Facilitating Value Enhancement of Enterprises

3.2.1 Business overview

The age of digital economy has arrived. Digital transformation has accelerated the creation and transmission efficiency of information, and driven profound changes in organizational structure and management mechanisms. Hikvision EBG makes proactive efforts in riding the wave of digitalization in the industry, and is committed to becoming a digital transformation partner for IoT scenarios and AI applications for industrial users.



In 2019, building on the AI Cloud architecture, Hikvision EBG business relied on the technology capabilities in respect of intelligent IoT and the fusion of IoT and information networks to develop a digital enterprise solution that integrates conventional information systems, devices and facilities IoT, and intelligent scenarios IoT. These efforts have helped enterprises build digital transformation and gain insights into development opportunities, as well as enable them to extensively engage in scenarios of enterprise campus, production and manufacturing, healthy communities, smart construction sites, coal mining and metallurgy, petroleum and petrochemical, retail chains, education and teaching, financial services, cultural and tourism, medical and geriatric care, etc.

3.2.2 Core technology: establishing intelligent scenario IoT and developing digital enterprise applications

Intelligent Scenario IoT is a new type of infrastructure in the digital era, laying the foundation for realizing the

fusion of IoT and information networks and digitalization. Based on technologies such as visual perception, machine vision, thermal imaging, millimeter wave radar, Hikvision focuses on intelligent scenarios IoT and devices and facilities IoT, and carries out research on industry business application. Utilizing the AI Open Platform, IVS Industry Integrated Application Platform and the “One Core and Two Wings” strategy of Cloud Visualized Public Cloud Platform, it realizes intelligent scenarios IoT under the single-domain and multi-domain governance framework of enterprises, in a bid to support enterprises to realize the digitalization of scenario elements based on the environment, people, behavior etc., and offer digitalized comprehensive solutions for industry users.

(1) AI Open Platform: making continued efforts in developing the visual perception engine

Leveraging on the AI Open Platform as the visual perception engine, Hikvision EBG continues to improve its one-stop AI algorithm customization and application system tailored for industrial fragmented scenarios. A series of automation components and tools are designed to integrate the full chain of AI development and application and achieve seamless integration with enterprises’ existing systems, making the AI technology more accessible and affordable to enterprises, and achieving remarkable results in innovative practice across various industries.

Leveraging on the AI Open Platform, Hikvision EBG supports biopharmaceutical enterprises to realize innovation approaches in GMP⁶ (Good Manufacturing Practice) compliance management, through which such enterprises conduct intelligent analysis and give pre-warning on the personnel behavior, material placement and facility operation status in crucial production lines, promoting the visualization of management throughout the pharmaceutical production process and improving QA (Quality Assurance) inspection efficiency by 50%. Hikvision EBG cooperates with energy enterprises to set up the intelligent system in coal mines, which forms an efficient closed-loop business process consisting of real-time pre-warning, handling and verification of events regarding the potential safety hazards arising from behaviors of underground personnel, equipment and facility status and environment parameters etc. An AI livestock asset stock-taking system was developed by Hikvision EBG through cooperation with livestock and poultry farming enterprises. The system enables intelligent statistics analysis on the number of pigs, which satisfies the urgent demands for asset stock-taking and surveillance on diseases and reduces comprehensive costs by 15% for enterprises.

⁶ Good Manufacturing Practices. GMP is a set of compulsory standards applicable to pharmaceutical, food and other industries. It requires enterprises to meet hygienic quality requirements from raw materials, personnel, facilities and equipment, production processes, packaging and transportation, and quality control in accordance with relevant national regulations, in order to form a set of operable operation specifications to help enterprises improve the enterprise's sanitation environment, and timely find and improve the problems in the production process.

(2) IVS Industrial Application Platform: extensive connectivity to support the digital applications for enterprises

Relying on the Unified Software Technology Architecture of Hikvision, the IVS Industrial Application Platform has put in place a variety of intelligent IoT basic service capabilities, including IoT access, device control, video online connectivity, data resource management etc. By taking advantage of the service-based architecture and component-based development technologies, Hikvision EBG has established the capabilities to drive the rapid shift from common business services to sub-sector applications, and provided enterprises with digital application softwares tailored for different sub-sectors, such as:

Digital operation and command center of enterprises: It integrates intelligent IOT technology, data analysis and 3D modeling etc. to realize the overall digitalization for enterprise campuses, manufacturing plants and logistic parks. Targeting at production management, park management and energy consumption management, etc., it aims to help enterprises to achieve transparent management of accurate perception and smart decision-making.

Safety production management platform: Targeting the production and operating activities of power grid, petroleum and petrochemical, steel metallurgy, coal mining, energy and chemical industry, it adopts video-centered IoT technology, together with the AI technology such as intelligent behavior analysis, to offer effective personnel management, operation control, safety supervision, equipment inspection, danger source detection, infrared temperature measurement, and etc., thus assisting management and decision-making, effectively preventing accidents, dangers and other harmful factors, safeguarding the safety and health of staff and avoiding damages to equipment, facilities and environment.

Intelligent logistics park platform: Targeting managers of logistics parks, taking into account the overall internal operation of the parks, it effectively manages the access of personnel and vehicles and the records and files through intelligent technological methods, and realizes the unified scheduling management of the internal platforms of the parks.

Intelligent construction site management platform: It aims to help the construction companies realize the supervision on personnel, materials, environment, and safety operations. It improves the refined management of the construction sites, through a multi-dimension perception and analysis of construction sites management based on the real name registration system of personnel management, access control data, environment surveillance data, helmet use data, and boundary crossing data in dangerous areas.

Smart community management platform: Business applications, such as inspection and assessment, care

for property owners, payment and repair services, are provided for property management service companies with efficient management tools to improve the quality of property services and build up a healthy community.

Upholding the concept of openness and convergence, the IVS Industrial Application Platform provides a plenty of OpenAPI services to achieve full opening of product capabilities and help partners to integrate intelligent IoT applications in a fast, convenient and secure way, and to jointly empower enterprises in digital transformation.

(3) Cloud Visualized Management Platform: enterprise-level SaaS application with Video + AI as its Core

As a public cloud application service portal based on scenario intelligence, Cloud Visualized Management Platform relies on the device access management of EZVIZ cloud to provide SaaS cloud services for chain business, community, general education, logistics and other sub-sectors, lowering the digital transformation threshold for enterprises.

In the retail chain industry, based on video-based remote inspection applications, Cloud Visualized Management Platform integrates the capabilities of AI Open Platform to apply scenario-based algorithms to the daily store inspections, which are widely used in aspects such as out-of-stock reminder, shelf inspection, obstructions in fire exit routes and regulations on staff clothing, and etc. In general education campuses, Cloud Visualized electronic class tablet is used in class attendance, class supervision, class evaluation, cultural display, information dissemination, inquiry about curriculum, home-school interaction and distribution of third-party application etc., reducing costs of education management for schools and building a bridge for home-school interaction. Within enterprises, in conjunction with the series products under DeepinGo, Cloud Visualized Management Platform achieves touch-free ID authorization/recognition access control and working time attendance to help enterprise enhance digital management.

In 2019, Cloud Visualized Management Platform continued to see fast growth both in the number of users it served and the number of devices it connected with, and created greater value through sustained application innovation in sub-sectors to increase customer loyalty. Through a more extensive and convenient connectivity with the external systems through open platform, Cloud Visualized Management Platform can connect with mainstream application software in the target market of enterprises, realizing the shift from purely “being integrated” to “multi-application interconnectivity” and “integrating third-party applications/services” to achieve opening and interconnectivity and integration into SaaS ecosystem.

3.2.3 Realization of industry value

Based on its industry insight and business knowledge, Hikvision EBG continues to specialize in five industry sectors: energy and metallurgy, culture, education and health, intelligent buildings, industrial and commercial enterprises, and financial services. Relying on the digital solution system of the industry, concerned and driven by the demand for user value, Hikvision EBG builds a value business system oriented to “narrow the management gap, enhance business efficiency, regulate operation practices and prevent potential security hazards” with the aim of achieving user value.

Narrowing the management gap

Leveraging on the video-centered IoT perception and connectivity capabilities, users can achieve holistic control and realize the change from “on-site management and decentralized management” to “center-based management and centralized management”, thus reducing the distance between enterprise managers at all levels and production scenarios to mitigate management anxiety.

For senior management of enterprises, the Company offers three technical approaches: AR real command, digital command view and data dashboard, enabling users to achieve holistic control and get insight into details at the same time. For example, in the field of enterprise production bases, we build digital command map for production base to realize management of factory on-site, personnel, equipment and facilities as well as energy consumption in a 3D digital world. The Company also created data dashboard to provide real-time feedback on the operation status of production bases and manufacturing workshops through detailed indicator system, meeting the needs of precise management scheduling as well as research and decision-making application.

In terms of front-line management, we have developed video + AI technology to facilitate people-in-charge in implementing environmental and safety inspections, remote monitoring and supervision and closed-loop rectification of production operations and related equipment, assisting enterprises to achieve standardized services or standardized operation management. For example, in the field of quality control for smart community, through transformation on intelligent patrol, we realize intelligent supervision and automatic pre-warning of various scenarios such as community boundaries, fire protection management, obstructions in fire exit routes, code of conduct for property management, reducing a lot of labor cost for community supports. In addition, AI remote inspection is also widely used in SOP⁷(standard operating procedure) inspection of production workshops, retail

⁷ Standard Operating Procedure. Refers to describing the standard operating procedures and requirements of an event in a uniform

chain stores inspection, substation inspection and many other fields.



For scenarios where the government has imposed regulatory requirements, the Company provides efficient visualized online monitoring approaches to carry out enforcement inspections, conduct compliance inspections, risk identification and real-time quantitative assessment, and early risk warning for entities subject to regulation, so as to achieve unified management, collaborative scheduling and enhance service capabilities. In the field of general education, Hikvision facilitates the education authorities to carry out inspection and safety supervision of hidden issues in schools and develop the benchmark of informatization in education. In the field of food and drug supervision, Hikvision helps users build up a catering supervision platform to ensure food safety in food preparation areas of kitchens and enhance efficiency of supervision.

Improving operational efficiency

Production results, time and manpower are the three elements of operational efficiency. Through the integration of AI and intelligent IoT technologies, Hikvision helps various businesses to drive the automation, online operation and standardization of process, and promote operational efficiency across various areas such as production, logistics, education, people’s livelihood: improving the quality of production and level of service to achieve improvement in the quality of deliveries; optimizing business processes and enhancing production capacity to achieve reduction in time consumed; reducing manpower input and labor costs to achieve optimization of staffing.

format, in order to guide and standardize daily work. The SOP of each process on the production line stipulates the operation details and order standards of the workers assigned to this process. The assigned workers’ operations according to the SOP is the basis to assure the product quality and production efficiency. Workshop SOP inspection refers to inspecting whether the workers at each key station are operating according to the SOP requirements of this process.



Improving quality of production: By integrating machine vision into production process, Hikvision helps users build intelligent production lines, which assist users with defect detection and volume measurement in the production process, and improve inspection efficiency to enhance yield rate and the overall quality of production. For example, in the field of electrical and electronic equipment manufacturing, Hikvision helps users to realize fully-automatic supervision of the status of the material port on the production line, which significantly improves the quality of order delivery; in the field of coal mining and metallurgy, Hikvision helps users to carry out automatic inspection of the material blockage, runout and coal loading at the belt transfer point to avoid production accidents and reduce energy consumption.

Enhancement of service: In the cultural tourism and education sectors, the Company realized online, transparent and intelligent business operation through video networking technology and facilitated the enhancement in service quality. In the field of general education, we work together with general education users to create the new form of intelligent campus that integrates classroom teaching, book lending, dormitory management, on-campus medical treatment and other functions, thus realizing their mission of servicing and educating students.

Optimizing business processes: In the on-site logistics scenario, Hikvision has created a digital platform and enhance the efficiency of on-site logistics synergy. As part of these efforts, the Company works together with users in the logistics industry to build intelligent logistics parks, realizing seamless connection, intelligent perception and optimization in collaborative interaction of people, vehicles and platforms through identification on digital platforms, which results in enhancement of the platform resource utilization rate by more than 30%.

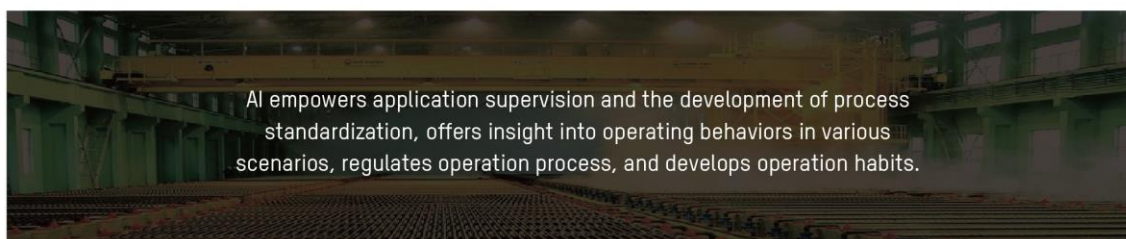
Reducing labor costs: In the field of financial services, Hikvision created the staff-free vault by taking advantage of human-machine collaboration. Through the integration of AGV, robotic arm, machine vision, etc.,

automated transportation, sorting and storage of the goods in the vault are realized, thus reducing labor intensity, releasing staffing configuration, and improving operational efficiency.

Standardizing operating behaviors

Based on the conventional management approaches of human supervision and training & education, the Company integrated AI scenario-based perception technologies and business informatization management to strengthen the visualization of supervision approaches and the awareness of standardized operation, providing efficient assistance to establish standardized management of process operation and scenario-based operation behaviors.

In process-based production scenarios such as energy metallurgy, industrial manufacturing, equipment manufacturing, electronic appliances as well as food and drug and FMCG (fast-moving consumer goods), the AI scenario-based perception and operation management system can be integrated to enhance operator awareness of standardized operation, and strengthen safety monitoring through intelligent supervision of the operation process, and to enhance intrinsic safety based on data insight. For example, in the power sector, the Company works with grid users to build an on-site safety operation control platform for a holistic operation plan management and safety inspection and management for transmission lines, power distribution, power network for agricultural purposes, technical retrofitting, comprehensive governance and infrastructure projects.



Standardization of process of flow operation

- Management and control of operation process
- Review and trace of flows



Insight into operating behaviors in various scenarios

- Production & manufacturing
- Application for construction site
- Community supervision
- Financial marketing

Based on customized AI-perceptual technology, the status of operational elements and behavioral norms in production scenarios are analyzed and combined with management needs to achieve effective monitoring. In the equipment manufacturing scenario, Hikvision assisted users engaged in tire manufacturing to achieve intelligent management of compliance behavior on tire appearance quality inspection, resulting in a decrease of over 30% in

QA resource investment.

Through IoT sensing technologies such as intelligent perception, outdoor 3D positioning and etc., Hikvision helps meet the two-way supervision needs of construction companies and owner units using intelligent construction site visualized supervision that integrates site personnel operation management, real name management of staff, environmental management as well as mechanical management. In 2019, the Company assisted users to implement a large-scale real name attendance system, achieving intelligent comprehensive management covering attendance, access and behavior monitoring.

In the financial outlet scenario, intelligent supervision is carried out on the process of hand-over of deposit box at the outlet, enabling timely detection of abnormalities and ensuring the smooth progress of escort operation. This is achieved through multi-level authentication of vehicle plates and personnel as well as automatic matching with the escort schedule.

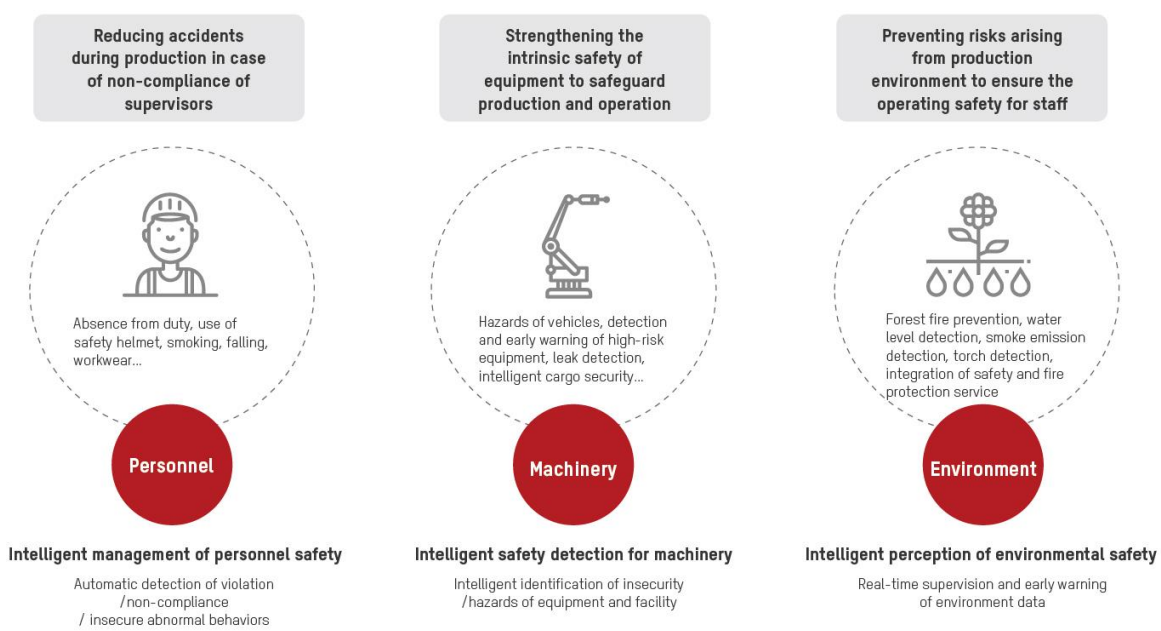
Preventing potential safety hazards

With full coverage of business activities and the combination of intelligent perception and fire prevention, the Company created a three-in-one enterprise safety prevention system integrating intelligent personnel safety management, intelligent equipment and facilities safety monitoring, and intelligent environmental safety perception, thus establishing a “full coverage, multi-dimensional” fire protection monitoring network. The Company also created innovative fire technical prevention, promoting the transformation in fire protection management from post-event accountability investigation to precautionary warning, improving emergency handling capacity, and reducing the work pressure of fire safety management personnel.

The Company integrates AI technologies to create a security management system for business management personnel and front-line staff. In typical high-risk production sites such as construction sites, oil fields and coal mines, Hikvision deploys intelligent monitoring systems for a series of activities such as Hot Work⁸, ascending operations, personnel leaving the post, and safety uniforms and etc., to achieve active early warning of abnormalities and violations, and to reduce the occurrence of production accidents.

⁸ Hot Work refers to welding and cutting operations in the no-fire area and the use of blowtorches, electric drills, grinding wheels, etc. in flammable and explosive places for temporary operations that may generate flames, sparks, and hot surfaces.

With the support of AI, reducing production safety risks relating to personnel operation, changes in environments and equipment



With the use of an intelligent technical prevention system, in retail stores, real-time monitoring of the transaction process is implemented, enabling management staff to effectively focus on abnormal orders for retrospective accountability, and to reduce losses caused by internal theft. For example, the Company helped a supermarket chain build an intelligent loss prevention system in 500 branch stores, enabling efficient and accurate recognition of habitual thieves, resulting in reduction of 13.7% in single-store loss.

By integrating various intelligent perception approaches such as video AI and thermal imaging and etc., Hikvision provided early hidden danger warning and asset hidden danger detection in high-risk scenarios including substations, transmission lines, pipelines, steel metallurgy production and manufacturing, ensuring stable production operations. In the metallurgical industry, Hikvision helped a user in the copper industry implement real-time temperature measurement and pre-alert of electrolytic devices, which effectively avoids the potential hidden trouble of excessive power consumption and reduced product quality, reducing inspection costs by 75%.

Based on the intelligent IoT and firefighting linkage, the Company combined intelligent fire alarm, gas leak alarm, water, electricity safety monitoring, and AI video integrated “security and fire protection integration. It has been widely applied in more than 10 industries such as enterprise campus, finance, education, hospitals, cultural and historic sites, etc. In addition, a project of integrated security and fire protection achieved the unified management of 373 high-rise buildings and 108 key units. Since the completion of the project, there has been a significant increase in the intact rate of firefighting facilities and an overall decrease of 35% in the number of alarms.

Digital transformation will become a prioritized strategy for every enterprise, driving a new stage of rapid development of the digital economy and accelerating the transformation of the industrial value chain, iterative upgrading of new business models and new business formats. “Business online, intelligent IoT, fusion of IoT and information networks” is the digital evolution path promoted by Hikvision EBG. In 2020, Hikvision EBG will continue to take advantage of profound technology accumulation and enterprise service experience to promote the vigorous development of industrial digital transformation.

Openness and cooperation represent the new normal state in the digital age. Hikvision EBG continues to uphold the philosophy of full openness, division of labor and collaboration, and win-win cooperation, while actively working with users and partners to create dynamic solution application ecosystems, facilitating the digital transformation of various industries.

3.3 Small and Medium Business Group (SMBG): Building Industrial Internet

With the progress in the digital wave as well as the change and enrichment of business forms, the digitalization capacity of SMBs has now become a key productivity factor for them to seize opportunities and evolve. With a focus on the fast-growing SMB group and building on Hikvision’s leading intelligence, big data, Internet and service capabilities, Hikvision SMBG strives to create an integrated security industry Internet covering mall transactions, communities, programs, content, services, and tools. The goal is to reach millions of security practitioners and users, helping partner companies throughout the full chain of operations, strengthen industrial collaboration and realizing optimal allocation of resources. Hikvision SMBG endeavors to become a preferred one-stop product and service provider trusted by users. Through community-based service operation and intelligent visualization management, Hikvision SMBG helps SMBs reduce costs and increase efficiency, while enhancing their business competitiveness amidst a rapidly changing market environment.

Effective synergy of distribution channels is the foundation of a well-performing SMB business. Hikvision SMBG has built the Hikvision SMBG E-commerce Platform, an industrial Internet platform, which supports official mall transactions, cloud services and SaaS applications, provides users with a professional solution library and knowledge learning library, and optimizes the ordering tools to upgrade the service experience, in order to create a more valuable industrial business form. In 2019, Hikvision SMBG E-commerce Platform exceeded 3 million downloads, covering over 400,000 security practitioners.



Hikvision SMBG E-commerce Platform is a comprehensive platform integrating trading, marketing, community, solution, service and tool. It focuses on empowering small businesses and offering customer-end services, and providing convenience for customers and users through mobile Internet technology.

Hikvision SMBG will connect online and offline experience stores through Internet tools, and empower offline stores and shopping guides through various channels such as delivery of promotional materials, pre-sales, training, certification, cases, and information to realize offline experiences and online purchases, thereby creating a consistent user experience between online and offline. Thanks to these capabilities, Hikvision SMBG is able to consolidate channel partners and service stores across China, upgrade and optimize the service operation system at the provincial, municipal and county levels, and provide users with localized, community-based and grid-based operation services.

By building a one-stop engineering platform, Hikvision SMBG creates a valuable security product sale ecosystem for customers, strives to create value for customers, and becomes a trusted partner for customers. Hikvision continues to enrich ways to help customers improve their business capabilities. It also unites with a wide range of security practitioners in a deeper market to enhance the coverage of user-oriented grid-based services, helping establish more connections between distributor customers and users. At the same time, to help distributor customers better serve their users, the Company provides convenient and intelligent applications and management tools to help improve localization services and improve installers' efficiency in project operation and maintenance.

Hikvision SMBG connects consumers and service providers through online and offline connections, and provides users with customized design solutions to facilitate the linkage between supply and demand. Supported by the huge channel resources of Hikvision across China and the increasingly enhanced platform tools, SMB users can easily experience and purchase Hikvision's products and services through a variety of business portals such as the official website, customer service 400, E-commerce Platform, WeChat-stores, distributors and service flagship

stores. Users can create demand online through cloud commerce, e-commerce and new retail stores, and can also place orders through the nearest offline store; offline experience stores provide 1V1 services such as consultation, survey, solution design, installation, after-sales service and evaluation etc.



The SMB market is a typical long-tail market, characterized by individualized and scattered user demand. These demands are minimal from an individual perspective, however, the cumulative effect of scale is relatively large due to the huge overall quantity and extensive scope. Hikvision SMBG materializes the digital operation of multiple industries by continuously building industrial Internet platforms as well as linking and empowering channel customers; it also builds open and shared, win-win industrial Internet platforms by relying on first- and second-tier distributors and collaborating with players in the security industry, third-party ecology and SMB users. Hikvision SMBG will gradually implement the strategic blueprint of “Refined Operation, Change of Model, Leading Scale Advantage, Data Value”, play a leading role in guiding the transition to refined operation of the industry at the SMB-end, transform the offline module into the combination of online and offline, thus helping partners to develop business and promote market integration. While creating value by combining Hikvision’s experience in big data and AI application, the Company will continuously build new distribution management systems and models, create customer cooperation ecology and facilitate the digital transformation of SMBs.

4. Innovative Businesses Flourishing

Hikvision's business developments constantly generate new technologies. In addition to intelligent IoT solutions and big data services represented by security and protection, the new businesses based on video technologies such as EZVIZ Network, HikRobot, HikAuto, HikSemi, HikMicro, HikFire are gradually making breakthroughs and growing and they are effectively synergized with the traditional main businesses to provide more diverse supporting applications for customers and users' scenarios. Besides, a new technological highland has been

established, to offer new impetus for long-term sustainable development of the Company.

4.1 Innovative business-EZVIZ Network

The core of EZVIZ's Internet businesses is based on intelligent video and visual technologies. It uses Internet cloud computing, AI, machine vision and control technologies to create reliable, safe, and intelligent household products and IoT platform, to provide families, individuals and small and micro enterprises with intelligent products and high-quality services.

In 2019, EZVIZ proposed creating the "1+4+N" smart home IoT eco-system: centered on the EZVIZ Cloud, deploying four independently developed products—smart security, smart home entry, smart control and companion robot—that are open to and connect to environmental control, intelligent audio and video and other subsystems, to achieve full intelligentization of households, offices, shops, schools, hotels and other premises.

Four intelligent products: realizing full intelligentization

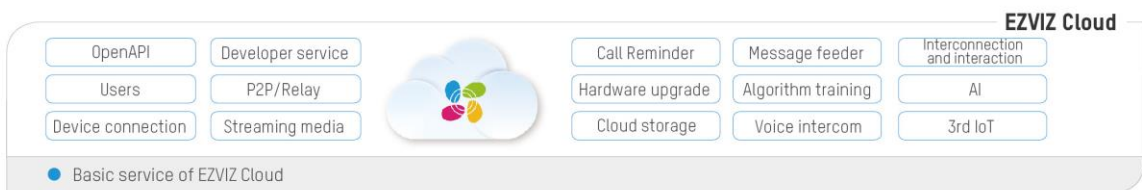
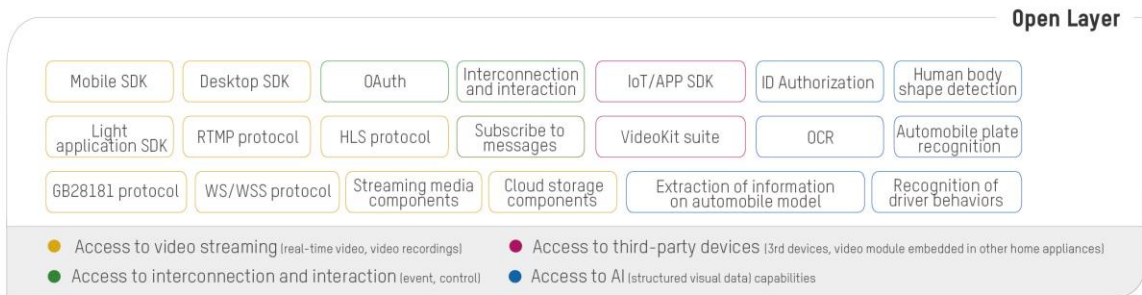
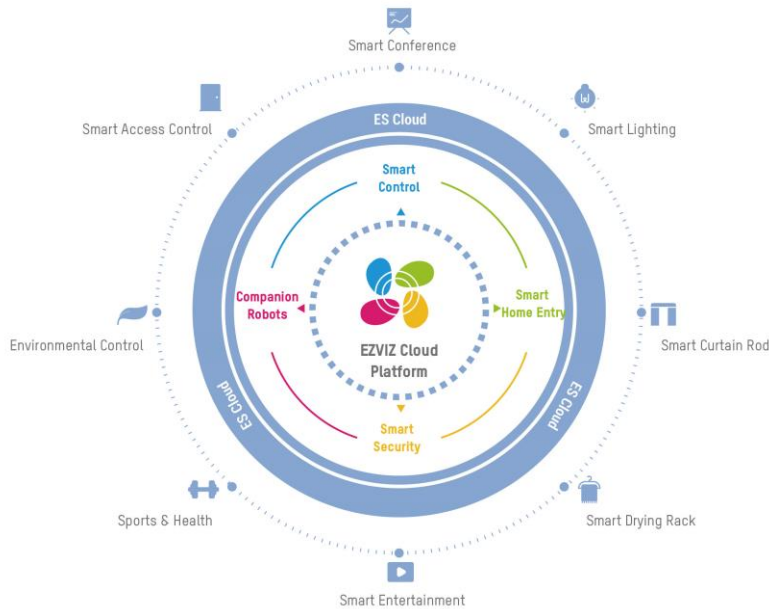
In the field of smart security, EZVIZ has redefined Smart Home Camera (SHC), which is characterized by easy installation, easy storage, two-way voice, privacy protection, low power consumption and linkage with households. In 2019, EZVIZ launched the product series that support AI tracking, quadruple zooming and colored night vision. It has now established a diverse product system comprised of colored products, multi-ocular products, AI products and battery products.

In the field of smart home entry, EZVIZ has launched the Smart Visualized Fingerprint Lock and Smart Visualized Lookout. Through linkage with the whole intelligent household system products, visualized management of home entry control is enabled, to enhance the user's proactive defense ability and convenience in the home entries.

In the field of smart control, EZVIZ has launched the intelligent switch panel, intelligent outlet and etc. Additionally, EZVIZ continues improving the system solutions centered on intelligent central control, integrating into smart community applications, and has achieved the integrated intelligent solutions that cover smart community and smart household.

In the field of companion robot, EZVIZ has enhanced the core video and AI technologies, iterated the products and extended to new smart robot products and launched the first RS1 Intelligent Vision Robot Vacuum and the EZVIZ Smart Safety Watch with Built-in HD Camera for Kids, enriching the product portfolio of environmental safety and children safety products.

By drawing on the EZVIZ Cloud platform and the four independently developed products, together with ecological products, EZVIZ Internet can offer diverse scenario solutions including intelligent household, intelligent apartment and intelligent office, to provide families, individuals and small and micro enterprises with high-quality services.



1+4+N Business Ecosystem Map and EZVIZ Cloud Platform Capabilities Chart

EZVIZ Cloud platform: transforming from a video cloud platform to an IoT cloud platform to build an ecosystem

EZVIZ uses intelligent hardware products, cloud services, AI and robotic technologies to create intelligent life, work and education environments for users. Besides, EZVIZ uses its open platform to share with partners the cloud service capabilities bolstered by intelligent video, to co-create the IoT cloud ecosystem. EZVIZ Cloud now has tens of millions of household users, is able to sustain billion-level message-processing and is capable of hundred-million-level equipment operation and maintenance and financial-level information security and encryption.

As the interface to experience EZVIZ intelligent household ecosystem, EZVIZ Cloud video APP is connected to the EZVIZ intelligent terminal products. With products portfolio diversification, AI capabilities expansion and participation of the ecosystem partners, the EZVIZ Cloud video APP upgraded to Version 5.0 in 2019, moving its business from client side to higher-class business platforms. EZVIZ Cloud is currently supported by iOS, Android, and PC, with tens of millions of active users every day.

The EZVIZ Open Platform is characterized by low development cost, high professional level, high stability and easy access. The extraordinary algorithms and technologies for, ID authorization/recognition, vehicle analysis and body detection enable the developers and ecosystem partners to constantly share the business opportunities engendered by technological iteration. So far, 60,000+ partners have joined EZVIZ Cloud.



In order to further open the EZVIZ hardware products, cloud AI and cloud video capabilities, EZVIZ SaaS ecosystem platform provides IoT components such as access control management, smart lock management, smart

control and smart sensing, the visualized management components such as video surveillance, video sharing and audio/video interaction, and also AI training platform service. The EZVIZ SaaS ecosystem platform helps industrial partners including Hikvision quickly complete application development and project implementation, e.g. the audio/video interaction components used for the Double Teacher Classroom, remote court trial, and remote medical; the video sharing components used for the industrial projects such as Virtual Classroom, Transparent Bidding, Scenery Live, Live Traffic and Visible Kitchen; the access control management and smart lock management components used for smart construction site, smart office, smart apartment and smart hotel. Collaboration with partners has engendered more diverse, safer and smarter scenario solutions.

Internet information security management and control system

In security governance, to achieve the information security and data protection strategy goals of “solid technology, independent supervision, user trust”, EZVIZ has established the information security and compliance team and data protection team. Through training, publicity and education, every individual's information security responsibility is clarified. The overall security and data protection capability development is focused on "precaution". Precautionary security standards and protection mechanism are in place to enable closed-loop continuity management and dynamic optimization.

In technical risks control, EZVIZ possessed the professional technical security capability since it was founded. Such capability is mainly responsible for identifying, assessing and handling the technical risk closely related to EZVIZ's business, continuously improving, and developing the relevant capabilities; EZVIZ has introduced external capabilities such as external consultation, public test and reward for identification of vulnerabilities, to solve general security issues. Well-proven solutions are introduced to enhance EZVIZ's baseline security and data protection capability.

In security compliance, EZVIZ has obtained Cloud Security International Certification (CSA-STAR) and ISO/IEC 27001:2013 certification, integrated into the global security standards under the ISO27001 framework and optimized the internal and external security management systems, to enable it to continuously improve organization security; EZVIZ has obtained the information system security-level protection registration certificate (Class 3), as a technical requirement in line with Cyber Security Law, thus EZVIZ has the basic capability to support customers in undertaking major projects; Through ISO / IEC29151: 2017 certification, the standard covers the requirements of the EU's General Data Protection Regulation GDPR, and also meets the requirements of personal data security protection, EZVIZ Cloud is able to comply with international information security standards.

By drawing on its algorithmic abilities in ID authorization/recognition, vehicle analysis and body detection analysis, and characterized by safe, easy-to-use, stability and convenience, EZVIZ Cloud achieved rapid growth in 2019: the image anomaly detection service cumulatively completed 80 million inspections and detected 10 million anomalies; night-time shop guard service handles 200,000 alarms per day; combined with AI technology, it provides more accurate intelligent alarm, reducing false alarms by 43%.

EZVIZ will continue to input resources to maintain its advantageous position in intelligent video technology and create high-end intelligent IoT cloud platform. The three-dimensional intelligent service system enables product adaptability in many scenarios and provides families, individuals and small and micro enterprises with refined and convenient services.

4.2 Innovative business-Robotics (HikRobot)

By drawing on HikRobot's leading-edge algorithmic techniques, strong capability of software/hardware development, and complete marketing system, HikRobot focuses on intelligent manufacturing and continues its exploration and investment in mobile robot, machine vision and industrial UAV (unmanned aerial vehicles).

Mobile robot: focused on internal logistics to promote intelligent internal logistics of factories

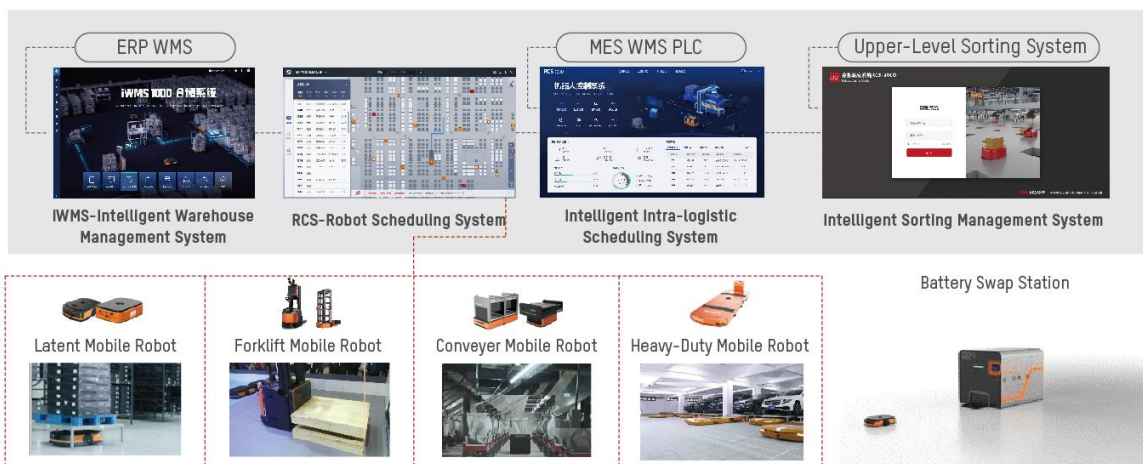
The mobile robot business started from the LMR (Latent Mobile Robot) and has developed into four product lines including LMR, Forklift Mobile Robot, Conveyer Mobile Robot and Heavy-Duty Mobile Robot series, which are applicable to various sorting, handling and shuttling scenarios, and has extended its capabilities to research of core modules and components.

In 2019, the third-generation products of the LMR series started mass production, and the products with stronger carrying capacity and the ones with smaller size were also launched. The LMR series has spawned four sub-series, which can cover the application requirements from 5kg to 2,000kg.

Forklift Mobile Robot series launches products for carrying cargos to you and Forklift product for carrying, lifting, and stacking cargos, which have been successfully applied in multiple applications. The highlight is the innovative variant of omnidirectional forklift, which can substantially reduce passage width and increase the utilization rate of warehouse. The Conveyer Mobile Robot and Heavy-Duty Mobile Robot series also have launched important products.

In the factory internal logistics scenario, the LMR series and Forklift Mobile Robot series are mostly used for

warehousing of raw materials and finished products; where the LMR series can substantially improve sorting efficiency and the Forklift Mobile Robot series can adequately utilize the space and increase warehouse capacity; the Conveyer Mobile Robot series is mostly used for moving materials inside manufacturing workshops, where a specific actuator can be configured to automatically interface with the automated equipment, thus the original separate equipment can be systemized to achieve overall automation of the workshop. The Heavy-Duty Mobile Robot series is mostly used for manufacturing processes that handle large and heavy articles. The product portfolios of these four series can provide customers with integrated intelligent logistics solutions that cover raw materials management, production distribution and finished products management.



With the growth and technological improvement of product families, the application scope for Mobile Robot has also be expanded. In addition to expanded applications in 3C manufacturing, new energy, automobile parts, E-commerce logistics etc., the products have also found market in the front-line joint venture automotive OEMs in the domestic market. HikRobot has also increased input in the core technologies such as robot sensing, control and planning, and R&D of the key components such as motor controller and sensors and made breakthroughs in several key areas. The independently developed motor controllers are in massive application in all series of products. The visual-based V-SLAM⁹ navigation technology has been successfully applied in multiple products.

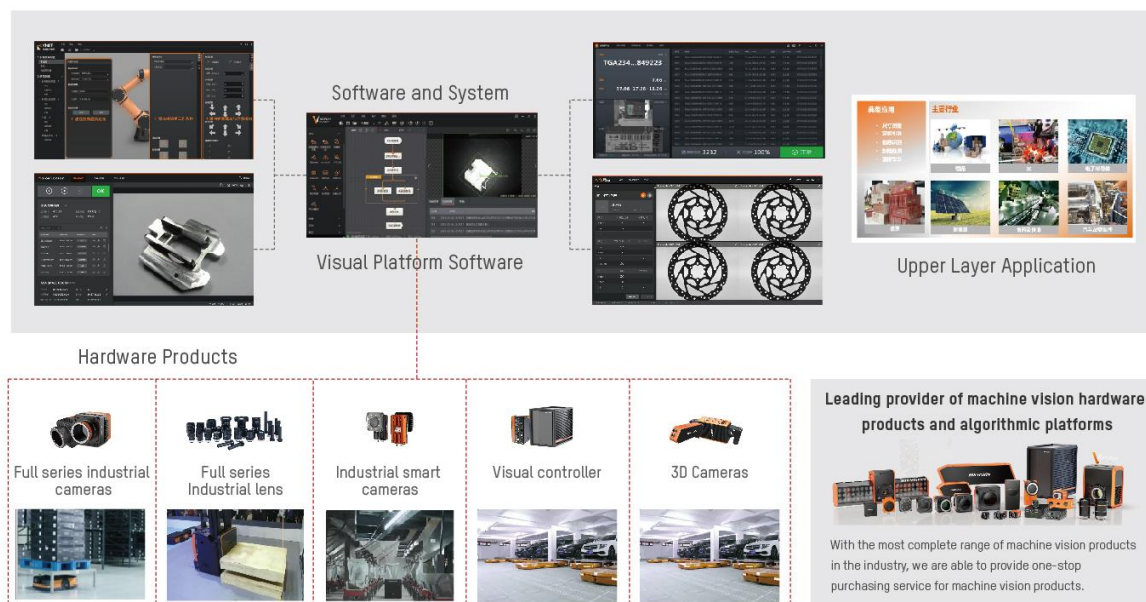
Machine vision: focused on industrial sensing to promote production digitalization and intelligentization

Machine vision, as the core of industrial sensing, is the key technology to build the industrial Internet and digital factory sensing network and plays an increasingly important role in intelligent manufacturing. In 2019,

⁹ Vision-Simultaneous Localization And Mapping, vision-based simultaneous positioning and map construction。

HikRobot continued diversifying and optimizing the machine vision products, strengthened its position as a vision products provider and explored solutions, to better meet fragmented industrial scenario application demands.

In the area of industrial cameras, HikRobot launched the 151 million pixels ultrahigh resolution camera and 65 million pixels and 25 million pixels high resolution cameras, further expanding its influence in the mid-to-high end cameras market; it also launched 4K and 8K CL Line Scan Camera, breaking the market monopoly of the foreign brands. In ID products, it continued optimizing logistics code reading technology oriented for Logistic Vision Solutions, launched the 20MP Smart Code Reader and 8K Line Scan Smart Code Reader and launched the Six-sided Code Reading System and Multi-sided DWS System¹⁰, to propel the intelligent logistics industry; for the industrial code reading applications, it launched the miniaturized products and the subseries that support auto-focusing, substantially strengthening the competitiveness of industrial code readers.



In terms of AI technology investment, HikRobot vigorously promoted application of deep learning in machine vision and launched a series of algorithm module products based on AI technology, including the AI-based code reading, OCR¹¹, defect detection and object classification algorithms; it vigorously promoted hardware productization of AI technology and launched the intelligent cameras and vision control products that support deep learning, immensely reducing the application costs of AI technology. In terms of algorithm platform, it continues

¹⁰ Dimension Weight Scanning, integrated system for automatic volume measurement, weighing and multi- ID authorization/recognition code reading.

¹¹ Optical Character Recognition

diversifying the vision tools platform, continues improving performance and usability of software, provides the customers with "machine vision brain" that has better processing power, builds the machine vision ecosystem centered on the vision tools platform and helps the partners efficiently implement vision applications.

In the area of intelligent manufacturing, the value of mobile robot and machine vision has been universally recognized by the industry. With continuous technological enhancement and cost optimization, the application scope will continue expanding. HikRobot will continue increasing investments to make breakthroughs in core technologies, continuously develop new product lines, prioritize optimizing product development and delivery processes, to provide industrial customers with more competitive products and solutions and propel the development of global intelligent manufacturing.

UAV, as one of the product types in the robotics business, successfully achieved innovation, utilized its abundant technological achievements to implementing intensive integration of multiple technologies and focused on the area of security and protection. In 2019, HikRobot continued optimizing flight control technologies, optical and functional mounted products, and the defense system that defends the safety of low-altitude airspace. It launched the defense products such as the second version of Quadrotors UAV, and other defense products such as reconnaissance devices and handheld jammers. By now, Unmanned Aerial Vehicle (UAV) products cover all series in the high, middle, and low markets and its defense products form a complete reconnaissance and processing system. HikRobot uses diverse products to provide customers with solutions with industrial characteristics, which have been applied in emergency rescue, 5G live broadcast, environmental monitoring, rapid detection of public interest litigation and protection of important places. HikRobot will continuously adapt to the changes of industrial demands and explored new robotic product forms.

4.3 Innovative business-Automotive Electronics (HikAuto)

HikAuto focuses on the field of intelligent driving, with video sensors as the core, combined with radar, AI and video analysis and processing technologies, to provide independent software and hardware system solutions for the OEMs of passenger vehicles and commercial vehicles, distributors and operators, and also consumers.

Technology R&D: promote video AI to enable intelligent driving

With functional enhancement and deep integration of sensors such as video camera, ultrasonic radar, and millimeter wave radar etc., HikAuto launched product series such as: Around View Camera, Blind Spot Detection

and Warning, Fatigue Driving Detection, and Parking Assist etc. It also started exploring the automatic parking system, automatic driving data recording system, and etc. In light of the development trend of intelligent connected vehicles, HikAuto is further expanding its business in digital cockpit and smart driving.

HikAuto continued increasing input in software system and hardware facilities to meet the requirements of mainstream international automotive enterprises: fully promoting synergized implementation of MES (Manufacturing Execution System), intelligent warehousing and PLM (Product Lifecycle Management), and building digitalized intelligent factory; it independently developed the six-axis precision focusing, fully automatic image testing and other core devices, and multiple fully automatic HD camera production lines started mass production; it obtained ISO26262 functional safety management system certification and possessed the preliminary capability of designing and manufacturing the products that meet the international functional safety standards.



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In 2019, HikAuto continued promoting AI applications in vehicle scenario: HikAuto and Chang’an OuShang jointly launched the first mass-produced passenger car in the domestic market that supports unlocking by face identification and driver status monitoring; HikAuto has developed the products that deeply integrate millimeter wave radar and video sensor; it expanded from driving assistant (system) to autonomous driving (system) and has delivered the first low-speed automatic driving version of passenger car L3 collaboration project; with increase in 5G coverage, for the business scenarios such as logistics, transportation and public security, HikAuto initiated the

¹² PDC: Parking Distance Control.
USS: UltraSonic Sensor.

pilot projects on low-speed automatic driving solutions within specific areas.

Passenger vehicle: provide competitive intelligent video parts

In recent years, there have been significantly more demands from passenger vehicle owners on DVR (Driving Video Recording) and Around View Monitor, and there are universal demands on driving video recording, injured feigning prevention, parking view assist and rear-end collision evidence. For the Consumer market, HikAuto Electronics launched the 360° HD panoramic image system, which uses vehicle-specific design and covers 23 vehicle models of three major vehicle series. This system is in a leading position in the industry in terms of image sharpness, night visibility, seamless interfacing, ultra-low delay, reliability and other key indicators. In addition, by the end of the year, HikAuto launched the industry-leading 5 million pixels F1.6 ultra-large aperture HD and night-view driving video recorder, with built-in AI chip and supporting 4G networking, and this product has become the top-selling product among the similar new products during the Double Eleven period.

Currently, HikAuto has delivered mass-produced products for mainstream domestic automatic enterprises such as SAIC Motor Passenger Vehicle Corporation, Geely Automobile, Shanghai General Motors, Great Wall Automobile, Chang'an Automobile and SGMW, and continued expanding collaboration on products and technologies. Besides, it explored international business and successfully joined a targeted global project of an international automotive enterprise. Over 80 new targeted projects were secured throughout the year.

Commercial vehicle: provide comprehensive solutions for reducing accident rate and casualty rate

In the commercial vehicle market, the quantity of commercial vehicles in the country is over 20 million, including approximately 800,000 long-distance passenger vehicles, 300,000 hazardous chemicals trucks, 700,000 urban public buses, 1.4 million taxis, over 1 million online service taxis and approximately 16 million freight vehicles. Outside aviation, railway and waterborne transportation, commercial vehicles carry massive amount of passengers and goods and are closely related to people's life and work. However, traffic accidents, casualties and goods loss always occur, causing losses to government, enterprises and people.

Since 2003, the traffic management departments of all levels of government have paid intensive attention to traffic safety, taken stringent measures to curb speeding, fatigue driving and dangerous driving and constantly improved traffic safety equipment. The time period 2003-2009 was the first stage, during which GPS monitoring was the core technology. The second stage was 2009-2017, where video evidence collection was implemented in addition to GPS monitoring. Starting in 2018, ADAS (advanced aided driving system) began commercial operation,

where traffic safety management evolved from post-accident evidence collection to early pre-event warning, which further reduced accident and casualty rates, and enabled expansion of intelligent video applications in commercial vehicles. It is estimated that intelligent equipment will increase from RMB 5 billion to 10 billion during 2020-2022.

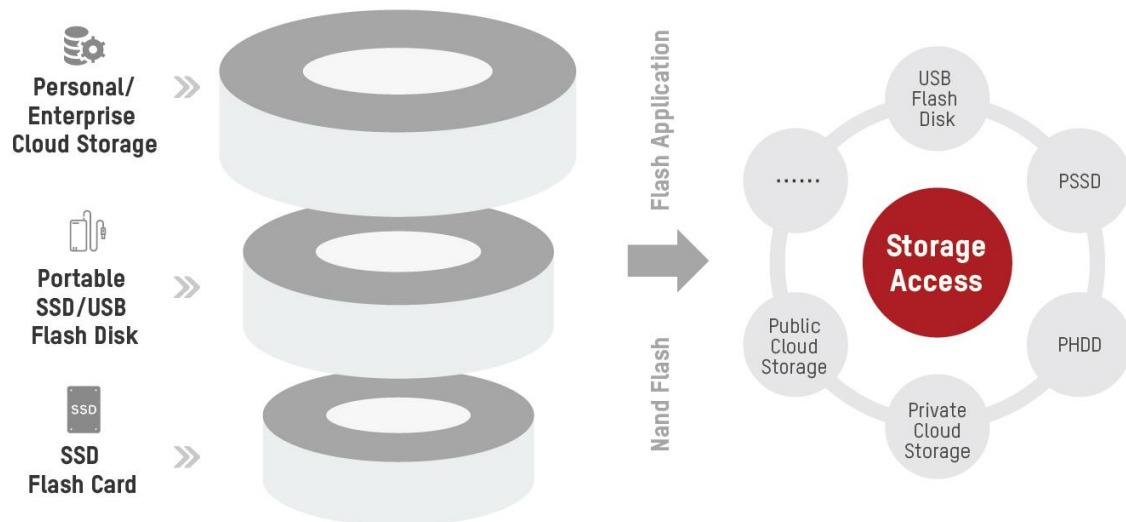
In 2019, HikAuto launched the second generation ADAS for the commercial vehicle market. The new system integrated technologies including in-vehicle monitoring, video-radar fusion, forward collision warning, lane departure warning, pedestrian collision warning, blind spot detection, fatigue driving warning, driver behavior analysis and driver/passenger ID authorization/recognition. HikAuto Electronics' intelligent video systems have been extensively applied in domestic commercial vehicles. As of 2019, over 170,000 systems had been installed and commissioned, with a 252% compound growth rate during 2017-2019. HikAuto offers comprehensive solutions for commercial vehicles that are based on video monitoring and centered on advanced aided driving technology, that integrate radar, thermal imaging, positioning and other multi-dimensional sensors, and that extend to intelligent analysis on specific application scenarios.

Growth of the automotive industry generally stagnated in the recent years, but HikAuto is a new entrant mostly focused on the opportunities in the industrial revolution engendered by intelligent and networking technologies. In the past three years, HikAuto continued investments in the key technologies and high-standard quality system and production capacity and gained its advantage in the integration of video, AI and multiple sensors. In the commercial vehicle industry and market, the input-to-output cycle is relatively short, facilitating the ability to use advantageous technologies, brand and channels and accelerate planning and implementation of technologies and solutions, in order to become the leader in the commercial vehicle industry and market, and to lay the foundation for short-term and medium-term automotive electronics businesses. In the passenger vehicle industry and market, in spite of the large market scale, the input-to-output cycle is long, so HikAuto makes its foothold in serving the main domestic automotive enterprises, providing customers with solutions that have independent technological advantages and that meet the customized demands domestically. HikAuto will also continue investments to meet the standards of the global mainstream automotive enterprises, build competitive technological reserve and international operational capacity, expand medium-term and long-term business development space, and strive to become one of the global influential suppliers.

4.4 Innovative business—Smart Storage (HikSemi)

HikSemi is dedicated to providing customers with professional products and data storage solutions. It has

launched a variety of product types--such as the intelligent memory card, solid state disk (SSD), and private cloud storage etc.--supporting wide temperature range, power failure protection, video streaming balance algorithms, read-write-intensive requirements and other functions. Products are applied in various fields such as terminal consumption, rail transit, industrial control, video surveillance and so on.



For industrial SSD, HikSemi launched new products with high reliability and wide temperature range in 2019, to meet vehicle-mounted application requirements under harsher conditions, e.g. -40~85°C temperature variation and the working environment requiring protection against dust, mist and corrosion. For enterprise SSD, HikSemi upgraded the durability and adapted to the read-write balance application scenarios, and the products have been applied in various servers. HikSemi has also made major breakthroughs in PCIe¹³ and launched C/E series consumer PCIe products. During 11.11 and 12.12 Global Shopping Festivals, HikSemi was ranked among the top five enterprises in terms of sales volume, becoming a domestically well-known storage brand.

For memory card products, in addition to the advanced video monitoring card, HikSemi launched the products with higher cost performance, which are capable of stable read-write and multiple protections and are applicable to the video monitoring application scenarios with continuous large-volume data writing. It also launched consumer (storage) cards with high cost performance and high compatibility, which are extensively applicable to mobile phones, cameras, tablet PC and other products. In the future, HikSemi will implement targeted innovations for various storage products in various application scenarios such as consumer cameras and driving recorder etc.,

¹³ PCI-Express (PCI- Peripheral Component Interconnect Express), is a high-speed serial computer expansion bus standard

leading the establishment of the industrial standards, expanding market channels and intensifying online business strategy.

For flash memory products, HikSemi has launched multiple new portable SSD products, and has also innovatively developed and launched safe, fast and portable fingerprint-activated SSD, providing users with more efficient and safer solutions in data transfer and backup scenarios.

For personal data storage products, HikSemi provides the private PC family cloud storage system solutions with mobile phone as the control terminal, where the users can use mobile APP to remotely access personal data storage equipment, view and access data online; data can be previewed in multi formats and one-click data sharing is enabled as needed. Collaborating with Baidu Cloud Storage, HikSemi has launched products based on its independently developed software system, enabled the bidirectional backup function of Baidu Cloud Storage and the personal private cloud storage, which provides users with safe and convenient data management services and achieves integration of public cloud and personal data center.

With gradual optimization of 3D flash memory stacking technology, products iteration has accelerated and technological innovation substantially reduces the raw material cost of flash memory, which further makes Solid State Disk products more consumer-friendly and the price more compatible with Hard Disk Drive. Starting from the vision of "storage keeps good things and intelligence changes life" and relying on the two R&D centers in Wuhan and Hangzhou, extraordinary R&D, sales and after-sales service teams, HikSemi hopes to become a domestically leading flash memory solution provider and strives to provide people with better data recording and sharing experience.

4.5 Innovative Business – Infrad Sensor (HikMicro)

HikMicro focuses on the field of uncooled infrared thermal imaging, and is committed to product R&D and industrialization of uncooled infrared thermal imaging sensors. The infrared thermal imaging industry has always been constrained by the high price of key components, which limits the scale of application. HikMicro is committed to address this challenge and bring infrared thermal imaging products from niche to mass market.

HikMicro has built an 8-inch MEMS¹⁴ (Micro-electromechanical Systems) production line with a purification

¹⁴ Micro Electro Mechanical Systems, Microelectromechanical system is an industrial technology that combines microelectronic technology and mechanical engineering. Its operating range is generally in the micrometer range; this technology involves many disciplines such as microelectronics, materials, mechanics, chemistry, and mechanics. The products made with it are miniaturized,

level of 10 and a high-vacuum packaging line, and possesses the first-class teams dedicated in integrated circuit design, MEMS design, and MEMS/package testing process development and manufacturing. Currently, HikMicro products are widely used in security monitoring, ADAS, disaster prevention, medical quarantine, smart building, industrial and human body temperature measurement and other industries. In the future, HikMicro will continue to take the market-oriented approach, continue to break through technical bottlenecks, and be committed to promoting industrialization.



HikMicro MEMS and packaging production line

To date, HikMicro has launched 9 products in 17um and 12um platforms for mass production, including two types of vacuum packaging: ceramic packaging¹⁵ and wafer-level packaging¹⁶ (WLP). All products are designed with vanadium oxide thermal materials and are TEC¹⁷-free. The performance indicators and level of advancement of the process technology platform have reached the world-class level.

In terms of product technologies, HikMicro will break through the technical bottleneck of smaller pixels, conduct R&D on 10um pixel series products, build corresponding process technology platforms, reduce product size without impacting product performance, and further reduce optical costs during product integration, and

intelligent, multifunctional, highly integrated, and suitable for mass production.

¹⁵ A form of semiconductor packaging that uses ceramic materials as the main packaging material

¹⁶ A form of semiconductor packaging, most or all of the packaging and testing procedures are performed on the wafer, and then cut into individual components.

¹⁷ Thermal Electric Cooler, thermoelectric cooler is a device that uses semiconductor thermo-electric effect to produce cooling capacity

ultimately reduce the cost of thermal imaging end products. Meanwhile, HikMicro will continue to promote the R&D and application of WLP packaging technology in different products. As compared with ceramic packaging technology, WLP packaging technology will contribute to the significant reduction in the consumption of packaging materials and make products more cost-effective; and as compared with CLP packaging technology, WLP packaging technology can simplify packaging operations and improve packaging yield, thereby further reducing product costs. Therefore, it is the ideal packaging model for mass production.

In 2019, HikMicro launched 160*120 resolution flagship products. Benefited from the application of the cutting-edge wafer-level packaging (WLP) technology, consumption of packaging materials that account for a large proportion of product costs is reduced, thus greatly reducing the costs and selling prices of sensors. It ushered in the “thousand-RMB era” of the thermal imaging industry with the introduction of “thermal imaging product at thousand-RMB price range”. For thermal imaging products, the effect of resolution is mainly reflected in the size of the field of view and the width of images, while having no effect on the precision of temperature measurement. With its 17um pixel size, built-in AD full digital output, the product is offered with superior performance indicators, and its NETD¹⁸ (one of the key indicators) is less than 40mk, enabling high-precision temperature measurement and high-quality imaging. With good performance and affordable price, this product series has satisfied the market demands, especially in body temperature measurement in designated areas, temperature measurement at urban traffic security entrance, handheld temperature measurement, access control integration, as well as fire prevention, boundaries protection, etc., contributing greatly to the enhancement in social benefits with technological progress.

Currently, the thermal imaging industry chain in China is undergoing rapid development, and the dramatic decline in the costs of key components has brought new opportunities in the industry. As a result of the gradual decline in price, thermal imaging products are no longer a niche market. In the era of Internet of Everything, infrared thermal imaging, featured by its key functions of “night vision” and “non-contact temperature measurement”, will definitely become an integral part of “multi-dimensional perception”, and be more widely applied to various industry-purpose and even consumer products. HikMicro will continue to consolidate its product-side technical advantages by taking advantage of its capability of independent supply of key components, explore more application scenarios, and promote thermal imaging to the mass market for the benefits of various industries.

¹⁸ Noise Equivalent Temperature Difference, the smallest temperature difference that infrared sensors can detect, is one of the main indicators to measure the performance of infrared sensors.

4.6 Innovative business-Fire Protection (HikFire)

HikFire is dedicated to R&D, production, sale and operation of integrated solutions for fire protection. Taking the opportunities engendered by the reform in fire protection and law enforcement systems, opening-up of fire protection market and gradual modification of technical standards and norms, HikFire quickly implements its strategies in intelligent fire protection, traditional fire protection and fire protection operation.

Based on the technological accumulation in multi-dimensional sensing, AI, big data, cloud computing, thermal imaging and image identification, HikFire has successfully applied various AI algorithms in fire security management, such as firefighting access occupation detection, fire/smoke identification, fire extinguisher identification, firefighting equipment status identification and fire control room personnel on-duty/off-duty identification, and has satisfactorily improved the fire risk warning mode, which has been universally recognized by the industrial customers.

HikFire is dedicated to integrated innovative application in security and fire protection, has tactfully integrated the security technologies into fire protection and has launched a series of security-fire integrated products. In addition, based on the unified technical architecture software platform, HikFire achieved security-fire integration on the software level by modularizing the fire protection applications. Besides, by drawing on EZVIZ Cloud's IoT connectivity, HikFire has created its fire protection operation cloud platform, launched the fire protection operation business and offered security-fire integrated solutions applicable to multiple scenarios. These solutions have been extensively applied in many sectors such as communities, schools, hospitals, financial institutions, cultural and historical sites and buildings, energy, nine small places¹⁹ and intelligent buildings, to improve overall fire security management.

Three major business sectors

In 2019, HikFire established a complete fire protection business line, launched multiple sets of solutions for traditional fire protection, intelligent fire protection and fire protection operation, and created a preliminary fire protection ecosystem framework that covers multi-dimensional sensing, early warning, information push, fire alarm, emergency evacuation, fire rescue, operation service and firefighting training, and etc.

In the field of intelligent fire protection, HikFire has integrated the IoT and low power consumption

¹⁹ Nine small places refer to small schools or kindergartens, small hospitals, small stores, small restaurants, small hotels, small recreational bars and clubs, small Internet bars, small beauty salons or bathhouses, and small production and processing enterprises.

technologies to develop products related to smoke, gas, water supply, electricity and user data transmission, and has obtained the CCCF²⁰ fire protection certificate. By drawing on the technological achievements of image identification, AI, thermal imaging, cloud platform and big data and integrating the multi-dimensional sensing technologies, HikFire has launched the innovative products such as video smoke detector, intelligent security and fire protection cameras, fire image analysis, image fire detector and security-fire integrated platform software; it has launched the security-fire integrated solutions customized for the industrial applications, to improve management efficiency and reduce construction cost.



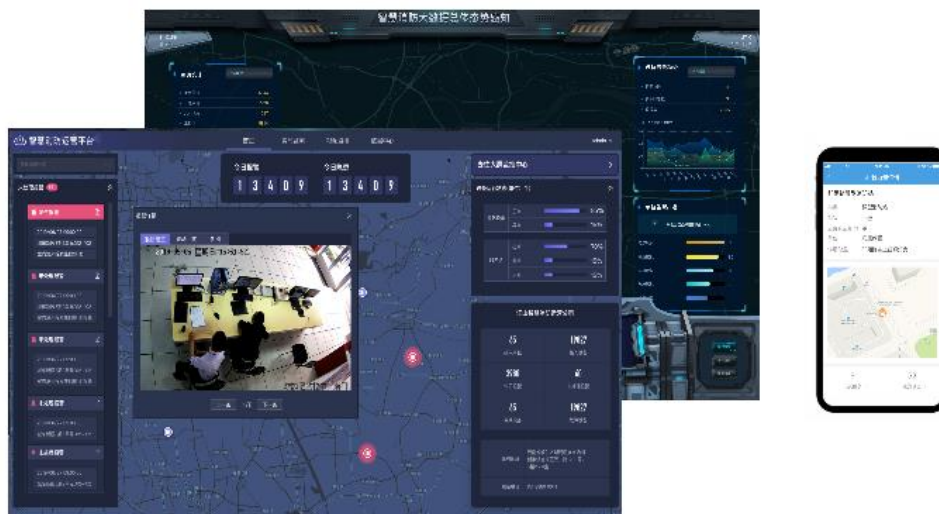
In the field of traditional fire protection, HikFire has independently developed and manufactured the two-bus²¹ fire alarm system and obtained the CCCF certificate; it has launched the products such as fire alarm/control linkage controller, smoke detector, temperature sensor, manual fire alarm button, fire hydrant button, fire display panel, sound-light alarm, and input/output modules; it has also launched the fire control room graphic display to enable remote verification of fire alarm and improve management efficiency.

²⁰ China Certification Center for Fire Products, CCCF is a type of CCC certification and is a 3C certification for fire protection products

²¹ The two buses are a technology that combines the power supply line and the signal line into one, compared to the four-wire system (two power supply lines and two communication lines), and realizes the technology that the signal and power supply share one bus. The two buses save construction and cable costs, and bring great convenience to on-site construction and later period maintenance. It is widely used in fire protection, instrumentation, sensors, industrial control and other fields. Typical two-bus technology includes M-BUS, fire bus etc.



Fire protection operation service is the backbone on which HikFire builds its market operation system in the fire industry. Efficient operation and data service can help quickly integrate the upstream and downstream resources of the industry chain. In December 2019, HikFire unveiled the HikFire National Operation Center in Jiangshan, Quzhou, to conduct fire protection operation, firefighting training, engineering maintenance and labor assignment service and etc. HikFire explored the insurance business to create a fire protection ecosystem. Meanwhile, HikFire launched the fire protection cloud platform, to enable it to conduct fire safety management custodian, mall and online labor assignment, and other businesses.



Outlook of fire protection business

According to the data publicized by Prospective Industrial Research Institute, the overall market size of intelligent fire protection was approx. RMB 3.5 billion in 2019. China has 800,000 key entities, 50 million ordinary entities and 110 million Nine Small Places. Based on the progress of intelligent city construction, it is estimated that the intelligent fire protection investment in China will maintain a growth rate of approximately 15%. Based on the data previously publicized by *HC Fire Network*, it is estimated that the traditional firefighting equipment market in

China could reach RMB 70 billion. Based on the data of *Grand View Research*, the global firefighting equipment market could reach nearly USD 60 billion.

HikFire is dedicated to IoT-based security-fire integrated applications and offering one-stop fire safety solutions and one-stop fire protection operation and management solutions. Through constant integration of new technologies, it strives to reduce fire risks, improve fire protection management efficiency and make the environment safer and life better.

II. Significant changes in main assets

1. Major Changes in Main Assets

Major assets	Explanation on Major Changes
Equity Assets	The increase of 24.28% was mainly due to investments in Hangzhou Haikang Intelligent Industrial Equity Investment Fund Partnership, Daishan Hailai Yunzhi Technology Ltd., Jiaying HaiShiJiaAn Zhicheng Technology Ltd., Qinghai Qingtang Big Data Ltd. and other companies.
Fixed Assets	No significant change
Intangible Assets	Increased by 20.26%, mainly due to increase in intangible asseets for the acquisition of land in the second phase of Chongqing Science and Technology Park and Hangzhou Innovation Industry Base
Construction in Progress	Increased by 51.78%, mainly due to increased investment in the construction of Chengdu Science and Technology Park, Hangzhou Innovation Industry Base, and Chongqing Science and Technology Park

2. Major Overseas Assets

Applicable Inapplicable

III. Analysis of core competitiveness

As a technology-driven company, technological innovation has been Hikvision’s major approach to operations as well as the driving force for its sustainable development. With its efforts over the years, the Company has preliminarily built a cycle of continuous growth in R&D investment and continuous transformation of R&D deliveries. Despite volatilities in the external environment, the Company will uphold the business philosophy of

prudence and stability, professionalism and solidification, and take advantage of the driving force deriving from technological innovation.

1. Continued investment in R&D to strengthen competitiveness in R&D of software and hardware and underlying technologies

Since its foundation, Hikvision has established a leading system for R&D, production and sales of hardware products, building the competitive advantage in the industry for the Company at the product level. Currently, the hardware product system of Hikvision has covered video collection, transmission, storage, central analysis, big data server, mobile traffic, alarm, display and control, video intercom, entrance control and access, conference tablet and other categories. This diversified portfolio of hardware products provides strong support for developing a wide range of fragmented scenario solutions.

Since 2016, Hikvision has focused on the integration of software and hardware as well as their coordinated development. As steered by the rapid transformation of market demands and based on the component-based development model, it has established unified software R&D system for multiple industries and multiple R&D teams across the Company. The core of the unified software development system lies in the Company's unified software technology architecture. In 2019, the advantages of unified software technology architecture become apparent, which supports the rapid development and iteration of industry applications, realizes the value of software reusability, and improves the compatibility among software. As a result of its dedicated efforts over the years, the Company has successfully brought its capabilities of software development to a new level.

In addition, the Company continues to invest in R&D in the fields of sensors and detectors, laying the foundation for the fusion application of multi-dimensional perception technology at the level of hardware products; the long-term and continuous investment in underlying, common and key technologies underpins the long-term and continuous technological innovation of the Company. Hikvision has completed the transformation and upgraded from single sensor to multi-dimensional sensors, from non-intelligent sensor to intelligent sensor, and from sensor product to intelligent IoT system.

2. Continuous optimization and improvement to build independent and controllable supply capacity with flexibility

Fragmented market demand has resulted in diverse product categories and models, as well as the small volume and multiple batches of orders, posing enormous challenges to manufacturing of products. The ever-changing international environment also gives rise to significant uncertainties in terms of continuous and stable supply of raw

materials along the supply chain. Sustainable, stable and reliable supply chains have become the strategic resources for the steady development of the Company's business. After years of large-scale investment and continuous improvement, the Company has built a supply chain system in line with its own business, including the supply capacity with a combination of independent production and outsourced production, to strike a balance between delivery flexibility and production efficiency. The Company also emphasizes high-level operational coordination mechanism and IT system management, with a view to achieve efficient and accurate forecasting and management of materials, as well as flexible and effective planning coordination and production scheduling. Tailor-made, independent and controllable are the key elements for Hikvision's supply chain system to adapt to the Company's changing business needs and enhanced efficiency.

Currently, Hikvision has three manufacturing bases in Hangzhou, Tonglu and Chongqing, and has proceeded with the expansion plans in Tonglu, Wuhan and Chongqing, while establishing local factories in India and Brazil, in order to ensure steady and rapid development of the Company's business.

3. Focusing on business changes and improve organizational capabilities in line with business development

In order to better adapt to the needs of users and improve internal operating efficiency, the Company kicked off the transformation and reorganization of the domestic business structure in 2018, forming three business groups namely PBG, EBG and SMBG, which serve respective types of markets and customers. Each focuses on their respective target market, and provides services to users in the public service sector, users in big enterprises, and users in small and medium-sized enterprises, respectively.

In order to better serve our customers, Hikvision has built a city-focused marketing and service system in China, which is supplemented by the investment in SMBG. Through Hikvision SMBG E-commerce Platform and relying on the large offline partner system, the Company strengthened the unified online and offline support of distributors and opens up service channels for partners. In terms of overseas business, Hikvision has built a country-focused marketing and service system, established distribution channels in major countries and regions around the world, consolidated and expanded the scope of business by optimizing the distributors' team, in order to provide better services to different countries and regions as well as various industries and users.

In order to better develop our innovative business, the Company has continuously established subsidiaries engaging in innovative businesses since 2016. All subsidiaries operate independently and are responsible for their own profits and losses. The innovative business teams work hard in their respective business scenarios to obtain recognition from the market and users.

As part of its efforts to adapt to changes in the environment and business, the Company constantly adjusts

and optimizes its business organization in order to stay in line with different business markets and different user demands. The continuous progress of internal changes not only reflects the Company's operating vitality, but also constitutes the base of competitiveness of its business.

4. Continuous optimization and improvement on enhancing capabilities in talent development

Talent is the most vital source of competitiveness of an enterprise. Upholding the employment concept of "talent-focused, growing together", the Company has established a dual career development path consisting of management sequence and professional sequence, established a professional qualification evaluation system and a talent assessment system, and implemented a multi-level training mechanism, while making constant investments for the consolidation and upgrade of backbone talents as well as the reservation and development of backup talents of the Company. The Company constantly improves the performance evaluation mechanism, integrating talents recruitment, promotion and downgrading, training and development as well as salaries and benefits, to boost the morale and creativity of employees. Through a variety of activities such as "Face-to-Face with Executives", "Dialogue with Managers", "Humanities Lecture Hall", "Reading Club" etc., it has created an equal, open-minded and positive organizational atmosphere to help employees gain a sense of achievement and belonging.

5. Continuously developing standards and improving systematic protection capabilities

To empower its business development, Hikvision continues to invest resources to strengthen and optimize the quality management system, R&D management system for product safety, as well as compliance system etc. The Company strictly complies with the laws and regulations and related requirements applicable to its operations in different countries and regions. In 2019, Hikvision established a global compliance department to promote the internationalization of its corporate governance system as well as risk management and control capabilities, while encouraging supervision from various parties to strive for continuous progress.

Section IV Discussion and Analysis on Business Operation

I. Overview

In 2019, the US-China trade war had tremendous impact on globalization. During the reporting period, the section 889 of FY2019 National Defense Authorization Act (NDAA) of the United States partially came into effect and Hikvision was included on the Entity List of U.S. Department of Commerce. Being added on the Entity List challenged the Company's capability in long-term stable and continuous raw materials supply, the Company's adaptability and flexibility of the R&D system, and the Company's ability to sustain businesses in the various countries and regions globally, impacting the Company's businesses in the short run. The domestic macroeconomic downturn resulted in decreased demand in the industry which also significantly impacted the Company's performance in 2019. Thanks to the concerted efforts of all employees of the Company and the upstream and downstream partners, the Company has appropriately coped with these impacts. Oriented by customer demand and driven by technological innovation, the Company continued progressing with sound and healthy operation. During the reporting period, the Company achieved total business revenue of RMB 57.66 billion, with YoY growth of 15.69%; the net profit attributable to shareholders of the Company was RMB 12.41 billion, with YoY growth of 9.36%. The gross profit margin of the Company in 2019 was 45.99%, an increase of 1.14% comparing to the prior year.

II. Core business analysis

1. Overview

(1) Increasing input in R&D and consolidating basic capabilities to cope with external uncertainties

In 2019, the Company's R&D input was RMB 5.48 billion, which was equivalent to 9.51% of the total sales amount. The Company had over 19,000 R&D and technical service personnel and maintained enormous R&D investments.

For hardware products, with the R&D advantages in the existing hardware products, the Company continued intensifying research into perceptive technologies, optimized computing and storage technologies and continued improving the design capability of products system; by drawing on technologies such as AI, IoT, cloud computing and big data etc., the Company upgraded its product package solutions and established overall competitiveness of

the products. Besides, the Company continued expanding the non-video businesses and made substantial breakthroughs in non-security businesses.

For software R&D, the Company continues to implement the unified software technology architecture and establish the capability to support large scale system software. During the reporting period, the advantages of the unified software architecture started to manifest, where it supported quick development and iteration of industrial applications, materialized the value of software reuse and improved the compatibility among software. The R&D teams in different regions shared the software development, management, operation environment, and configuration management strategies, to enable large-scale synergized software development.

In light of the increasingly uncertain geopolitical situation and the escalation of the trade conflict, the Company has focused on more diversified supply plans for parts of the key components in 2019. After being added on the Entity List in October 2019, the Company rapidly implemented components substitution for most of the directly replaceable products or applied new product design to maintain consistent product performance. For a few products' components that could not be replaced quickly, we have stocked up material inventory to maintain stable delivery. We will continue to strengthen supply chain risk management, continue to make new product designs and also increase R&D efforts in fundamental areas. The Company is confident with its business continuity plan to ensure our supply chain sustainability.

(2) Stabilization and progress in comprehensive security, big data and intelligent businesses

Benefited by the Company's diverse security products, intelligent security products and comprehensive security solutions and constant technological innovation, the comprehensive security business continued its sound development as a traditional business sector of the Company. In comprehensive security, Hikvision has ranked No. 1 globally in the video surveillance industry for 8 consecutive years.

In 2019, the Company proposed the "IoT-information network fusion" data architecture based on big data and AI technologies, set forth the path and method for large-scale systematic data fusion between intelligent IoT and information network, and launched the AI Cloud Data Fusion Platform. Through this platform, the Company has evolved from merely providing data collection services to providing data governance and application services and from merely providing intelligent IoT data services to providing data services across intelligent IoT and information network, and has become a big data services provider with independent technological advantages. By drawing on this platform, Hikvision provides multiple industries with "multi-network aggregation and cross-domain fusion" big

data aggregation, governance and mining services.

The Company put forward the "big data-AI fusion" concept, which integrates AI and perceptive big data to achieve perceptive intelligence, and integrates AI and multi-dimensional big data to achieve cognitive intelligence; it expands from focus on products to focus on systems, from focus on technologies to focus on businesses expansion, from focus on single business to focus on businesses across multiple industries; in the cooperation ecosystem built through the open platform, it provides users with complete intelligent industry and smart city solutions. In intelligent business, Hikvision is deeply dedicated to industrial intelligent business and provides services for smart city, safe city, smart transportation, digital enterprise, smart community, and etc.

(3) Promoting development of innovative businesses

In 2019, the smart home business achieved sales revenue of RMB 2.59 billion, and the robotic business achieved sales revenue of RMB 814 million; the Automotive Electronics, HikSemi and HikMicro etc. also made breakthroughs. Their products and business modes withstood the tests in their respective business scenarios and gradually established their own industrial influence and market position. In 2019, the Company founded the innovative businesses HikFire (fire protection) and Rayin (security check), which added new elements in the innovative businesses. The innovative businesses development echelon has been preliminarily formed.

The employees of the innovative businesses dedicated themselves to the businesses with the spirit of entrepreneurship and commitment. Synergy has been established between the Company's employee teams and the innovative business teams and also between the traditional businesses and innovative businesses, where they are mutually complementary and synergized to open up new space for the Company's future growth. Rapid development of the innovative businesses also enabled the employees to gain enhanced value from their investments in the innovative business co-investment platform, which converged the interests of the Company and that of the employees, laying the foundation for long-term development of the Company.

(4) Adjusting raw materials strategy to cope with uncertainties in supply system

In 2019, due to the risk of being added on the U.S. Commerce Department Entity List, the Company increased its inventory level of U.S.-origin materials. By the end of 2019, Hikvision's raw materials inventory level was 200 percent higher than at the end of 2018. After being added on the Entity List, the upstream suppliers offered great support to Hikvision and immensely assisted in the stable business development of the Company. After corresponding adjustment for half a year, the Company's supply chain has strengthened its ability to cope with external uncertainties.

(5) Adjusting expenditure strategy to improve internal operation efficiency

In 2019, the Company adjusted its expenditure strategy by contracting its expansion strategy and intensifying expenditure control and optimization, to improve the internal operation efficiency. The Company will continue internal optimization and adjustment and consolidate resources input, to further increase output.

2. Operating incomes and operating costs

1) Operating income structure

Unit: RMB

	2019		2018		YoY Change (%)
	Amount	Proportion to operating income	Amount	Proportion to operating income	
Total operating income	57,658,110,065.22	100.00%	49,837,132,481.61	100.00%	15.69%
Classified by industry					
Video products and video services	57,658,110,065.22	100.00%	49,837,132,481.61	100.00%	15.69%
Classified by product					
Front-end equipment	27,175,127,832.29	47.13%	24,083,382,887.01	48.32%	12.84%
Back-end equipment	7,519,825,167.90	13.04%	6,779,290,973.76	13.60%	10.92%
Central control equipment	8,822,675,802.63	15.30%	7,323,448,788.51	14.70%	20.47%
Construction contracts	1,091,421,819.86	1.89%	2,285,061,427.63	4.59%	-52.24%
Others	8,612,324,560.21	14.94%	6,561,947,057.15	13.17%	31.25%
Subtotal	53,221,375,182.89	92.30%	47,033,131,134.06	94.38%	13.16%
Smart home business	2,592,271,750.14	4.50%	1,636,697,390.22	3.28%	58.38%
Robotic business	813,993,602.43	1.41%	657,068,840.55	1.32%	23.88%
Other innovative businesses ¹	1,030,469,529.76	1.79%	510,235,116.78	1.02%	101.96%
Subtotal	4,436,734,882.33	7.70%	2,804,001,347.55	5.62%	58.23%
Classified by region					
Domestic	41,419,508,094.09	71.84%	35,646,435,049.93	71.53%	16.20%

¹ Other innovative businesses include products of the corresponding businesses of the innovative business subsidiary HikAuto, HikMicro, HikSemi, HikMed, HikFire, Rayin and others. Same below.

	2019		2018		YoY Change (%)
	Amount	Proportion to operating income	Amount	Proportion to operating income	
Overseas	16,238,601,971.13	28.16%	14,190,697,431.68	28.47%	14.43%

Composition of operating income of the three major business groups in China²

Unit: 100mn

	2019	2018	YoY Change (%)
PBG	155.86	149.73	4.09%
EBG	125.91	101.64	23.88%
SMBG	93.56	75.83	23.38%
Total	375.33	327.20	14.71%

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

√ Applicable □ 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 industry						
Video products and video services	57,658,110,065.22	31,140,176,777.12	45.99%	15.69%	13.31%	1.14%
Classified by product						
Front-end equipment	27,175,127,832.29	13,018,006,201.14	52.10%	12.84%	8.00%	2.15%
Back-end equipment	7,519,825,167.90	3,700,043,734.49	50.80%	10.92%	2.68%	3.95%
Central control equipment	8,822,675,802.63	4,289,265,345.53	51.38%	20.47%	26.88%	-2.46%
Construction contracts	1,091,421,819.86	844,074,602.62	22.66%	-52.24%	-57.96%	10.54%
Others	8,612,324,560.21	6,479,665,731.95	24.76%	31.25%	35.83%	-2.54%
Subtotal	53,221,375,182.89	28,331,055,615.73	46.77%	13.16%	9.74%	1.66%
Smart home business	2,592,271,750.14	1,574,835,597.99	39.25%	58.38%	57.85%	0.21%
Robotic business	813,993,602.43	380,163,028.57	53.30%	23.88%	37.33%	-4.57%
Other innovative businesses	1,030,469,529.76	854,122,534.83	17.11%	101.96%	117.75%	-6.01%

² Some innovative business products rely on the sales of the three major business groups. The sales statistics of the business groups are divided by the sales responsible unit, but the sales statistics of the product / innovation business are divided by product forms.

	Operating income	Operating cost	Gross margin	YoY Change (%) of operating income	YoY Change (%) of operating cost	YoY Change (%) of gross margin
Subtotal	4,436,734,882.33	2,809,121,161.39	36.68%	58.23%	68.54%	-3.88%
Classified by region						
Domestic	41,419,508,094.09	22,351,037,586.32	46.04%	16.20%	13.70%	1.19%
Overseas	16,238,601,971.13	8,789,139,190.80	45.88%	14.43%	12.32%	1.02%

Adjusted statistics of principal business are based on the caliber at the end of the reporting period of last year, if the statistics caliber of principal business has been changed during the reporting period

Applicable Inapplicable

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

Yes No

Industry	Item	Unit	2019	2018	YoY Change (%)
Video products and video services	Sales volume	Per unit	141,859,538	126,356,788	12.27%
	Output volume	Per unit	148,141,909	128,068,306	15.67%

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

Applicable Inapplicable

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

Applicable Inapplicable

5) Operating cost structure

Classified by industry

Unit: RMB

Industry	Item	2019		2018		Increase/decrease over previous year
		Amount	Proportion to operating cost	Amount	Proportion to operating cost	
Video products and video services	Operating cost	31,140,176,777.12	100%	27,483,469,555.24	100%	13.31%

Classified by products

Unit: RMB

Product	Item	2019		2018		Increase/decrease over previous year
		Amount	Proportion to operating cost	Amount	Proportion to operating cost	
Front-end equipment	Operating cost	13,018,006,201.14	41.80%	12,054,070,919.03	43.86%	8.00%
Back-end equipment	Operating cost	3,700,043,734.49	11.88%	3,603,440,284.98	13.11%	2.68%

Product	Item	2019		2018		Increase/ decrease over previous year
		Amount	Proportion to operating cost	Amount	Proportion to operating cost	
Central control equipment	Operating cost	4,289,265,345.53	13.78%	3,380,634,705.16	12.30%	26.88%
Construction contracts	Operating cost	844,074,602.62	2.71%	2,008,019,572.05	7.31%	-57.96%
Others	Operating cost	6,479,665,731.95	20.81%	4,770,561,559.60	17.36%	35.83%
Subtotal	Operating cost	28,331,055,615.73	90.98%	25,816,727,040.82	93.94%	9.74%
Smart home business	Operating cost	1,574,835,597.99	5.06%	997,681,210.62	3.63%	57.85%
Robotic business	Operating cost	380,163,028.57	1.22%	276,817,693.44	1.01%	37.33%
Other innovative businesses	Operating cost	854,122,534.83	2.74%	392,243,610.36	1.42%	117.75%
Subtotal	Operating cost	2,809,121,161.39	9.02%	1,666,742,514.42	6.06%	68.54%

6) Any change in consolidation scope during the reporting period

Yes No

During the reporting period, the Company has newly set up twenty wholly-owned subsidiaries and three holding subsidiaries, acquired one subsidiary, actually controlled a subsidiary through an entrusted management agreement, and cancelled two companies, which have caused the changes 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:

Applicable Inapplicable

8) Major customers and suppliers:

Sales to major customers of the Company

Sales to top five customers (RMB)	2,002,048,873.96
Total sales to top five customers as a percentage of the total sales for the year (%)	3.47%
Total sales to the related parties in top five customers as a percentage of the total sales of the year (%)	0.39%

Information on top five customers

No.	Name of Customer	Sales Amount (RMB)	Percentage of total sales for the year
1	First	964,023,537.74	1.67%
2	Second	344,067,070.24	0.60%
3	Third	243,885,275.51	0.42%
4	Fourth (related party)	227,168,169.17	0.39%
5	Fifth	222,904,821.30	0.39%
Total	--	2,002,048,873.96	3.47%

Other information of major customers

Applicable Inapplicable

The Company's fourth customer regarding sales amount is a related party: branch research institute and subsidiary of CETC (under the common control of CETC, consolidated as required)

Major suppliers of the Company

Total purchases from top five suppliers (RMB)	8,582,960,481.78
Total purchases from top five suppliers as a percentage of the total purchases for the year	22.50%
Total purchases from the related parties in the top five suppliers as a percentage of the total purchases for the year	0.00%

Information on top five suppliers of the Company

No.	Supplier Name	Purchase Amount (RMB)	Percentage of total purchase for the year
1	First	4,440,973,440.63	11.64%
2	Second	1,372,813,705.21	3.60%
3	Third	1,108,483,523.43	2.91%
4	Fourth	839,318,275.91	2.20%
5	Fifth	821,371,536.60	2.15%
Total	--	8,582,960,481.78	22.50%

Other information on major suppliers

Applicable Inapplicable

3. Expenses

Unit: RMB

	2019	2018	Increase/decrease over previous year	Note of significant change
Sales expenses	7,256,781,486.68	5,892,500,406.52	23.15%	The company continues to increase investment in domestic and overseas marketing networks
Administrative expenses	1,822,464,442.07	1,377,244,870.14	32.33%	Increase as the Company's business scale expands and number of employees

	2019	2018	Increase/decrease over previous year	Note of significant change
				grows
Financial expenses	-640,068,177.19	-424,263,559.64	-50.87%	Affected by exchange rate fluctuations, foreign exchange gains increased during the period
R&D expenses	5,483,811,698.36	4,482,780,693.41	22.33%	Continue to increase R&D investments

4. R&D Investment

Applicable Inapplicable

In 2019, the Company has newly added 1,339 authorized patents (including 243 patents for invention, 417 utility models and 679 product design patents), and newly added 161 software copyrights. As of the end of 2019, the Company had accumulatively owned 4,119 authorized patents (including 755 invention patents, 1147 utility models and 2217 product design patents), and accumulatively owned 1,042 software copyrights.

During the reporting period, the Company invested RMB 5.48 billion in R&D, which accounted for 9.51% of the operating income. Owing to the continuous relatively high level R&D investment and continuous innovation, the Company is able to keep and enhance its technology leading position and rapidly transform technical advantage to product superiority, so as to continually promote the growth of the Company’s performance.

R&D investment of the Company

	2019	2018	Change Percentage
Number of Engineers (ppl)	19,065	16,010	19.08%
Engineers as percentage of Total headcount	47.19%	46.55%	0.64%
Amount of R&D expenses (RMB)	5,483,811,698.36	4,482,780,693.41	22.33%
R&D investment as a percentage of operating income	9.51%	8.99%	0.52%
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 of significant change of total R&D expenses as a percentage of operating income as compared to last year

Applicable Inapplicable

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

Applicable Inapplicable

5. Cash flow

Unit: RMB

Item	2019	2018	Increase/decrease over previous year
Subtotal of cash inflows from operating activities	64,478,744,263.94	57,332,151,092.45	12.47%

Item	2019	2018	Increase/decrease over previous year
Subtotal of cash outflows from operating activities	56,711,024,092.80	48,218,865,064.69	17.61%
Net cash flows from operating activities	7,767,720,171.14	9,113,286,027.76	-14.76%
Subtotal of cash inflows from investing activities	668,070,675.20	10,894,117,243.97	-93.87%
Subtotal of cash outflows from investing activities	2,591,059,148.00	9,443,396,961.92	-72.56%
Net cash flows from investing activities	-1,922,988,472.80	1,450,720,282.05	-232.55%
Subtotal of cash inflows from financing activities	9,615,811,861.82	12,501,552,609.39	-23.08%
Subtotal of cash outflows from financing activities	15,087,164,151.74	13,298,915,018.82	13.45%
Net cash flows from financing activities	-5,471,352,289.92	-797,362,409.43	-586.18%
Net increase in cash and cash equivalents	484,656,274.51	10,001,826,464.72	-95.15%

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

Applicable Inapplicable

The fluctuation of net cash flows from operating activities is mainly due to the increase in expenditure on purchase inventory; the fluctuation of net cash flows from investing activities is mainly due to the large amount in the net recovery amount of prior year's principal-guaranteed financial products, however, there is no similar investment activities in the current reporting period; the fluctuation of net cash flows from financing activities is mainly due to the decrease in this year's net borrowing inflow and the increase in this year's dividend distribution, and also the equity incentive subscription funds received in the prior year, however, there is no similar financing activities in the current 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

Applicable Inapplicable

III. Non-Core Business Analysis

Applicable Inapplicable

IV. Analysis of assets and liabilities

1. Material changes of asset items

Unit: RMB

	December 31 st 2019		January 1 st 2019		YoY Change (%)	Note of significant change
	Amount	Percentage of total assets	Amount	Percentage of total assets		
Cash and bank balances	27,071,948,919.78	35.92%	26,559,675,452.93	41.83%	-5.91%	No significant change
Accounts receivable	21,307,927,200.28	28.28%	16,619,441,281.18	26.18%	2.10%	Increase as sales revenue grows
Inventory	11,267,986,843.11	14.95%	5,725,104,153.41	9.02%	5.93%	Inventory increases caused by increase in stocking due to increase in sales and production scale
Long-term equity investment	252,165,321.49	0.33%	163,301,844.56	0.26%	0.07%	Increased investment in associates and joint ventures
Fixed assets	5,791,218,720.87	7.68%	5,082,415,160.10	8.00%	-0.32%	No significant change
Construction in process	631,555,479.06	0.84%	416,092,413.42	0.66%	0.18%	Increase in construction investment on Chengdu Science and Technology Base, Hangzhou Innovation Industry Base and Chongqing Science and Technology Base Phase 2
Short-term loans	2,640,082,485.15	3.50%	3,465,655,688.29	5.46%	-1.96%	Increase in demands for temporary capital turnover
Long-term loans	4,604,168,571.43	6.11%	440,000,000.00	0.69%	5.42%	Increase in project borrowings
Non-current liabilities due within one year	86,123,154.06	0.11%	3,178,171,147.16	5.01%	-4.90%	

2. Assets and liabilities measured at fair value

√ Applicable □ Inapplicable

Unit: RMB

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	Newly added during the period	Sales during the period	Other changes	Closing balance
Financial assets								
1. Derivative financial assets	1,860,050.59	-1,863,915.06	4,046.23					181.76
2. Other non-current financial assets	290,966,813.00	17,547,234.44			3,884,220.00			312,398,267.44
3. Receivables for financing	2,273,846,399.85						-1,016,461,346.83	1,257,385,053.02
Subtotal of financial assets	2,566,673,263.44	15,683,319.38	4,046.23		3,884,220.00		-1,016,461,346.83	1,569,783,502.22
Financial Liabilities	290,998.43	-361,429.75						652,428.18

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

□ Yes √ No

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

Unit: RMB

Item	Closing Book Value (RMB)	Reasons for being restricted
Monetary fund	556,280,911.38	Various cash deposits and other restricted funds
Notes receivable	329,309,522.17	Endorsed to suppliers
Notes receivable	3,454,753.01	Pledge for issuance of bank acceptance
Receivables for financing	272,663,613.54	Pledge for issuance of bank acceptance
Fixed assets	61,877,730.05	Sale and leaseback of fixed assets
Long-term receivables	968,205,409.44	Pledge for long-term debts
Total	2,191,791,939.59	

V. Analysis of Investments

1. Overview

Applicable Inapplicable

Investment during 2019 (RMB)	Investment during 2018 (RMB)	Fluctuation (%)
2,214,804,834.61	2,070,774,031.12	6.96%

2. Significant equity investment during the reporting period

Applicable Inapplicable

3. Significant non-equity investment during the reporting period

Applicable 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 reporting period	Source of funds	Project schedule	Reasons for not reaching planned progress and expected benefits	Disclosure Date (if applicable)	Disclosure Index (if applicable)
Hangzhou Innovation Industry Base	Self-built	YES	Video product and video service	62,698,117.75	113,538,634.58	Specific Loan	11.07%	无	September 23rd 2017	<i>Announcement on Investment and Construction of Hangzhou Innovation Industry Base Project in Hangzhou (No. 2017-034)</i>

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 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 Project	Self-built	YES	Video product and video service	236,354,100.92	242,931,547.66	Self-fund	12.34%	None	September 23rd 2017	<i>Announcement on Investment and Construction of Chengdu Science and Technology Base Project in Chengdu (No. 2017-033)</i>
Chongqing Science and Technology Park Project-phase 2	Self-built	YES	Video product and video service	108,809,026.93	111,066,438.98	Self-fund	14.58%	None	September 23rd 2017	<i>Announcement on Investment and Construction of Chongqing Science and Technology Base in Chongqing (No. 2017-035)</i>
Xi'an Science and Technology Park Project	Self-built	YES	Video product and video service	4,507,504.22	6,171,571.90	Self-fund	0.27%	None	September 23rd 2017	<i>Announcement on Investment and Construction of Xi'an Science and Technology Base in Xi'an (2017-031)</i>
Wuhan Science and Technology Park Project	Self-built	YES	Video product and video service	2,698,113.21	4,339,622.64	Self-fund	0.15%	None	September 23rd 2017	<i>Announcement on Investment and Construction of Wuhan Science and Technology Base in Wuhan (2017-032)</i>
Wuhan Intelligence Industry Park Project	Self-built	YES	Video product and video service	1,435,710.38	2,370,546.89	Self-fund	0.10%	None	September 23rd 2017	<i>Announcement on Investment and Construction of Wuhan Intelligence Industry Base in Wuhan (2017-036)</i>

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 reporting period	Source of funds	Project schedule	Reasons for not reaching planned progress and expected benefits	Disclosure Date (if applicable)	Disclosure Index (if applicable)
Total	--	--	--	416,502,573.41	480,418,362.65	--	--			

4. Financial assets measured at fair values

√ Applicable □ Inapplicable

Unit: RMB

Category	Initial investment cost	Current profits or losses on the changes in fair value	Accumulated fair value changes included in equity	Purchase during the reporting period	Amount sold during the reporting period	Cumulative investment income	Closing balance	Source of funds
Derivative instruments	1,013,306,062.25	-1,863,915.06		1,407,674,787.60		11,550,750.03	984,893,221.62	Company's own funds
Other non-current financial assets	290,966,813.00	17,547,234.44		3,884,220.00			312,398,267.44	Company's own funds
Receivables for financing	2,273,846,399.85						1,257,385,053.02	Company's own funds
Total	3,578,119,275.10	15,683,319.38	-	1,411,559,007.60	-	11,550,750.03	2,554,676,542.08	--

5. Use of raised funds

Applicable Inapplicable

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

VI. Disposal of significant assets and equity**1. Disposal of significant assets:**

Applicable Inapplicable

During the reporting period, there was no disposal of significant assets

2. Sale of significant equity:

Applicable Inapplicable

VII. Analysis of major subsidiaries and investees

Information about major subsidiaries, and investees that contribute above 10% of the Company's Net Profit

Unit: RMB

Company name	Company type	Principal business	Registered capital	Total assets	Net assets	Operating revenue	Operating profit	Net profit
Hangzhou Hikvision System Technology Co., Ltd.	Subsidiary	<p><u>Manufacturing</u>: video surveillance system; <u>Technology development and service</u>: computer system integration, electronic product, communication product, transmission and display equipment, big data and IoT software and hardware products, intelligent systems, real-time communication systems, servers and supporting software and hardware products;</p> <p><u>Service</u>: the installation of electric security engineering; steel structure engineering contracting and construction; the design, construction and maintenance of mechanical and electrical engineering, construction engineering, electronic engineering and intelligent system (based on qualification for operation), parking management; sales of its self-produced products, import and export goods and technology.</p>	600 million	3,761,583,508.72	1,615,897,147.18	1,679,095,072.24	111,387,698.75	100,838,514.08
Hangzhou Hikvision Science and Technology Co. Ltd.	Subsidiary	<p>Technology development, technology consulting, results transferring; computer software, electronic product, communication product, digital security product, fire-control products; production and sales: security electronic product and its auxiliary equipment, intelligent hardware electronic product, explosion-proof electrics, security electronic product and its auxiliary equipment, intelligent hardware electronic product, explosion-proof electrics, fire-control products, IC card and IC card RW device, mobile phone, cordless phone, handheld wireless police terminal, hand held mobile police terminal; labor protection articles (including special labor protection articles); import or export of goods or technology</p>	1000 million	38,997,577,410.70	3,710,944,828.05	54,014,771,449.42	1,320,326,843.48	1,017,503,089.22

Information about obtaining and disposal of subsidiaries during the reporting period

√ Applicable □ Inapplicable

Company name	Equity acquisition and disposal method during the reporting period	Impact on overall production results
Hangzhou Kuangxin Technology Ltd.	Equity transfer by cash	Business development
Hangzhou EZVIZ Technology Ltd.	Entrusted management agreement	Business development
Zhengzhou Hikvision Digital Technology Ltd.	Cash contribution	Business development
Zhenping County Haikang Juxin Digital Technology Ltd.	Cash contribution	Business development
Zhejiang Hikvision Fire Control Technology Ltd.	Cash contribution	Business development
Tianjin Hikvision Information Technology Ltd	Cash contribution	Business development
Shijiazhuang Hikvision Science and Technology Ltd.	Cash contribution	Business development
Ning Guo Hikvision City Operation Service Ltd.	Cash contribution	Business development
Ningbo Haikang Parking System Operation Ltd.	Cash contribution	Business development
Nanchang Hikvision Digital Technology Ltd.	Cash contribution	Business development
Hefei Hikvision Digital Technology Ltd	Cash contribution	Business development
Hangzhou Hikfire Technology Ltd.	Cash contribution	Business development
Hikvision Digital Technology (Shanghai) Ltd.	Cash contribution	Business development
Guangzhou Hikvision Technology Ltd.	Cash contribution	Business development
Fuzhou Hikvision Digital Technology Ltd.	Cash contribution	Business development
PT. Hikvision Technology Indonesia	Cash contribution	Expand overseas sales channels
Hikvision West Africa Limited	Cash contribution	Expand overseas sales channels
Hikvision Technology Egypt JSC	Cash contribution	Expand overseas sales channels
Hikvision Technologies S.R.L.,	Cash contribution	Expand overseas sales channels
Hikvision Japan K.K.	Cash contribution	Expand overseas sales channels
Hikvision IOT (Thailand) CO.,LTD	Cash contribution	Expand overseas sales channels
Hikvision Central America S.A.	Cash contribution	Expand overseas sales channels
Hikvision Azerbaijan Limited Liability	Cash contribution	Expand overseas sales channels
Hikvision Argentina S.R.L.	Cash contribution	Expand overseas sales

		channels
Ezviz International Limited	Cash contribution	Expand overseas sales channels
Beijing Brainaire Storage Technology Ltd.	Liquidation and Cancellation	Adjustments of organizational framework
Tianjin Hikvision System Technology Ltd.	Liquidation and Cancellation	Adjustments of organizational framework

VIII. Structural entities controlled by the Company

Applicable Inapplicable

IX. Outlook for the Future Development of the Company

1. Industry developing trends

1. Industrial development trend

(1) Traditional comprehensive security demands continue increasing

Security is the basis for a happy life, and it is an inevitable requirement of development to continuously improve security capability. Governments, enterprises and households of all countries will continue increasing investments in security, and the demands in traditional comprehensive security business will maintain stable growth.

(2) Emergence of intelligent business demands

Ubiquitous intelligence has brought clear opportunities, but the fragmented intelligent application demands that are difficult to implement are still a hindrance. On the other hand, more low-cost technical solutions continue to evolve iteratively on the chip, algorithm and software side, and the implementation of intelligent benchmarking projects in various subdivided industries brought demonstration effect. The era of large-scale implementation of intelligentization is gradually approaching.

(3) Increasing non-market factors in overseas markets bring more challenges

Competitive or cooperative relationships between countries will directly or indirectly impact the Company's survival environment in the specific country or region. Increasing non-market factors in overseas markets will bring more risks of uncertainty.

2. The Company's development strategy

Hikvision is a provider of Intelligent IoT solutions and big data services with video as its core competence. The Company adheres to the business philosophy of "professionalism, honesty, and integrity" and the core corporate values of "dedicated to customers' continual success, adding value to companies and communities, acting with honesty and integrity, pursuing excellence in every endeavor." Through continuous innovation, it provides global customers with high-quality products and services and creates value for customers.

With the corporate mission "to explore innovative ways to better perceive and understand the world, to empower vision for decision-makers and practitioners, and work together to enhance safety and advance sustainable development around the world," the Company is committed to empower vision for the security and growth of the world.

3. Key Operation Priorities in 2020

(1) Under the premise of discriminating business environment and business sustainability, conduct businesses judiciously and seize worthwhile market opportunities.

(2) Continue promoting the market strategy centering on urban areas, continue progressing with differentiated deployment in overseas markets, maintain synergy between headquarters and regional marketing systems, and continue increasing resources input in frontline businesses to enhance value for customers.

(3) Continue increasing input in fundamental R&D capability, further consolidate the fundamental technologies and accumulate innovative capabilities.

(4) Put more focus on capital security and emphasize business quality, to guarantee efficiency and profitability of business activities.

(5) Continue developing innovative businesses and seize market opportunities.

X. Reception of activities including research, communication and interviews during the report period

√ Applicable □ Inapplicable

(1) Reception of research activities during the reporting period.

Time of reception	Location of reception	Method of reception	Type of reception object	Index of basic situation of the research
From January 1 st 2019 to January 11 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From January 1st 2019 to January 11th 2019</i>

Time of reception	Location of reception	Method of reception	Type of reception object	Index of basic situation of the research
From January 14 th 2019 to January 31 st 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From January 14th 2019 to January 31st 2019</i>
From February 15 th 2019 to March 1 st 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From February 15th 2019 to March 1st 2019</i>
From March 4 th 2019 to March 19 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From March 4th 2019 to March 19th 2019</i>
April 20 th 2019	Headquarters meeting room of the Company	Performance result conference call	Institutional investors; individuals	CNINF, <i>Investor Relations Activity Record: April 20th 2019</i>
May 10 th 2019	Headquarters meeting room of the Company	Site Research	Institutional investors; individuals	CNINF, <i>Investor Relations Activity Record: May 10th 2019</i>
April 22 nd 2019 to May 17 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From April 22nd 2019 to May 17th 2019</i>
May 20 th 2019 to June 3 rd 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From May 20th 2019 to June 3rd 2019</i>
June 4 th 2019 to June 21 st 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From June 4th 2019 to June 21st 2019</i>
July 20 th 2019	Headquarters meeting room of the Company	Performance Result-Conference Call	Institutional and individual investors	CNINF, <i>Investor Relations Activity Record: July 20th 2019</i>
From July 22 nd 2019 to August 2 nd 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From July 22nd 2019 to August 2nd 2019</i>
From August 5 th 2019 to August 16 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From August 5th 2019 to August 16th 2019</i>
From August 19 th 2019 to September 9 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	CNINF, <i>Investor Relations Activity Record: From August 19th 2019 to September 9th 2019</i>
From September 10 th	Headquarters	Site Research and	Institutional	CNINF, <i>Investor Relations Activity Record: From</i>

Time of reception	Location of reception	Method of reception	Type of reception object	Index of basic situation of the research
2019 to September 23 rd 2019	meeting room of the Company	telephone communication	investors	<i>September 10th 2019 to September 23rd 2019</i>
October 19 th 2019	Headquarters meeting room of the Company	Performance Result-Conference Call	Institutional and individual investors	<i>CNINF, Investor Relations Activity Record: October 19th 2019</i>
From October 21 st 2019 to November 1 st 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	<i>CNINF, Investor Relations Activity Record: From October 21st 2019 to November 1st 2019</i>
From November 4 th 2019 to November 15 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	<i>CNINF, Investor Relations Activity Record: From November 4th 2019 to November 15th 2019</i>
From November 18 th 2019 to November 29 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	<i>CNINF, Investor Relations Activity Record: From November 18th 2019 to November 29th 2019</i>
From December 2 nd 2019 to December 20 th 2019	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	<i>CNINF, Investor Relations Activity Record: From December 2nd 2019 to December 20th 2019</i>
December 23 rd 2019 to January 3 rd 2020	Headquarters meeting room of the Company	Site Research and telephone communication	Institutional investors	<i>CNINF, Investor Relations Activity Record: From December 23rd 2019 to January 3rd 2020</i>

(2) Participation of conferences for investor relationship activities during the reporting period.

Time of conference	Location	Conference Name	Type of reception object	Method of reception
January 2019	Shanghai	UBS 19 th Greater China Conference 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
January 2019	Beijing	Morgan Stanley 2019 China New Economy Summit	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
January 2019	Shenzhen	17th Annual dbAccess China Conference 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
February 2019	Hongkong	Macquarie A-Share Technology Stock Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
March 2019	Taipei	Bank of America Merrill Lynch Asia TMT Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
April 2019	Hangzhou	Haitong Securities 2019 Spring Corporate Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.

Time of conference	Location	Conference Name	Type of reception object	Method of reception
May 2019	Shenzhen	GuoTaiJunAn 2019 Mid-Year Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Shenzhen	HSBC 6 th China Annual China Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Shenzhen	CICC High-Technology Forum	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Hongkong	Goldman Sachs Technet Conference Asia Pacific 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Shanghai	Guojin Securities 2019 Mid-Year Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Shanghai	Huatai Securities 2019 Mid-Year Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Singapore	Nomura Investment Forum Asia 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
May 2019	Beijing	Morgan Stanley's Fifth China Summit	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
June 2019	London-Edinburgh	2019 United Kingdom NDR-Via CLSA	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
June 2019	Shanghai	Merchants Securities 2019 Capital Market Summit	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
July 2019	Tokyo	Daiwa Hong Kong China Investment Seminar Tokyo 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
July 2019	Shanghai	Guotai Junan Information Industry Summit	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
July 2019	Hongkong-Taiwan	Hongkong Taiwan NDR-via HSBC	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
September 2019	Taipei	Credit Suisse Asian Technology Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
September 2019	Paris-Stockholm	Europe NDR-Via CICC	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
September 2019	London	CICC Forum (UK) 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
September 2019	Suzhou	Citic Securities Thematic Investment Forum-- Looking for Core Assets	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
October 2019	Singapore	NDR-Via Jefferies	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
October 2019	Shanghia	NDR-Via CICC	All kinds of	One-on-One, One-on-multi, small

Time of conference	Location	Conference Name	Type of reception object	Method of reception
			investors	group Meetings, and etc.
October 2019	Hongkong	NDR-Via Credit Suisse	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
October 2019	Zhuhai	GuoTaiJunAn 2020 Investment Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Beijing	NDR- Citic Securities	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Beijing	CICC Annual Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Shenzhen	Goldman Sachs 2019 China Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Shenzhen	Credit Suisse 10th Credit Suisse China Investment Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Macao	CITI China Investor Conference 2019	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Shenzhen	Citic Securities 2020 Capital Market Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
November 2019	Hongkong	NDR-Via HSBC	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.
December 2019	Wuhan	ShenWanHongYuan 2020 Capital Market Conference	All kinds of investors	One-on-One, One-on-multi, small group Meetings, and etc.

(3) Investor relations activity statistics during the current year

Number of daily research received (On-site and telephone conference, times)	231
Number of institutional investors received (ppl)	4299
Number of individual investors received (ppl)	317
Number of investor relations conference participated	23

Section V Significant Events

I. Profit distribution of ordinary shares and capitalization of capital reserves

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

Applicable Inapplicable

Profit distribution policy (proposal) and capitalizing of capital reserves policy (proposal) in last three years (including the current reporting period)

- (1) Profit distribution for the year 2017: Based on the Company's total share capital of 9,227,270,473 shares on the date of equity registration when the Company implements the distribution plan, the Company distributed cash dividend of RMB 5 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil.
- (2) Profit distribution for the year 2018: Based on the Company's total share capital of 9,348,465,931 shares on the date of equity registration when the Company implements the distribution plan, the Company distributed cash dividend of RMB 6 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil.
- (3) Profit distribution proposal for the year 2019: Based on the Company's current total share capital of 9,345,010,696 shares, the Company proposed to distribute cash dividend of RMB 7 (tax inclusive) per each 10 shares to all shareholders, bonus share and share distribution from capital reserve is nil.

Cash dividend of ordinary shares in last 3 years (including the current reporting period)

Unit: RMB

Year	Cash dividends (including tax)	Net profit attributable to shareholders of listed Company in consolidated statements	Ratio of net profit attributable to shareholder of Company in consolidated financial statements (%)	Amount of cash dividends in other methods	Ratio of cash dividends in other methods
2019	6,541,507,487.20	12,414,587,690.45	52.69%	0.00	0.00%
2018	5,609,079,558.60	11,352,869,241.32	49.41%	0.00	0.00%
2017	4,613,635,236.50	9,410,855,084.82	49.02%	0.00	0.00%

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

Applicable Inapplicable

II. Profit distribution and capitalizing of capital Reserves proposal for the current reporting period

Bonus issue per 10 shares (share)	0
Cash dividend per 10 shares (RMB) (tax inclusive)	7.00
Additional shares converted from capital reserves for 10 shares (share)	0
Total capital shares as the basis for the distribution proposal (share)	9,345,010,696
Total cash dividend (RMB) (tax inclusive)	6,541,507,487.20
Distributable profits (RMB)	25,196,894,651.27
Percentage of cash dividends in the total distributed profit (%)	25.96%
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 2019, the parent company of the Company realized net profit of RMB 11,682,416,010.01, after deducting the statutory surplus reserve of RMB 211,792,989.55, adding the undistributed profit of the parent company at the beginning of the year of RMB 19,327,533,457.91, deducting the cash dividends of RMB 5,609,079,558.60 in 2018, adding back RMB 7,817,731.50 of the unpaid dividends for the repurchased restricted shares, as of December 31 st 2019, the profits attributable to shareholders of the parent company amounted to RMB 25,196,894,651.27. As of December 31 st 2019, the profits attributable to shareholders in the consolidated statement were RMB 28,961,389,145.22 (consolidated). To sum up, according to the principle of “whichever is lower”, the profits attributable to shareholders this year was RMB 25,196,894,651.27.	
Based on the Company’s total share capital of 9,345,010,696 shares, the Company proposed to distribute cash dividend of RMB 7 (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 6,541,507,487.20, and the remaining undistributed profits will be transferred to the next year.	

III. 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.

Applicable Inapplicable

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
Commitments in offering documents or shareholding alterations	CETHIK Group Co., Ltd.	<p>1. 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.</p> <p>2. 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:</p> <p>(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.</p> <p>(2) Haikang Group will not make use of the controlling power to obtain the prior right to complete the transaction with Hikvision.</p> <p>(3) Haikang Group will not deal with Hikvision in not fair terms comparing to the market prices to prejudice the Company's interests.</p> <p>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 obey the Articles of Association and other regulatory documents related to the avoiding of issues 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</p> <p>3. Commitment to the maintenance of the independence of the listed Company</p> <p>3.1 Commitment to Personnel</p>	October 29 th 2013	Long-term	Strict performance

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
		<p>Independence of the listed Company</p> <p>(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;</p> <p>3.2 Commitment to the independence of the asset of the listed Company</p> <p>(1) Commitment to independent and complete asset of the listed Company</p> <p>(2) Commitment free of unlawful use of cash and asset of the listed Company by the controlling shareholders</p> <p>3.3 Commitment to financial independence of the listed Company</p> <p>(1) Commitment to an independent finance department with a team and accounting system;</p> <p>(2) Commitment to a regulated, independent accounting system and financial management system of the branches and subsidiaries</p> <p>(3) Commitment to maintaining accounts with banks independently of and not sharing any bank account with our controlling shareholders</p> <p>(4) Commitment that the financial staff shall not assume any positions in CETHIK</p> <p>(5) Commitment to paying taxes independently according to the law;</p> <p>(6) Commitment to implementing financial decisions independently</p> <p>3.4 The Company has set up an independent organizational structure which maintains its independent operations which is independent from that of CETHIK.</p> <p>3.5 Commitment to business Independence of the listed Company</p> <p>(1) The Company has the asset, personnel, aptitude and management capability for independent and complete business operation. The</p>			

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
		<p>Company has the ability to operate independently in the market.</p> <p>(2) Commitment in independence in both business and operations</p> <p>4. Regarding plans for the development and relevant commitment for the listed Company, Haikang Group has committed as below for the subsequent development of Hikvision according to the Securities Acts and relevant laws and rules,</p> <p>4.1 Currently the Company has no plan to change or make significant adjustments for principal business in the next 12 months;</p> <p>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.</p> <p>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.</p> <p>4.4 Currently the Company has no plan to make significant changes to the Articles of Association for the listed Company.</p> <p>4.5 Currently the Company has no plan to make significant changes to the existing employee recruitment for the listed Company.</p> <p>4.6 Currently the Company has no plan to make significant changes for the dividend distribution plan for the listed Company.</p> <p>4.7 Currently the Company has no plan</p>			

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
		to make significant changes for business and organizational structure for the listed Company.			
Commitments in Initial Public Offering or re-financing	Hangzhou Weixun Investment Management Limited Partnership (later renamed as Xinjiang Weixun Investment Management Limited Partnership)	During Hu Yangzhong, Wu Weiqi, Jiang Haiqing, Zhou Zhiping, Xu Lirong, Cai Dingguo, He Hongli, Zheng Yibo, Hu Dan, Jiang Yufeng, Liu Xiang, 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 dimission, should not transfer Hikvision's shares held under Weixun.	May 17 th 2010	Long term	Strict performance
	Hangzhou Pukang Investment Limited Partnership (later renamed as Xinjiang Pukang Investment Limited Partnership)	During Hu Yangzhong, Wu Weiqi, Gong Hongjia's tenure of the Company's board of directors, supervisors and senior management persone, the annual transfer of Hikvision's total shares should not exceed 25% of total number of shares held under Pukang; whithin 6 months after abovementioned personnel's dimission, should not transfer Hikvision's shares held under Pukang.	May 17 th 2010	Long term	Strict performance
	The Company's directors, supervisors and executive: Hu Yangzhong, Wu Weiqi, Jiang Haiqing, Zhou Zhiping, Xu Lirong, Cai Dingguo, He Hongli, Zheng Yibo, Hu Dan, Jiang Yufeng, Liu Xiang, Wang Ruihong, Chen Junke	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 Weixun; whthin 6 months after their dimission, they should not transfer their shares held under Weixun.	May 17 th 2010	Long term	Strict performance
	Directors, executive officers of the Company: Hu Yangzhong, Wu Weiqi	During their tenure of the Company's board of directors, supervisors and senior management personnel, the	May 17 th 2010	Long term	Strict performance

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
		annual shares transfer should not exceed 25% of total number of shares held under Pukang; within 6 months after their dimission, they should not transfer their shares held under Pukang.			
	The Company's director Gong Hongjia's spouse, Chen Chunmei	During Gong Hongjia's tenure of the Company's board of directors, supervisors and senior management personnel, Chen's annual shares transfer should not exceed 25% of total number of shares held under Pukang; within 6 months after the dimission of Gong Hongjia, Chen should not transfer her shares held under Pukang.	May 17 th 2010	Long-term	Strict performance
	China Electronics Technology Group Corporation (later renamed as China Electronics Technology Group Co., Ltd.)	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 th 2008	Long term	Strict performance
	Gong Hongjia; Hangzhou Weixun Investment Management Limited Partnership (later renamed as Xinjiang Weixun Investment Management Limited Partnership); Hangzhou Pukang Investment Limited Partnership (later renamed as Xinjiang Pukang Investment Limited Partnership); ZheJiang Orient Holdings Co., Ltd.	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 the same industry</i> on 10 July, 2008.	July 10 th 2008	Long term	Strict performance
Other commitments to the Company's minority shareholders	CETC Investment Holdin Co.,Ltd (CETCIH); The 52nd Research Institute at China Electronics Technology Group Corporation; China Electronics Technology	During the effective period of the implementation of CETCIH's plan to increase the holding of Hikvision (within 6 months from October 23 rd 2019) and the statutory period, CETCIH will not reduce its shareholdings of Hikvision	October 23 rd 2018	Within 6 months from October 23 rd 2018	Completed

Commitments	Giver of commitments	Details of commitments	Date of commitments	Term of commitments	Performance
	Group Co., Ltd.				
	CETC Investment Holding Co., Ltd (CETCIH); The 52nd Research Institute at China Electronics Technology Group Corporation; China Electronics Technology Group Co., Ltd.	Within six months from the date of completion of the implementation of increasing shareholding of Hikvision plan, CETCIH will not reduce its shareholdings of Hikvision.	April 24 th 2019	Within 6 months from April 24 th 2019	Completed
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:

Applicable Inapplicable

IV. The Company’s funds used by the controlling shareholder or its related parties for non-operating purposes.

Applicable Inapplicable

No such case during the reporting period.

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

Applicable Inapplicable

VI. For changes in accounting policies, accounting estimates and accounting methods as compared to the financial report for the prior year

Applicable Inapplicable

The Company has implemented the Accounting Standards for Business Enterprise No. 22 – Recognition and Measurement of Financial Instruments, the Accounting Standards for Business Enterprise No. 23 – Transfer of Financial Assets, the Accounting Standards for Business Enterprise No. 24 – Hedging Accounting and the Accounting Standards for Business Enterprise No. 37 – Presentation of Financial Instruments (hereinafter referred

to as “New Standards for Financial Instruments”) revised in 2017 by the Ministry of Finance, effective from January 1st 2019.

In the classification and measurement of financial assets, the New Standards for Financial Instruments require the classification of financial assets based on their characteristics of contractual cash flows and the business models for management of such assets by enterprises into the three main categories of “financial assets measured at amortized cost”, “financial assets at fair value through other comprehensive income” and “financial assets at fair value through profit and loss of current period”, and cancel the categories of loans and receivables, investment held to maturity and available-for-sale financial assets in the former standards for financial instruments. Investments in equity instruments are generally classified into financial assets at fair value through profit and loss of current period, and investments in equity instruments for non-trading purpose are also allowed to be designated as financial assets at fair value through other comprehensive income, but such designation is irrevocable, and at the time of disposal, the accumulated amount of fair value changes previously included in other comprehensive income must not be transferred to profit and loss of current period.

In respect of value impairment, the New Standards for Financial Instruments relating to impairment requirements are applicable to financial assets measured at amortized cost, financial assets at fair value through other comprehensive income, receivables for financing and financial guarantee contracts. The New Standards for Financial Instruments require the adoption of the expected credit loss model to recognize the provision for credit loss for replacing the former model of credit loss occurred. The new impairment model adopts a three-stage model depending on whether credit risk of the relevant project has increased significantly after initial recognition, provision for credit loss is made according to the expected credit loss within 12 months or the expected credit loss during the entire subsisting period. Company measures the loss provision for the accounts receivable formed by transactions regulated by the income standard based on the amount equivalent to the expected credit loss throughout the lifetime.

Recognition and measurement of financial instruments prior to January 1st 2019 were inconsistent with the New Standards for Financial Instruments, the Company has made retrospective adjustments according to the requirements of the New Standards for Financial Instruments. The Company will not adjust the data involved in financial statements for comparison in preceding periods which are not consistent with the requirements of the New Standards for Financial Instruments. The difference between the original book value of financial instruments and the new book value on the date of implementation of the New Standards for Financial Instruments will be accounted under retained earnings or other comprehensive income on January 1st 2019. For details on the effects of adoption of the New Standards for Financial Instruments by the Company on January 1st 2019, please refer to Financial Report Notes (III) 28.2.

The Company prepared the 2019 Financial Statement in accordance with the Notice on Amending the 2019 Annual Financial Statements of General Enterprises (Accounting Council (2019) No. 6, hereinafter referred to as "Financial Accounting No. 6 Document") issued by the Ministry of Finance on April 30th 2019. Financial Accounting No. 6 Document revised the presentation items on the balance sheet and income statement, and split the "Notes Receivable and Accounts Receivable" item into "Notes Receivable" and "Accounts Receivable" and the "Notes Payable and Accounts Payable" item into "Notes Payable" and "Accounts Payable" items; it also specified or revised the contents of “Non-current Assets due Within One Year”, “Deferred Income”, "Other Equity Instruments", "Research and Development (R&D) Expenses", "Interest Income " under “Financial Expenses”, "Other Income", "Asset Disposal

Income", "Non-operating Income" and "Non-operating Expenses"; it adjusted the position of "Impairment Losses of Assets" and specified the contents of "Invested capital of other equity instrument holder". In light of the aforesaid changed items, the Company made retrospective adjustment of the comparative data of the previous year. The changes of accounting policy will not affect the consolidated net profits, the Company's net profits or owner's equity.

Besides, as a result of the implementation of the New Financial Instrument Standards and as per Notice on Amending the 2019 Annual Financial Statements of General Enterprises (Accounting Council [2019] No. 6), the "interests receivable" in "other receivables" is changed to the interests that are due and receivable for the relevant financial instruments but not yet received as of balance sheet date (the interests of the financial instruments assessed by the effective interest method is included in the book balance of the financial instruments); "interests payable" in "other payables" is changed to the interests that are due and payable for the relevant financial instruments but not yet paid as of balance sheet date (the interests of the financial instruments assessed by the effective interest method is included in the book balance of the financial instruments). Based on the provisions of the New Financial Instrument Standards, no retrospective adjustment of the comparative data had been done.

VII. Explanation for retrospective restatement of major accounting errors during the reporting period

Applicable Inapplicable

No such case during the reporting period.

VIII. Explanation for changes in scope of the consolidated financial statements as compared to the financial report for the prior year

Applicable Inapplicable

During the reporting period, the Company has newly set up twenty wholly-owned subsidiaries and three holding subsidiaries, acquired one subsidiary, actually controlled one subsidiary through an entrusted management agreement, and cancelled two companies, 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.

IV. 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)	330

Consecutive years of the audit service provided by the domestic CPA firm	4
Name of the certified public accountants from the domestic CPA firm	Tang Lianjiong, Zhang Shushu
Consecutive years of the audit service provided by the certified public accountants from the domestic CPA firm	Tang Lianjiong has provided audit service for 1 consecutive year; Zhang Shushu has provided audit service for 3 consecutive years.

Whether the CPA firm was changed in the current period

Yes No

Engagement of internal control audit CPA firm, financial advisor or sponsor

Applicable Not applicable

X. Listing suspension and termination after disclosure of this annual report

Applicable Inapplicable

XI. Bankruptcy and restructuring

Applicable Inapplicable

No such case during the reporting period.

XII. Material litigation and arbitration

Applicable Inapplicable

No such case during the reporting period.

XIII. Punishments and rectifications

Applicable Inapplicable

No such case during the reporting period.

XIV. Integrity of the Company and its controlling shareholders and actual controllers

Applicable Inapplicable

XV. The implementation of an Equity Incentive Plan, Employee Stock Incentive Plan, or other incentive plans

Applicable Inapplicable

1. During the reporting period, the Company completed the third time unlocking, repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme.

On December 3rd 2018, *Resolution for the Fulfillment of the Unlocking Conditions of the Third Unlock Period*

for the 2014 Restricted Share Incentive Schemes and the Resolution for the Third Repurchase and Cancellation of the Locked shares that Already Granted for 2014 Restricted Share Incentive Schemes were approved by the 7th meeting of the fourth Board. Authorized by the first extraordinary general meeting for 2014, a total of 33,422,536 restricted shares of 1055 grantees were vested and circulated on January 8th 2019. Meanwhile, 509,625 restricted shares held by a portion of grantees not fulfilling the incentive conditions were repurchased and cancelled. On June 26th 2019, repurchase and cancellation process of the restricted shares was complete. For details, please refer to in the *Indicative Notice of Listing the Unlocked Shares during the Third Unlocking Period of 2014 Restricted Share Incentive Schemes* (No. 2019-002) and the *Notice of the Completion of Third Repurchase and Cancellation of Locked Shares that Already Granted for 2014 Restricted Share Incentive Schemes* (No. 2019-035) issued on January 7th 2019 and June 27th 2019 respectively.

2. During the reporting period, the Company has completed the grants of 2018 Restricted Share Incentive Scheme

On December 20th 2018, *Resolution for Granting Restricted Shares to Planned Grantees for 2018 Restricted Shares Incentive Scheme* was approved by the 8th Meeting of the fourth board. According to the *Listed Company Equity Incentive Measures* and other administration or relevant laws, regulations and departmental rules and regulated documents, as well as *2018 Restricted Shares Incentive Scheme (edited draft)* and authorizations approved by the 2018 2nd extraordinary general meeting, the Company has completed granting and registration of 2018 Restricted Shares Incentive Scheme, with 6095 granted personnel, and 121,195,458 granted shares which were listed on January 18th 2019.

For details, please refer to *Indicative Notice of Completion of Granting of 2018 Restricted Share Incentive Schemes* (No. 2019-004) issued on January 17th 2019.

3. During the reporting period, the Company completed the first time unlocking, repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme.

On December 26th 2018, *Resolution for the Fulfillment of the Unlocking Conditions of the First Unlock Period for the 2016 Restricted Share Incentive Schemes* was approved by the 9th meeting of the fourth Board. Authorized by the second extraordinary general meeting for 2016, a total of 30,140,165 restricted shares of 2822 grantees were vested and circulated on January 21st 2019. Meanwhile, 2,945,610 restricted shares held by a portion of grantees not fulfilling the incentive conditions were repurchased and cancelled. On September 3rd 2019, repurchase and cancellation process of the restricted shares was complete.

For details, please refer to in the *Indicative Notice of Listing the Unlocked Shares during the First Unlocking Period of 2016 Restricted Share Incentive Schemes* (No. 2019-007) and the *Notice of the Completion of the First Repurchase and Cancelation of Locked Shares that Already Granted for 2016 Restricted Share Incentive Schemes* (No. 2019-044) issued on January 18th 2019 and September 5th 2019 respectively.

By the end of the reporting period, the Company has a total of 166,599,970 granted and restricted shares, accounts for 1.78% of the Company's total share capital

The Company followed the *Accounting Standard for Business Enterprises No. 11 – Share-based Payment* and other accounting standards in relation to accounting treatment for Restricted Share Incentive Schemes. Costs in relation to the shares granted under 2014 Restricted Share Incentive Schemes, 2016 Restricted Share Incentive Schemes and 2018 Restricted Share Incentive Schemes are amortized over the waiting period for vesting.

During the reporting period, costs amortized in relation to the shares granted under the 2014 Restricted Share Incentive Schemes, shares granted under the 2016 Restricted Share Incentive Schemes and shares granted under 2018 Restricted Share Incentive Schemes of the Company have no material impact on the financial position and operating results of the Company. For details, please refer to Note (XI) - Share-based Payments.

XVI. Significant related-party transaction

1. Related-party transactions arising from routine operation

Related party	Relationship	Type of related transaction	Content of related transaction	Valuation	Trading Amount (0'000 RMB)	Proportion to the amount of similar transactions.	Approved trading quota (0'000 RMB)	Whether above 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	Procurement, receiving services	Reference market price; Agreed on price	38,546	1.01%	60,000	No	Payment on delivery	April 20 th 2019	Announcement on projections on 2019 related-party transactions (No: 2019-020)
Shanghai Fullhan Micro	The Company's director, Gong Hongjia is the director of the related party	Procurement	Procurement, receiving services	Reference market price; Agreed on price	36,658	0.96%	45,000	No	Payment on delivery		
Wuhu Sensor Technology	A joint venture affiliated business held by the Company	Procurement	Procurement, receiving services	Reference market price; Agreed on price	6,326	0.17%	10,000	No	Payment on delivery		
Maxio Technology and its subsidiaries	A joint venture affiliated business held by the Company	Procurement	Procurement, receiving services	Reference market price; Agreed on price	4,919	0.13%	10,000	No	Payment on delivery		
Subsidiaries or research	Under the common	Sales	Providing	Reference	48,142	0.83%	70,000	No	Payment		

institutes of CETC	control of the Company's actual controller.		services, selling products, commercial goods	market price; Agreed on price					on delivery
Zhiguang Hailian Big Data Technology Ltd.	A joint venture affiliated business held by the Company	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	410	0.01%	2,000	No	Payment on delivery
Zhejiang Tuxun	The Company's prior senior executive left his post from the Company in March 2018; it has been 12 months after Zheng left his post, therefore, Zhejiang Tuxun will no longer be a related party of the Company from April 2019.	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	45	0.00%	500	No	Payment on delivery
Wuhu Sensor Technology	A joint venture affiliated business held by the Company	Sales	Providing services, selling products, commercial	Reference market price; Agreed on price	413	0.01%	2,500	No	Payment on delivery

			goods							
Hangzhou Comfirmware	The Company's prior senior executive, Jia Yonghua, is the director of the related party. Jia Yonghua resigned in October 2019. He was still a related party of the Company because he left office less than 12 months ago.	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	11	0.00%	200	No	Payment on delivery	
Maxio Technology (Hangzhou) Ltd. and its subsidiaries	A joint venture affiliated business held by the Company	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	16	0.00%	200	No	Payment on delivery	
Sanmenxia Xiaoyun Vision Technology Ltd.	A joint venture affiliated business held by the Company	Sales	Providing services, selling products, commercial goods	Reference market price; Agreed on price	801	0.01%	0	No	Payment on delivery	
Jiaxin Haishi JiaAn Zhicheng Technology Ltd.	A joint venture affiliated business held by the	Sales	Providing services, selling	Reference market price; Agreed on	49	0.00%	0	No	Payment on	

	Company		products, commercial goods	price					delivery		
Total				--	136,336	--	200,400	--	--	--	--
Details on significant sales return				None							
Total amount of related transactions projected based on different categories, actual performance during the current reporting period (if any)				The amount of related party transactions with Jiaxin Haishi JiaAn Zhicheng Technology Ltd. and Sanmenxia Xiaoyun Vision Technology Ltd. has been approved by the chairman of the board according to the Company's <i>Related-Party Transaction Management System</i> .							
Reasons on significant difference between trading price and market referencing price (if applicable)				Not applicable							

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. Other significant related party transactions

Applicable Inapplicable

On December 3rd 2018, the *Resolution on the Commencement of Financial Leasing Related-Party Transactions between Controlled Subsidiaries of Innovative Business and China Electronics Technology Leasing Co. Ltd.* was considered and approved by the Company at the seventh meeting of the fourth session of the Board, pursuant to which consent was given to subsidiaries of innovative business controlled by the Company (including Hangzhou EZVIZ Network Co., Ltd., Hangzhou Hikrobot Technology Co., Ltd., Hangzhou HIK Automobile Technology Co., Ltd., Hangzhou Hikmicro Sensing Technology Co., Ltd., Wuhan HIK Storage Technology Co., Ltd. and Hangzhou Hikmed Imaging Technology Co., Ltd.) to commence financial leasing related-party transactions with China Electronics Technology Leasing Co., Ltd. (CETL) in 2019, which mainly covered financial leasing business for machinery and equipment of the Company, and the expected annual total amount would be capped at RMB 200 million (excluding tax). Hangzhou Hikmicro Sensing Technology Co., Ltd., a subsidiary of the Company engaging in innovative business, entered into a financial leasing contract with China Electronics Technology Leasing Co. Ltd. to conduct sale and lease back business with CETL on some of its self-owned equipment, the financing amount was RMB 70 million, the leasing term was 48 months, and the leasing interest rate was 3.8% per annum.

On April 19th 2019, China Electronics Technology HIK Group Co., Ltd. (CETHIK), the parent company of the Company, entered into an Entrusted Management Agreement with Hangzhou EZVIZ Network Co., Ltd., a subsidiary of the Company. Pursuant to the agreement, CETHIK entrusted EZVIZ Network to exercise de facto

operation and management rights in EZVIZ Technology to fully oversee the production, operation and management of EZVIZ Science and Technology. EZVIZ Network would not collect any fixed amount of entrusted management fees from CETHIK, but EZVIZ Network would be entitled to 100% distributable profit of EZVIZ Science and Technology under the entrusted management relationship. At the same time, EZVIZ Network would pay an amount of capital occupation costs to CETHIK according to a certain fee rate for capital occupation based on the amount of paid-up capital in EZVIZ Science and Technology (up to a maximum of RMB 20 million). Thus, EZVIZ Network became the de facto controller of EZVIZ Science and Technology.

On October 18th 2019, the 12th meeting of the 4th Board of Directors passed the *Proposal on Extension of the Financial Services Agreement with CETC Finance Ltd.* and authorized the Company to extend the *Financial Services Agreement* (the Agreement) with the associated legal person CETC Finance Ltd. (the Finance Company) (the Agreement was first signed on December 29th 2016, with validity period of three years). Both parties agreed to cooperate on deposits, settlement, comprehensive credit line and other financial services. It was agreed that the balance of the fund deposited by Hikvision and its controlled subsidiaries at the Finance Company shall not exceed 20% (inclusive) of the owners' equity reported in the company's consolidated statements of the previous year, the revolving line of credit shall not exceed the amount equivalent to RMB 3 billion (inclusive), and the fund may be used for the purposes including but not limited to loan, bill acceptance, bill discounting, letter of guarantee, letter of credit, insurance claim settlement, and finance leasing. The term of the Agreement is three years and the matter in question needs deliberation of the Board of Directors.

On October 18th 2019, the 12th meeting of the 4th Board of Directors passed the *Proposal on Investment in and Establishment of Industrial Investment Fund Partnership and the Related Transactions* and authorized the company to work with the associated legal persons CLP Electronic Information Industry Investment Fund (Tianjin) Partnership (L.P.) (CLP Fund), CETHIK Group Ltd. (CETHIK) and China Power Fund Management (Tianjin) Co., Ltd. (China Power Management) and also the non-associated legal person Hangzhou High-tech Venture Capital Co., Ltd (Hangzhou High-tech) to co-invest in and establish the Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.) (tentative name, Hikvision Intelligent Fund). Hikvision Intelligent Fund is a limited partnership, with investment of RMB 1,000,010,000. China Power Management as the fund manager and the general partners contributed RMB 10,000 and hold 0.0010% shares. Hikvision, Hangzhou High-tech, CLP Fund and

CETHIK as limited partners contributed RMB 600 million, 200 million, 100 million and 100 million respectively and hold 59.9994%, 19.9998%, 9.9999% and 9.9999% shares. The fund is the company’s own capital.

On December 9th 2019, the 13th meeting of the 4th Board of Directors passed the *Proposal on Adjusting Some of the Fund Providers of Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.)*. The Company was authorized to adjust some of the fund providers in the Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.) Establishment Plan, i.e. the limited partner CLP Fund in the original plan was changed to CETC (Tianjin) Investment Management Partnership (L.P.), but the other elements of the plan remained unchanged.

On December 9th 2019, the 13th meeting of the 4th Board of Directors passed the *Proposal on Investment in and Establishment of Hangzhou Hikfire Technology Ltd. (tentative name) and the Related Transactions* and authorized Hikvision and the associated legal persons to work with the co-investment partners to co-invest RMB 100,000,000 in establishing Hangzhou Hikfire Technology Ltd. (HikFire). Hikvision contributed RMB 60 million in cash, holding 60% of the equity of HikFire. The co-investment partners contributed RMB 40 million in cash, holding 40% of the equity of HikFire. This Company was registered at the Bureau of Industry and Commerce on December 18th 2019.

Disclosure website for provisional reports on significant related-party transactions:

Title of provisional repo/rts	Disclosure date	Disclosure website
<i>Announcement on the Commencement of Financial Leasing Related-Party Transactions between Controlled Subsidiaries of Innovative Business and China Electronics Technology Leasing Co. Ltd.</i> (No. 2018-062)	December 4 th 2018	www.cninfo.com.cn
<i>Announcement on signing the Entrusted Management Agreement and related-party transactions with the controlling shareholder</i> (Announcement No. 2019-026)	April 19 th 2019	www.cninfo.com.cn
<i>Announcement on Extension of the Financial Services Agreement with CETC Finance Ltd.</i> (Announcement No. 2019-051)	October 19 th 2019	www.cninfo.com.cn
<i>Announcement on Investment in and Establishment of Industrial Investment Fund Partnership and the Related Transactions</i> (Announcement No. 2019-052)	October 19 th 2019	www.cninfo.com.cn

Title of provisional repo/rts	Disclosure date	Disclosure website
<i>Announcement on Investment and Establishment of Innovative Business Subsidiaries and Related Transactions</i> (Announcement 2019-059)	December 10 th 2019	www.cninfo.com.cn
<i>Announcement on Adjusting Some of the Fund Providers of Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.) and the Related Transactions</i> (Announcement No. 2019-060)	December 10 th 2019	www.cninfo.com.cn

XVII. Significant contracts and their execution

1. Trusteeship, contracting and leasing

(1) Trusteeship

Applicable Inapplicable

No such case in the reporting period.

(2) Contracting

Applicable Inapplicable

No such case in the reporting period.

(3) Leasing

Applicable Inapplicable

According to the *Proposal on Carrying out Financial Leasing Related Party Transactions between the Holding Innovative Business Subsidiary and CLP Lease Ltd.*, which was passed at the 7th meeting of the 4th Board of Directors of the Company on December 3rd 2018, the Company's holding subsidiary Hangzhou HikMicro Sensing Technology Ltd. (HikMicro) and CLP Lease Ltd. (CLP Lease) signed the Financial Leasing Contract, where HIKMICRO used some of its own equipment to start leaseback business with CETC Financial Leasing Ltd.; the financing amount was RMB 70 million, term of lease 48 months and annual lease rate 3.8%. See the details in Financial Statement Note (V), 32.

Leasing projects where the profit or loss brought to the Company reaches more than 10% of the Company's total profit

Applicable Inapplicable

No such case during the reporting period.

2. Significant guarantees

√Applicable □ Inapplicable

(1) Details of guarantees

Unit: RMB'0000

Guarantees provided by the Company for 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	Due or not	Guarantee for a related party or not
Hangzhou Hikvision Science and Technology Ltd.	April 20 th 2019	787,500	January 18 th 2019	91,202.14	Joint guarantee	2019.1.18-2021.01.18	No	Yes
HIKVISION INTERNATIONAL CO., LTD.	April 20 th 2019	462,500	December 20 th 2017	29,336.41	Joint guarantee	2017.12.20-2020.12.20	No	Yes
Chongqing Hikvision Science and Technologies Ltd.	April 20 th 2019	135,000	July 5 th 2019	30,000.00	Joint guarantee	2019.07.05-2020.08.08	No	Yes
Yu Tian Hai Shi Mei Tian Electronic Technology Ltd.	April 20 th 2019	30,000	March 26 th 2019	8,000.00	Joint guarantee	2019.03.26-2034.03.26	No	Yes
Urumchi HaiShi Xin'An Electronic Technology Ltd.	April 20 th 2019	50,000	March 29 th 2019	15,162.29	Joint guarantee	2019.03.29-2028.06.20	No	Yes
Pi Shan Hai Shi Yong An Electronic Technology Ltd.	April 20 th 2019	35,000	March 26 th 2019	21,600.00	Joint guarantee	2019.03.26-2040.03.26	No	Yes
Luo Pu Hai Shi Ding Xin Electronic Science and Technology Ltd.	April 20 th 2019	30,000	March 26 th 2019	14,400.00	Joint guarantee	2019.03.26-2035.03.26	No	Yes
Mo Yu Hai Shi Electronic Technology Ltd.	April 20 th 2019	30,000	March 26 th 2019	18,560.00	Joint guarantee	2019.03.26-2035.03.26	No	Yes

Guarantees provided by the Company for 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	Due or not	Guarantee for a related party or not
Hangzhou Hikvision Electronics Ltd.	April 20 th 2019	587,500						Not happened during the reporting period
Hangzhou Hikvision System Technology Ltd	April 20 th 2019	80,000						Not happened during the reporting period
Chongqing Hikvision System Technology Ltd.	April 20 th 2019	60,000						Not happened during the reporting period
Chengdu Hikvision Digital Technology Ltd.	April 20 th 2019	50,000						Not happened during the reporting period
Hangzhou Haikang Zhicheng Investment and Development Ltd.	April 20 th 2019	10,000						Not happened during the reporting period
Wuhan Hikvision Technology Ltd.	April 20 th 2019	50,000						Not happened during the reporting period
Wuhan Hikvision Science and Technology Ltd.	April 20 th 2019	50,000						Not happened during the reporting period
Hikvision Xi'an Xueliang Construction Project Management Ltd.	April 20 th 2019	67,000						Not happened during the reporting period
Xi'an Hikvision Digital Technology Ltd.	April 20 th 2019	30,000						Not happened during the reporting period
Pyronix Limited	April 20 th 2019	10,082						Not happened during the reporting period
Total guarantee cap for subsidiaries approved during the reporting period(B1)		2,554,582.00	Total actual guarantee amount for subsidiaries during the reporting period(B2)				504,065.11	
Total approved guarantee cap for subsidiaries at the end of the reporting period(B3)		2,554,582.00	Total actual guarantee balance for subsidiaries at the end of the reporting period(B4)				228,260.84	
Total guarantee amount provided by the Company (total of the above-mentioned 3 kinds of guarantees) (During the reporting period, there was no such case as guarantee provided for external parties, or guarantees between subsidiaries, therefore, there is only item B, item A or C is nil)								
Total guarantee cap approved during the reporting period (A1+B1+C1)		2,554,582.00	Total actual guarantee amount during the reporting period (A2+B2+C2)				504,065.11	
Total approved guarantee cap at the end of reporting period (A3+B3+C3)		2,554,582.00	Total actual guarantee balance at the end of the reporting period (A4+B4+C4)				228,260.84	

Guarantees provided by the Company for 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	Due or not	Guarantee for a related party or not	
Portion of the total actual guarantee (A4+B4+C4) amount in net assets of the Company									5.02%
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)									220,260.84
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)									220,260.84

Illustration of compound method guarantee

As required by the project owner, China Electronics Technology Group Co., Ltd. (CETC) has provided a joint guarantee to responsibility and duties of projects of “Safe Chongqing, Emergency Control System Digital Construction Project”, including 41 districts/counties construction projects, signed by Chongqing Hikvision System Technology Co., Ltd. Meanwhile, the Company provides a counter guarantee to CETC’s joint responsibilities above.

(2) Illegal provision of guarantees for external parties

Applicable Inapplicable

No such case in the reporting period.

3. Entrusting others to execute any cash asset management**(1) Entrusted finances**

Applicable Inapplicable

No entrusted finance during the reporting period

(2) Entrusted loans

Applicable Inapplicable

No such case in the reporting period.

4. Other significant contracts

Applicable Inapplicable

No such case in the reporting period.

XVIII. Social responsibility**1. Fulfillment of social responsibilities**

While seeking for economic benefits and protecting shareholders' interests, Hikvision proactively fulfilled corporate social responsibilities by treating suppliers, customers and consumers in good faith, caring employees' remuneration benefits, professional development and other legal rights, and actively engaging in environment protection and affairs for public welfare, in order to make contribution to the sustainable development of society, economy and environment.

For details, please refer to the Company's *2019 Annual Social Responsibility Report* disclosed on CNINFO (www.cninfo.com.cn)

2. Fulfillment of the social responsibility of targeted poverty alleviation**(1) Plan on targeted poverty alleviation**

Hikvision is committed to sharing development with society, solving more practical problems for society

through innovation and collaboration, and always remember to fulfill social responsibilities.

(2) Annual Targeted Poverty Alleviation Overview

a member of the poverty alleviation group of China Intelligent Transportation Management Industry Alliance, Hikvision actively responds to the call of the Party and the Country for precise poverty alleviation. During the reporting period, the Company followed the China Intelligent Transportation Management Industry Alliance Poverty Alleviation Group to Cottage Village, Pu'an County, Guizhou Province to carry out poverty alleviation work. The Company and other members of the poverty alleviation group jointly donated money to the Cotton Village to repair roads and improve transportation. At the same time, the poverty alleviation team conducted in-depth exchanges with various functional departments of the Pu'an County Government through on-site investigations to discuss strategies for poverty alleviation.

(3) Effects of targeted poverty alleviation

Indicator	Unit of measurement	Quantity/development status
I.Overall situation	—	—
Including: (1) Fund	RMB	100,000
(2) The amount of goods and materials converted	RMB	
(3)Help the registered poor people out of poverty	Headcount	

(4) Future targeted poverty alleviation plan

Not available for now

3. Environmental protection

The Company is not a critical pollutant enterprises published by national environmental protection department

XIX. Other significant events

Applicable Inapplicable

XX. Significant events of the Company's subsidiaries

Applicable Inapplicable

Section VI Changes in Shares and Information about Shareholders

I. Changes in Share Capital

1. Table of changes in share capital

Unit: Share

	Before the change		Changes in the period (+, -)					After the change	
	Shares	Ratio	New Shares Issued	Bonus share	Share transferred from capital reserve	Others	Sub-total	Shares	Ratio
1. Shares subject to conditional restriction(s)	1,313,073,005	14.23%	121,195,458			-157,566,502	-36,371,044	1,276,701,961	13.66%
1)State holdings									
2)Shares held by State-owned corporate									
3) Other domestic shares	274,212,680	2.97%	120,971,358			-60,039,382	60,931,976	335,144,656	3.59%
Including: held by domestic corporates									
held by domestic natural person	274,212,680	2.97%	120,971,358			-60,039,382	60,931,976	335,144,656	3.59%
4) Foreign shares	1,038,860,325	11.26%	224,100			-97,527,120	-97,303,020	941,557,305	10.07%

Including:held by overseas corporates									
held by overseas natural person	1,038,860,325	11.26%	224,100			-97,527,120	-97,303,020	941,557,305	10.07%
2. Shares without restriction	7,914,197,468	85.77%				154,111,267	154,111,267	8,068,308,735	86.34%
1) RMB ordinary shares	7,914,197,468	85.77%				154,111,267	154,111,267	8,068,308,735	86.34%
2) Domestically listed foreign shares									
3) Foreign shares listed overseas									
4) Others									
3. Total	9,227,270,473	100.00%	121,195,458			-3,455,235	117,740,223	9,345,010,696	100.00%

Reason for the changes in share capital

√ Applicable □ Inapplicable

(1) Grants of 2018 Restricted Share Incentive Scheme

On December 20th 2018, *Resolution for Granting Restricted Shares to Planned Grantees for 2018 Restricted Shares Incentive Scheme* was approved by the 8th meeting of the fourth board. According to the *Listed Company Equity Incentive Measures* and other administration or relevant laws, regulations and departmental rules and regulated documents, as well as *2018 Restricted Shares Incentive Scheme (edited draft)* and authorizations approved by the 2018 2nd extraordinary general meeting, the Company has completed granting and registration of 2018 Restrcted Shares Incentive Sheme, with 6,095 granted personnel, and 121,195,458 granted shares which were listed on January 18th 2019. The Company's total capital share increased by 121,195,458 shares from 9,227,270,473 shares to 9,348,465,931 shares.

(2) The third time repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme:

On December 3rd 2018, *Resolution for the Third Repurchase and Cancellation of the Restricted Shares that Already Granted for 2014 Restricted Share Incentive Schemes* was approved by the 7th meeting of the fourth Board. Authorized by the first extraordinary general meeting for 2014, the board agreed to repurchase and cancel a total of 509,625 restricted shares held by a portion of grantees not fulfilling the stock incentive conditions. On June 26th 2019, repurchase and cancellation process of the restricted shares was complete. The Company's total share capital decreased by 509,625 shares from 9,348,465,931 shares to 9,347,956,306 shares.

(3) The first time repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme:

On December 26th 2018, *Resolution for the First Repurchase and Cancellation of the Restricted Shares that Already Granted for 2016 Restricted Share Incentive Schemes* was approved by the 9th meeting of the fourth Board. Authorized by the second extraordinary general meeting for 2016, the board agreed to repurchase and cancel a total of 2,945,610 restricted shares held by a portion of grantees not fulfilling the stock incentive conditions. On May 10th 2019, *Resolution for the First Repurchase and Cancellation of the Restricted Shares that Already Granted for 2016 Restricted Share Incentive Schemes* was reviewed and approved by the 2018 annual general meeting. On September 3rd 2019, repurchase and cancellation process of the restricted shares was complete. The Company's total share capital decreased by 2,945,610 shares from 9,347,956,306 shares to 9,345,010,696 shares.

Approval for changes in share capital

Applicable Inapplicable

(1) Grants of 2018 Restricted Share Incentive Scheme

On December 20th 2018, *Resolution for Granting Restricted Shares to Planned Grantees for 2018 Restricted Shares Incentive Scheme* was approved by the 8th meeting of the fourth board. Authorized by the 2018 2nd extraordinary general meeting, the board agreed to grant 126,518,281 shares to 6,341 grantees as planned in 2018 Restricted Shares Incentive Scheme, the granting date was December 20th 2018. In the payment process of capital, part of the grantees partially or completely renounce the subscription of the incentive shares due to personal reasons, resulted in an actual grantees of 6,095 personnels for the Company's 2018 restricted shares,

with 121,195,458 actual granted shares.

(2) The third time repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme:

On December 3rd 2018, *Resolution for the Third Repurchase and Cancellation of the Locked Shares that Already Granted for 2014 Restricted Share Incentive Schemes* was approved by the 7th meeting of the fourth Board. Authorized by the first extraordinary general meeting for 2014, the board of directors agreed to repurchase and cancel 509,625 restricted shares held by a portion of grantees not fulfilling the stock incentive conditions.

(3) The first time repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme:

On December 26th 2018, *Resolution for the First Repurchase and Cancellation of the Restricted Shares that Already Granted for 2016 Restricted Share Incentive Schemes* was approved by the 9th meeting of the fourth Board. Authorized by the second extraordinary general meeting for 2016, the board agreed to repurchase and cancel a total of 2,945,610 restricted shares held by a portion of grantees not fulfilling the stock incentive conditions. On May 10th 2019, *Resolution for the First Repurchase and Cancellation of the Restricted Shares that Already Granted for 2016 Restricted Share Incentive Schemes* was reviewed and approved by the 2018 annual general meeting.

Transfer for changes in share capital

Applicable Inapplicable

(1) Grants of 2018 Restricted Share Incentive Scheme

2018 granted restricted incentive shares were listed on January 18th 2019. The Company's total capital shares were increased by 121,195,458 shares from 9,227,270,473 shares to 9,348,465,931 shares.

(2) The third time repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme:

On June 26th 2019, the process of the third time repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme was complete. The Company's

total share capital decreased by 509,625 shares from 9,348,465,931 shares to 9,347,956,306 shares.

(3) The first time repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme:

On September 3rd 2019, repurchase and cancellation process of the restricted shares was complete. The Company's total share capital decreased by 2,945,610 shares from 9,347,956,306 shares to 9,345,010,696 shares.

Information about the implementation of share repurchase

Applicable Inapplicable

The implementation progress of reducing and repurchasing shares by centralized bidding

Applicable Inapplicable

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

Applicable Inapplicable

2. Changes in restricted shares

Applicable 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
Gong Hongjia	1,038,792,525	0	97,500,000	941,292,525	Executives locked shares	According to the relevant provisions of executives shares management
Hu Yangzhong	136,391,608	151,950	0	136,543,558	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	According to the relevant provisions of executives shares management
Grantees of restricted share incentive plan (consolidated)	112,422,448	121,195,458	63,562,701	166,599,970	Equity Incentive Restricted Shares + Equity incentive restricted Shares formed by the listing of granted shares under 2018 Restricted Stock Scheme	January 8 th 2019/ January 20 th 2019
Jiang Haiqing	8,352,661	2964,421	0	11,317,082	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	According to the relevant provisions of executives shares management
Wu Weiqi	8,301,742	137,700	0	8,439,442	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Jia Yonghua	4,166,433	1,469,111	0	5,635,544	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Li Pan	4,165,551	1,468,817	0	5,634,368	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Huang Fanghong	145,125	74,250	0	219,375	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Fu Baijun	135,450	136,650	0	272,100	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Jiang Yufeng	60,375	109,950	0	170,325	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	

Name of shareholder	Opening restricted shares	Increased in current period	Vested in current period	Closing restricted shares	Note for restricted shares	Date of unlocking
Xu Lirong	59,700	101,850	0	161,550	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
He Hongli	52,575	113,250	0	165,825	Executives locked shares+ partial of the unlocked restricted shares turning into executives locked shares	
Wang Qiuchao	15,000	11,250	0	26,250	Executives locked shares	
Qu Liyang	11,812	0	0	11,812	Executives locked shares	
Pu Shiliang	0	130,785	0	130,785	Partial of the unlocked restricted shares turning into executives locked shares	
Jin Duo	0	16,425	0	16,425	Partial of the unlocked restricted shares turning into executives locked shares	
Cai Changyang	0	16,425	0	16,425	Partial of the unlocked restricted shares turning into executives locked shares	
Bi Huijuan	0	22,500	0	22,500	Partial of the unlocked restricted shares turning into executives locked shares	
Jin Yan	0	26,100	0	26,100	Partial of the unlocked restricted shares turning into executives locked shares	
Total	1,313,073,005	128,146,892	161,062,701	1,276,701,961	--	

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 third row.
2. The difference of 509,625 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 509,625 shares on June 26th 2019. On September 3rd 2019, the Company repurchased and cancelled 2,945,610 shares.
3. The three executives Jiang Haiqing, Jia Yonghua and Li Pan have left office on October 25th 2019. According to relevant regulations, the shares held by them still need to be kept locked.

II. Issuance and listing of securities

1. Securities (exclude preferred share) issued during the reporting period

Applicable Inapplicable

Stock and the name of its derivatives	Issuance date	Issuance price (or interest rate)	Issuance amount	Date of listing	Amount that approved for listings	Date of transaction termination
Restricted shares	January 18 th 2019	16.98 RMB/share	121,195,458 shares	January 18 th 2019	121,195,458 shares	--

Issuance of securities (excluding preferred shares) during the current reporting period:

On December 20th 2018, *Resolution for Granting Restricted Shares to Planned Grantees for 2018 Restricted Shares Incentive Scheme* was approved by the 8th meeting of the fourth board. According to the *Listed Company Equity Incentive Measures* and other administration or relevant laws, regulations and departmental rules and regulated documents, as well as *2018 Restricted Shares Incentive Scheme (edited draft)* and authorizations approved by the 2018 2nd extraordinary general meeting, the Company has completed granting and registration of 2018 Restricted Shares Incentive Scheme, with 6,095 granted personnel, and a total of 121,195,458 granted shares which were listed on January 18th 2019.

For details, please refer to *Indicative Notice of Completion of Granting of 2018 Restricted Share Incentive Schemes* (No. 2019-004) issued on January 17th 2019.

2. Explanation on changes in share capital & the structure of shareholders, the structure of assets and liabilities

Applicable Inapplicable

During the reporting period, the Company completed the grants of 2018 Restricted Share Incentive Scheme, the Company's total capital shares were increased by

121,195,458 shares from 9,227,270,473 shares to 9,348,465,931 shares; the Company completed the third repurchasing and cancelling shares for 2014 Restricted Share Incentive Scheme, the total capital shares were decreased by 509,625 shares from 9,348,465,931 shares to 9,347,956,306 shares; the Company completed the first repurchasing and cancelling shares for 2016 Restricted Share Incentive Scheme, the total capital shares were decreased by 2,945,610 shares from 9,347,956,306 shares to 9,345,010,696 shares. The structure of 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

Applicable 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	237,895	The total number of common shareholders at the end of the previous month before the disclosure of the annual report	312,557

Particulars about shares held by shareholders with a shareholding percentage over 5% or the Top 10 of them								
Name of shareholder	Nature of shareholder	Shareholding percentage (%)	Total shares held at the end of the reporting period	Increase/decrease during the reporting period	The number of common shares held with trading restrictions	The number of shares held without trading restrictions	Pledged or frozen	
							Status	Amount
China Electronics Technology HIK Group Co., Ltd.	State-owned corporation	38.88%	3,632,897,256	-20,777,700 ²²	-	3,632,897,256	Pledged	50,000,000
Gong Hongjia	Overseas individual	13.43%	1,255,056,700	-	941,292,525	313,764,175	Pledged	545,030,000
Hong Kong Securities Clearing Company Ltd.(HKSCC)	Overseas corporation	6.30%	588,594,190	-224,298,307	-	588,594,190		
Xinjiang Weixun Investment Management Limited Partnership	Domestic non-state-owned corporation	4.82%	450,795,176	-	-	450,795,176	Pledged	162,227,000
Xinjiang Pukang Investment Limited Partnership	Domestic non-state-owned corporation	1.95%	182,510,174	-	-	182,510,174	Pledged	48,000,000
Hu Yangzhong	Domestic Individual	1.95%	182,186,477	-	136,639,858	45,546,619	Pledged	46,400,000
The 52nd Research Institute at China Electronics Technology Group Corporation	State-owned corporation	1.93%	180,775,044	-	-	180,775,044		
CITIC Securities Company Limited	Domestic non-state-owned corporation	1.03%	96,598,063	15,084,403	-	96,598,063		

²² It is transferred by state-owned shareholders, free of charge. For details, please refer to the announcement of *Completion of Free Transfer of Partial State-owned Equity* disclosed on www.cninfo.com.cn (No.2019-057).

Central Huijin Investment Ltd.	State-owned corporation	0.70%	65,818,800	-	-	65,818,800		
Guo Minfang	Domestic Individual	0.42%	39,474,700	2,712,500	-	39,474,700		
Explanation on associated relationship or concerted actions among the above-mentioned shareholders:		<p>China Electronics Technology HIK Group Co., Ltd. and The 52nd Research Institute at China Electronics Technology Group Co., Ltd. are all subject to control of China Electronics Technology Group Co. Ltd.. Ms. Chen Chunmei, limited partner of Xinjiang Pukang Investment Limited Partnership, is the spouse of Mr. Gong Hongjia, foreign individual shareholder of the Company. Hu Yangzhong, domestic individual, is holding shares in both Xinjiang Weixun Investment Management Limited Partnership and Xinjiang Pukang Investment Limited Partnership.</p> <p>Except for these, the Company does not know whether the other shareholders are related parties or whether they are acting-in-concert parties in accordance with the <i>Measures for Management of the Disclosure of the Shareholding Changes of Shareholders of the Listed Company</i>.</p>						
Particulars about shares held by the Top 10 common shareholders holding shares that are not subject to trading restriction(s)								
Name of shareholder	Number of common shares without trading restrictions held at the period-end	Type of shares						
		Type	Number					
China Electronics Technology HIK Group Co., Ltd.	3,632,897,256	RMB ordinary shares	3,632,897,256					
Hong Kong Securities Clearing Company Ltd.(HKSCC)	588,594,190	RMB ordinary shares	588,594,190					
Xinjiang Weixun Investment Management Limited Partnership	450,795,176	RMB ordinary shares	450,795,176					
Gong Hongjia	313,764,175	RMB ordinary shares	313,764,175					
Xinjiang Pukang Investment Limited Partnership	182,510,174	RMB ordinary shares	182,510,174					
The 52nd Research Institute at China Electronics Technology Group Co. Ltd.	180,775,044	RMB ordinary shares	180,775,044					
CITIC Securities Company Limited	96,598,063	RMB ordinary shares	96,598,063					
Central Huijin Investment Ltd.	65,818,800	RMB ordinary shares	65,818,800					

Hu Yangzhong	45,546,619	RMB ordinary shares	45,546,619
Guo Minfang	39,474,700	RMB ordinary shares	39,474,700
Explanation on associated relationship and concerted actions among top ten common shareholders without trading restrictions, and among top ten common shareholders and top ten common shareholders without trading restrictions	<p>China Electronics Technology HIK Group Co., Ltd. and The 52nd Research Institute at China Electronics Technology Group Co., Ltd. are all subject to control of China Electronics Technology Group Co. Ltd. Ms. Chen Chunmei, limited partner of Xinjiang Pukang Investment Limited Partnership, is the spouse of Mr. Gong Hongjia, foreign individual shareholder of the Company. Hu Yangzhong, domestic individual, is holding shares in both Xinjiang Weixun Investment Management Limited Partnership and Xinjiang Pukang Investment Limited Partnership.</p> <p>Except for these, the Company does not know whether the other shareholders are related parties or whether they are acting-in-concert parties in accordance with the <i>Measures for Management of the Disclosure of the Shareholding Changes of Shareholders of the Listed Company</i>.</p>		

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?

Applicable Inapplicable

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 th , 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

Applicable 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.	Xiong Qunli	February 25 th 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);

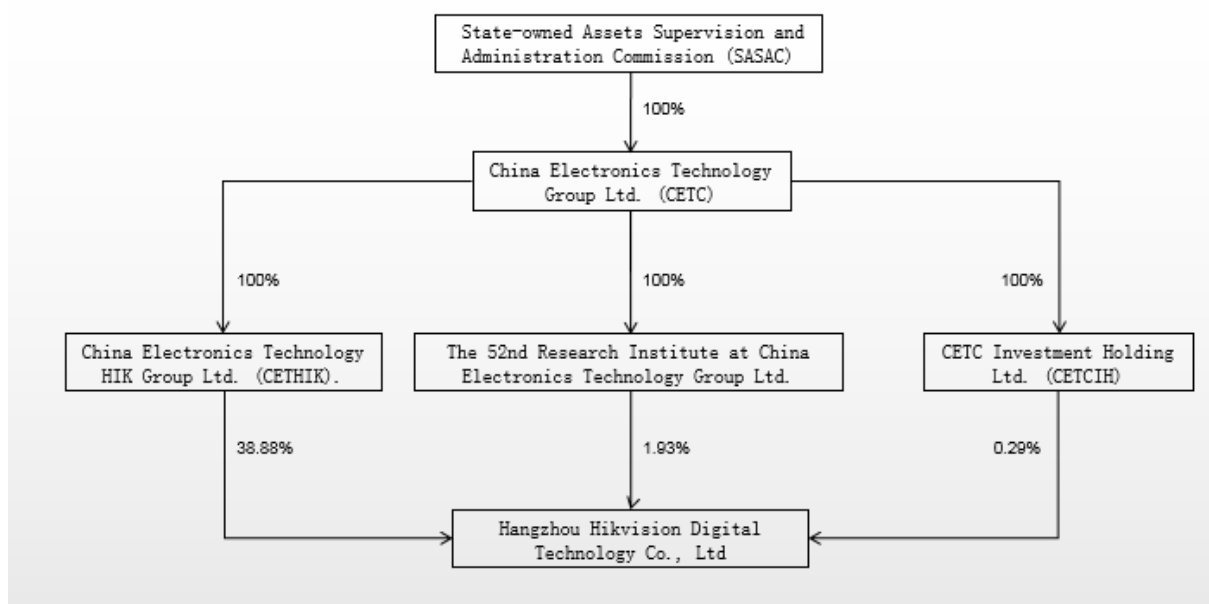
Name of the actual controller	Legal Representative /People in charge	Date of establishment	Organization code	Business scope
				operating feed processing and "three comes one supplement" business; operating counter trade and entrepot trade; Industrial investment; asset management; engaged in e-commerce information services; organization of enterprises in the industry to go abroad, participate in exhibitions.
Shares held by the actual controlling shareholder in other listed companies through controlling or holding during the reporting period		China Electronics Technology Group Ltd is the actual controller of nine domestic listed companies including An'hui Sun Create Electronic Co., Ltd, Shanghai East China Computer Co., Ltd, Chengdu Westone Information Industry Co., Ltd., GCI Science & Technology Co., Ltd., Tai'ji Computer Corporation Limited, GLARUN Technology Co., Ltd. , Phoenix Optics Co., Ltd., Chengdu Tianao Electronic Co., Ltd. and CETC Energy Co., Ltd., and etc.		

Change of the actual controller during the reporting period

Applicable 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 via trust or other ways of asset management

Applicable Inapplicable

4. Particulars about other corporate shareholders with shareholding proportion over 10%

Applicable Inapplicable

5. Particulars on shareholding decrease restrictions for the controlling shareholders, actual controller, restructurer or other committing parties

Applicable Inapplicable

Section VII Information of Preferred Shares

Applicable Inapplicable

There is no preferred share existed for the Company during the current reporting period.

Section VIII Information about Convertible Corporate Bonds

Applicable Inapplicable

There is no convertible corporate bond existed for the Company during the current reporting period.

Section IX Information about Directors, Supervisors, Senior Management

I. Shareholding changes of directors, supervisors, senior management personnel

√Applicable □ Inapplicable

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)
Chen Zongnian	Chairman	Incumbent	Male	55	June 19 th 2008		0	0	0	0
Gong Hongjia	Vice Chairman	Incumbent	Male	55	June 19 th 2008		1,255,056,700	0	0	1,255,056,700
Qu Liyang	Director	Incumbent	Male	56	March 7 th 2018		15,750	0	0	15,750
Hu Yangzhong	Director, General Manager (CEO)	Incumbent	Male	55	December 28 th 2001		182,186,477	0	0	182,186,477
Wu Weiqi	Director, Standing Deputy General Manager	Incumbent	Male	56	March 1 st 2003		11,371,389	0	0	11,371,389
Cheng Tianzong	Independent Director	Incumbent	Male	68	March 6 th 2015		0	0	0	0
Lu Jianzhong	Independent Director	Incumbent	Male	66	March 6 th 2015		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)
Wang Zhidong	Independent Director	Incumbent	Male	53	March 6 th 2015		0	0	0	0
Hong Tianfeng	Independent Director	Incumbent	Male	54	December 22 nd 2016		0	0	0	0
Cheng Huifang	Supervisor Chairman	Incumbent	Female	67	March 6 th 2015		0	0	0	0
Wang Qiuchao	Supervisor	Incumbent	Male	69	March 6 th 2015		20,000	15,000	0	35,000
Xu Lirong	Supervisor; person in charge of internal audit	Incumbent	Male	57	March 21 st 2018		303,000	0	0	303,000
Jiang Haiqing	Senior Deputy General Manager	Incumbent	Male	51	March 1 st 2003	October 25 th 2019	11,390,882	0	0	11,390,882
Jia Yonghua	Senior Deputy General Manager	Incumbent	Male	43	July 22 nd 2015	October 25 th 2019	5,701,244	0	0	5,701,244
Li Pan	Senior Deputy General Manager	Incumbent	Male	42	July 22 nd 2015	October 25 th 2019	5,700,068	0	0	5,700,068
He Hongli	Senior Deputy General Manager	Incumbent	Female	47	December 18 th 2005		331,500	0	0	331,500
Fu Baijun	Senior Deputy General Manager	Incumbent	Male	48	January 20 th 2009		390,000	105,000	0	495,000

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)
Cai Changyang	Senior Deputy General Manager	Incumbent	Male	49	April 8 th 2016		109,500	0	0	109,500
Xu Ximing	Senior Deputy General Manager	Incumbent	Male	47	October 11 th 2016		0	197,000	0	197,000
Bi Huijuan	Senior Deputy General Manager	Incumbent	Female	49	October 11 th 2016		150,000	123,000	0	273,000
Jiang Yufeng	Senior Deputy General Manager	Incumbent	Male	49	December 18 th 2005		325,500	0	0	325,500
Pu Shiliang	Senior Deputy General Manager	Incumbent	Male	43	March 21 st 2018		293,900	100,000	0	393,900
Jin Duo	Senior Deputy General Manager	Incumbent	Male	55	March 10 th 2015		109,500	0	0	109,500
Jin Yan	Senior Deputy General Manager, Person in charge of finance	Incumbent	Female	41	July 22 nd 2015		174,000	110,000	0	284,000
Huang Fanghong	Senior Deputy General Manager, Board Secretary	Incumbent	Female	38	April 8 th 2016		292,500	110,000	0	402,500
Chen Junke	Senior Deputy General Manager	Incumbent	Male	49	March 21 st 2018		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)
Total	--	--					1,473,921,910	760,000	0	1,474,681,910

Note:

- (1) Number 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) During the reporting period, the number shares held at the beginning of the period, shares increased during the period, shares decreased during the period for newly appointed directors, supervisors, and senior management personnel is the data after their appointment.

II. Changes of directors, supervisors and senior management personnel

Applicable Inapplicable

Name	Position	Type	Date	Reasons
Jiang Haiqing	Senior Deputy General Manager	Leave the post	October 25 th 2019	Adjustments on the Company's business management
Jia Yonghua	Senior Deputy General Manager	Leave the post	October 25 th 2019	Adjustments on the Company's business management
Li Pan	Senior Deputy General Manager	Leave the post	October 25 th 2019	Adjustments on the Company's business management

III. 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 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 52nd Research Institute at China Electronics Technology Group Corporation (52nd 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. 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 and vice chairman of the Company. Gong currently serves as a vice 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 52nd Research Institute, and chairman of the board of supervisors of CETHIK. He is currently the deputy director of the Reform and Development Committee of CETC's Strategy Committee, and serves as a director of the Company.

Mr. Hu Yangzhong (胡扬忠): Born in 1965, master degree of engineering, senior research engineer. He served as an engineer of the 52nd 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 January 2002. 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 52nd 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. 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 Hon Hai Corporation (鸿海集团) from July 2007 to 2012, and the chief executive officer of FIH Mobile Limited, a subsidiary of Hon Hai Corporation (鸿海集团), 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 currently serves as an independent director 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. Lu currently serves as a chartered accountant of Dahua Certificated Public Accountants LLP (大华会计师事务所), 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 an independent director of Hikvision.

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 (北京新天地电子信息技术研究) 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 currently serves as chairman and chief executive officer of Beijing Yilianyisheng Techonology Co. Ltd.(北京易连忆生科技有限公司), and an independent director of the Company.

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 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 an independent director of the Company.

2. Supervisors

Ms. Cheng Huifang (程惠芳): Born in 1953, PhD in international finance. She was a member of the 8th and 9th Zhejiang CPPCC (浙江省政协). 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), and a supervisor of the Company.

Mr. Wang Qiuchao (王秋潮): Born in 1951, master degree in law. Wang served as director of Zhejiang Tiance Law Firm (浙江天册律师事务所), chairman of the Zhejiang Lawyers Association (浙江省律师协会) and vice-president of the Zhejiang Law Society (浙江省法学会). Wang currently serves as honorary partner of Zhejiang Tiance 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 (深圳国际仲裁中心), 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 and deputy general manager of the Company. He is currently the employee representative supervisor and the person in charge of internal audit of the Company.

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.

Mr. Jiang Haiqing (蒋海清): Born in 1969, bachelor degree in engineering, a senior engineer. He joined the Company in November 2001 and served as an assistant of the general manager, a deputy general manager, and a senior deputy general manager of the Company. (On October 25th 2019, Jiang resigned from the Company's senior deputy general manager due to the adjustments of the Company's business management)

Mr. Jia Yonghua (贾永华): born in 1977, bachelor degree in engineering, a senior engineer. He joined Hikvision in January 2002 and held various positions at the Company, including director of Image Process and Analysis Division under the R&D Center, director of Strategy and Marketing Division, a deputy general manager of the Supply Chain Management Center, a deputy general manager of the Company. Mr. Jia currently serves as, and a senior deputy general manager of the Company. (On October 25th 2019, Jia resigned from the Company's senior deputy general manager due to the adjustments of the Company's business management)

Mr. Li Pan (礼攀): born in 1978, master degree in engineering, and is a senior engineer. He served as an engineer of the 52nd Research Institute from August 2000 to December 2001. He joined Hikvision in December 2001 and held various positions at the Company, including engineer, product manager, R&D manager, the general manager of the Transportation Division, the general manager of Hangzhou Branch, a deputy general manager of the Company, and a deputy general manager of the Company. (On October 25th 2019, Li resigned from the Company's senior deputy general manager due to the adjustments of the Company's business management)

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. 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 52nd Research Institute and a deputy general manager of Zhejiang Haikang Information 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 finance and accounting department, and a deputy general manager. Mr. Fu 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 15th 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. 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, and deputy general manager. Mr Jiang 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 52nd 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, master 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 52nd 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.

Position held in shareholders' entities

√Applicable □ 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		N
Xu Lirong	China Electronics Technology HIK Group Ltd.	Supervisor, Member of Commission for Discipline Inspection	December 2013		N

Positions held in other entities

√Applicable □ 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>Intelligent IoT Technology</i> Magazine	Legal Representative	February 2004		N
Cheng Zongnian	CETC Finance Ltd.	Director	December 2012		N
Cheng Zongnian	Phoenix Optics Co., Ltd.	Chairman	December 2019		N
Cheng Zongnian	Zhejiang Wuzhen Street Technology Ltd.	Chairman	May 2016	February 2019	N
Gong Hongjia	Furong Technology Ltd.	Director	October 1999		N
Gong Hongjia	Hangzhou FunVio Ltd.	Chairman	February 2004		N
Gong Hongjia	Funian Technology Ltd.	Chairman of the Board	October 2007		N
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		N
Gong Hongjia	Shanghai Pukun Information Technology Ltd.	Director	September 2014		N

Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
Gong Hongjia	FuCe Holdings Ltd.	Director	October 2014		N
Gong Hongjia	Chuangjia Venture Capital Investment Ltd	Director	October 2014		N
Gong Hongjia	Shenzhen Jiadao Valley Investment Management Ltd.	Legal Representative	October 2014		Y
Gong Hongjia	Shenzhen Jiadao Gongcheng Equity Investment Fund (Limited Partnership)	Executive Partner & delegate	November 2014		N
Gong Hongjia	JiuBaYi Health Technology Ltd.	Director	November 2014		N
Gong Hongjia	Beijing JiaBoWen Biotechnology Ltd.	Director	March 2015		N
Gong Hongjia	Wuhan YouXin Technology Co., Ltd.	Director	January 2016		N
Gong Hongjia	QingKe Management Consulting Group Ltd.	Director	February 2017		N
Gong Hongjia	Shenzhen JiadaoFangzhi Education Industry Investment Enterprise (Limited Partnership)	Executive Partner & delegate	June 2017		N
Gong Hongjia	Shenzhen Jiadao Successful Investment Enterprise (Limited Partnership)	Executive Partner & delegate	August 2017		N
Gong Hongjia	Shanghai AoYuan Medical Supplies Ltd.	Chairman	September 2017		N
Gong Hongjia	Sichuan JiaDao BoWen Ecological Technology Ltd.	Chairman	December 2017		N
Gong Hongjia	Beijing JiaDaoGu Management Consulting Ltd.	Supervisor	April 2018		N
Gong Hongjia	Core Microelectronics (Shanghai) Co., Ltd.	Director	October 2018	November 2019	N
Gong Hongjia	Sichuan Five-Plus-One Ecological Agriculture	Chairman	November 2018		N

Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	Technology Service Ltd.				
Gong Hongjia	Sichuan JiaBoWen Biological Technology Ltd.	Chairman	November 2018		N
Gong Hongjia	Shenzhen Zhongke Science and Technology Achievements Transformation Equity Investment Fund Management Ltd.	Chairman	December 2018	December 2019	N
Gong Hongjia	Shenzhen Zhongke Science and Technology Achievements Transformation Equity Investment Fund Management Ltd.	Director	December 2019		N
Gong Hongjia	ZhongYuan Concord Cell Genetic Engineering Co., Ltd.	Legal Representative Chairman	December 2018		N
Gong Hongjia	Shenzhen Guotai Data Technology Ltd.	Chairman	April 2019		N
Gong Hongjia	Tianjin Deyuan Investment Development Ltd.	Director	July 2019		N
Gong Hongjia	Yong Tai Hong Kan Holding Group Ltd.	Vice Chairman	October 2019		N
Qu Liyang	Zhejiang Haikang Technology Ltd.	Director	April 2009	December 2019	N
Qu Liyang	Zhejiang YiBo High Technology Ltd.	Director	August 2009	September 2019	N
Wu Weiqi	Xinjiang Pukang Investment Management Limited Partnership	Executive Partner	May 2011		N
Wu Weiqi	Wuhu Sensor Tech Intelligent Technology Ltd.	Director	January 2017		N
Wu Weiqi	Maxio Technology (Hangzhou) Ltd.	Director	May 2017		N

Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
Wang Zhidong	Beijing YiLianSheng Science and Technology Ltd.	Chairman and CEO	October 2013		Y
Cheng Tianzong	Hechun Technology Co., Ltd.	Director	June 2014		Y
Cheng Tianzong	Zuozhen Co., Ltd.	Director	January 2015		Y
Cheng Tianzong	Wenhui Technology Co., Ltd.	Independent Director	June 2016		Y
Lu Jianzhong	Shanghai Jiao Tong University- Antai College of Management,	Mentor for enterprises	December 2013		N
Lu Jianzhong	Dahua Certificated Public Accountants LLP	Chartered Accountant	January 2016		N
Lu Jianzhong	ChangShu FengFan Electric Power Equipment Co., Ltd.	Independent Director	September 2015		Y
Lu Jianzhong	Ningbo Lehui International Construction Equipment Co., Ltd.	Independent Director	March 2016		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
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	February 2012		N
Hong Tianfeng	Shanghai Fangguang Venture Investment Partnership Enterprise (Limited Partnership)	Managing Partner	August 2012		N

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 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
Hong Tianfeng	Suzhou Fangguang Venture Investment Phase 2 Partnership Enterprise (Limited Partnership)	Managing Partner	July 2016		N
Hong Tianfeng	Shenzhen Pengfenghui Venture Investment Ltd.	Executive Director & General Manager	June 2014		N
Hong Tianfeng	Shenzhen Fangguang Enterprise Management Consulting Ltd.	Executive Director & General Manager	May 2016		N
Hong Tianfeng	Sannuo Biology Sensor Co., Ltd.	Director	September 2013		Y
Hong Tianfeng	Shenzhen YunZhiXun Network Technology Ltd.	Director	May 2014		N
Hong Tianfeng	Jiangsu JiTaiKe Electrics Co., Ltd.	Director	July 2015		N
Hong Tianfeng	Zhongwei Dahe Cloud Connection Network Technology Ltd.	Director	November 2016		N
Hong Tianfeng	Shenzhen DongFengMingTu Enterprise Management Ltd.	Supervisor	August 2016		N
Hong Tianfeng	CETC Huayun Information Technology Ltd.	Director	March 2017		N

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	Beijing ZhiZhangYi Sicence and Technology Ltd.	Director	December 2016		N
Hong Tianfeng	Guangzhou Smart Software Ltd.	Director	March 2018		N
Hong Tianfeng	Shanghai Daxian Intelligent Science and Technology Ltd.	Director	June 2018		N
Hong Tianfeng	Shenzhen Chip and Semiconductor Technology Ltd.	Director	February 2018		N
Hong Tianfeng	Shenzhen YingFeiYuan Technology Ltd.	Director	October 2017		N
Hong Tianfeng	Shenzhen BiYi Micro-electronics Ltd.	Director	September 2019		N
Cheng Huifang	Zhejiang FuRun Co., Ltd	Independent Director	April 2014		Y
Cheng Huifang	Hangzhou Oxygenerator Group Co., Ltd.	Independent Director	January 2016		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		Y
Wang Qiuchao	Zhejiang T&C Law Firm	Partner	August 1993		Y
Wang Qiuchao	Zhejiang JingSheng Mechanical & Electrical Co.,ltd	Independent Director	April 2015	December 2019	Y
Wang Qiuchao	Zhejiang KaiShan Compressor Co., Ltd.	Independent Director	May 2015		Y
Wang Qiuchao	Hanjia Design Group Co., Ltd.	Independent Director	July 2015	March 2019	Y
Jia Yonghua	Hangzhou Confirmware Technology Co., Ltd.	Director	November 2016		N
Xu Ximing	Shenzhen Wangyu Security Service Science	Director	November 2019		N

Name	Name of other Entity	Position in other entity	Commencement of the term	Termination of the term	Compensation and allowance from the other entities
	and Technology Ltd.				
Fu Baijun	Shenzhen Hikvision City Service and Operation Ltd.	Director	Demceber 2019		N
Description of the status of employment in other units	Jia Yonghua resigned from his position as a senior deputy general manager of the company on October 25 th 2019				

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.

Applicable Inapplicable

IV. 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

Name	Title	Gender	Age	Tenure status	Total remuneration from the Company (RMB'0,000)	Remuneration from related parties (Y/N)
Chen Zongnian	Chairman	M	55	Incumbent	0	Y
Gong Hongjia	Vice Chairman	M	55	Incumbent	0	Y
Qu Liyang	Director	M	56	Incumbent	0	Y
Hu Yangzhong	Director, General Manager	M	55	Incumbent	308.90	N
Wu Weiqi	Director, Standing Deputy General Manager	M	56	Incumbent	293.88	N
Cheng Tianzong	Independent Director	M	68	Incumbent	30.00	N
Lu Jianzhong	Independent Director	M	66	Incumbent	30.00	N
Wang Zhidong	Independent Director	M	53	Incumbent	30.00	N

Name	Title	Gender	Age	Tenure status	Total remuneration from the Company (RMB'0,000)	Remuneration from related parties (Y/N)
Hong Tianfeng	Independent Director	M	54	Incumbent	30.00	N
Cheng Huifang	Supervisor Chairman	F	67	Incumbent	20.00	N
Wang Qiuchao	External Supervisor	M	69	Incumbent	20.00	N
Xu Lirong	Employee Supervisor, Person in charge of internal audit	M	57	Incumbent	158.88	N
He Hongli	Senior Deputy General Manager	F	47	Incumbent	278.90	N
Fu Baijun	Senior Deputy General Manager	F	48	Incumbent	240.90	N
Cai Changyang	Senior Deputy General Manager	M	49	Incumbent	242.29	N
Xu Ximing	Senior Deputy General Manager	M	47	Incumbent	418.67	N
Bi Huijuan	Senior Deputy General Manager	F	49	Incumbent	401.29	N
Jiang Yufeng	Senior Deputy General Manager	M	49	Incumbent	240.88	N
Pu Shiliang	Senior Deputy General Manager	M	43	Incumbent	278.90	N
Jin duo	Senior Deputy General Manager	M	55	Incumbent	248.90	N
Chen Junke	Senior Deputy General Manager	M	49	Incumbent	238.88	N
Jin Yan	Senior Deputy General Manager, person in charge of finance and accounting	F	41	Incumbent	248.90	N
Huang Fanghong	Senior Deputy General Manager Board Secretary Internal audit director	F	38	Incumbent	248.90	N
Jiang Haiqing	Senior Deputy General Manager	M	51	Left the post	207.41	N
Jia Yonghua	Senior Deputy General Manager	M	43	Left the post	199.07	N
Li Pan	Senior Deputy General Manager	M	42	Left the post	192.40	N

Name	Title	Gender	Age	Tenure status	Total remuneration from the Company (RMB'0,000)	Remuneration from related parties (Y/N)
Total	--	--	--	--	4,607.95	--

Note: The salary of the new appointed and adjusted directors, supervisors and executive management in the reporting period is the salary during the period in which they held the position.

Share incentives for directors, supervisors and senior executives in the Reporting Period

√ 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, General Manager	248,250	151,950			96,300
Wu Weiqi	Director, Standing Deputy General Manager	226,800	137,700			89,100
Jiang Haiqing	Senior Deputy General Manager (resigned)	190,500	116,700			73,800
He Hongli	Senior Deputy General Manager	196,050	113,250			82,800
Fu Baijun	Senior Deputy General Manager	254,550	136,650	105,000	16.98	222,900
Xu Lirong	Supervisor, person in charge of internal audit	167,550	101,850			65,700
Jiang Yufen	Senior Deputy General Manager	183,750	109,950			73,800
Jin Duo	Senior Deputy General Manager	109,500	43,800			65,700
Jin Yan	Senior Deputy General Manager, person in charge of finance	174,000	69,600	110,000	16.98	214,400
Jia Yonghua	Senior Deputy General Manager (resigned)	109,500	43,800			65,700
Li Pan	Senior Deputy General Manager (resigned)	109,500	43,800			65,700
Cai Changyang	Senior Deputy General Manager	109,500	43,800			65,700
Bi Huijuan	Senior Deputy General Manager	150,000	60,000	123,000	16.98	213,000

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
Pu Shiliang	Senior Deputy General Manager	243,900	154,260	100,000	16.98	189,640
Huang Fanghong	Senior Deputy General Manager, Secretary of the board	74,250	74,250	110,000	16.98	110,000
Xu Ximing	Senior Deputy General Manager	0	0	197,000	16.98	197,000
Chen Junke	Senior Deputy General Manager	0	0			0
Zheng Yibo	Deputy General Manager (resigned)	60,750	60,750			0
Cai Dingguo	Senior Deputy General Manager (resigned)	170,250	104,550			65,700
Zhou Zhiping	Deputy General Manager (resigned)	167,550	101,850			65,700
Total	--	2,946,150	1,668,510	745,000		2,022,640

Note:

- (1) This personnel listed above are executives who were included in 2014 restricted shares incentive plan, 2016 restricted shares incentive plan, and 2018 restricted shares incentive plan, and current executives.
- (2) Jiang Haiqing, Jia Yonghua, and Li Pan resigned from their positions on October 25th 2019.
- (3) The granting of the 2018 restricted shares incentive plan was completed during the reporting period, the grant day was December 20th 2018, and the listing day was January 18th 2019.

V. Staff in the Company

1. Statistics of employees, professional structure of the staff, and educational background

Number of incumbent employees in the parent Company	18,641
Number of incumbent employees in major subsidiaries	21,762
Number of incumbent employees	40,403
Number of employees receiving salaries in current period	40,403
Number of retired employees requiring the parent Company and its subsidiaries to bear costs	0
Professional structure	
Tier	Number of employees

Managerial personnel	580
Production staff	11,176
Sales staff	8,129
Engineers	19,065
Financial staff	310
Administrative Staff	1,143
Total	40,403
Educational background	
Education background	Number of employees
Master and/or doctor/or above	6,957
Bachelor	21,331
Junior College (professional training)	2,379
Other	9,736
Total	40,403

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 and has planned and implemented a set of training programs and courses.

In 2019, the Company continued to optimize the training system, with priority placed on creating online learning platform, optimizing courses system and cultivating internal trainers. In order to better accumulate and reproduce the experiences of the organization and provide the employees with premium training courses of various fields, the Company has introduced detailed arrangements for systematic management in 5 categories and implemented certification and level-by-level management of the courses from the aspects of course quality and reproducibility, and etc. The company has enacted the standard for Hikvision's internal trainers' growth,

development and capabilities, clarified the capability requirements and enabling courses for the internal trainers in terms of "demand analysis, course design, course development, lecturing and course evaluation", and completed the SOP process for internal trainers certification. The company provides standardized certification procedure covering application, qualification review, selection, certification and employment and will further improve certification efficiency by implementing online management.

The Human Resources Department interacts with the front-line business personnel and assists the business experts in gleaning in-organization experiences to design and implement large-scale training-practice programs. We are striving to better facilitate ability enhancement of the employees in critical positions during business transformation and thoroughly implement the concept of "learning in practice".

In 2020, the Company will continue working on the goal of business development and talent development and continue optimizing the systems and resources, to facilitate strategic transformation and prepare the talent pool and enhance their abilities for the critical activities during business development.

4. Labor outsourcing

Applicable Inapplicable

Section X Corporate Governance

I. Basic situation of corporate governance

During the reporting period, the Company strictly abided by the *Company Law*, *Securities Law*, *Code of Corporate Governance for Listed Companies in China*, *Stock Listing Rules of the Shenzhen Stock Exchange*, *Guidelines of the Shenzhen Stock Exchange for the Standard Operation of Listed Companies* and other applicable laws and regulations and also the regulator authority's regulations and norms, and all employees fulfilled their responsibilities in standard operation based on the actual conditions of the Company and through the corporate governance structure comprised of general meeting of stockholders, board of directors, board of supervisors and senior executives. We optimized the internal control system and comprehensively improving management efficiency. We improved investor relationship management and fulfilled information disclosure obligations. Through systemized and normalized efforts, we further standardized the Company's operations and continued to improve corporate governance, to ensure healthy and sustainable development.

During the reporting period, the corporate governance was improved in the following aspects:

1. Continued improvement of internal management: Based on the current business development, the Company has optimized the internal management systems by modifying the *Performance Management System* and implementing *Excellent Performance Management Standard*, to support refinement and implementation of the Company's strategic goals and enhance individual and organizational performance. The Company has modified the *Code of Business Conduct of Employees* and publicized the *Global Anti-bribery and Anti-corruption Manual* and *Code of Anti-monopoly Compliance*, to intensify standardizing employees' business conduct and create an impartial and orderly internal/external operation environment. We have modified the *Job Qualification System* and *Internal Recommendation Management Standard*, to improve the position system and further help building the talent workforce. We have modified the *Fund Payment and Settlement System* and *Foreign Exchange Hedging System*, to improve fund efficiency and effectively control costs and risks. We have publicized the *External Investments Management Measures* and *Post-investment Management Measures*, to normalize investment management and control investment risks. In order to better support sustainability of the corporate business globally, we have further integrated our resources and established the Legal and Compliance Department, to continuously optimize the compliance system.

2. Further implementation of process management and informatized management. During the reporting period, the Company publicized the criteria for assessing sophistication degree of processes and streamlined the process structure and organizational configuration, to create high-efficiency process platforms and enable structured management of business processes. We established a safe and highly efficient computer information management system and an information-based customer-centered end-to-end business process governance system, to enhance operation and management competency, boost business innovation and support operational excellence.

3. Improvement of the social responsibility management system. We established and improved the social responsibility management system in accordance with SA8000 international standard, publicized the *Social Responsibility Management Manual* and enacted the social responsibility policy for the purpose of "building an eco-friendly, safe, harmonious and responsible corporate image". We conducted a multitude of social responsibility management activities to fulfill our social responsibilities as a company and to make all possible contributions to the sustainability of social economy and environment.

4. Maintain good investor relations management. After each periodic financial report disclosure, the Company took the initiative to hold a public performance briefing (including conference call, Web-meeting), hosted periodic investor receptions; actively listened to investors' opinions and suggestions to form good interactions between the Company and investors, forming a positive interaction and communication. After the above events, the Company also timely released *Investor Relations Activity Record Form* to ensure that all investors have fair access to the Company's information. In routine duties, the company also communicates with investors through various channels such as telephone, email and interactive platform in order to maintain long-term trust relationship between investors and Company.

The Company's information disclosure was approved by the regulatory authorities: the Company has been awarded the A-level evaluation of the information disclosure of small-and-medium sized listed companies by the Shenzhen Stock Exchange for 9 consecutive years. The Company has also gained recognition in the capital market: the company is included among the "Best 10 of the Top 50 High-value Small and Medium-sized Listed Companies" rated by the 13th Appraisal of the Value of Listed Companies of China of Securities Times and also among the "Top 10 Best Management Teams of Small and Medium-sized Listed Companies of China"; the Company was rated by CNR as the "Listed Company Most Trusted by Investors in 2019" and was rated as "One-star Enterprise of Fair Wealth 2019" of College of Management of Fudan University.

Any significant incompliance for the relevant regulatory documents issued by China Securities Regulatory Commission in respect of corporate governance:

Yes No

II. Company's Independence in Businesses, Management, Assets, Institutions and Finance from Controlling Shareholders

The Company is completely independent in business, management, assets, organization, and finance 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 its 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 are 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 shareholder intervention in the Company's personnel decisions in general meetings of the Board or 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, Supervisor Committee, Management and other internal organizations operates 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 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

Applicable Inapplicable

IV. Annual General Meeting and Extraordinary General Meetings convened during the Reporting Period

1. Annual General Meeting convened during the reporting period

Meeting	Nature	Proportion of participating investors	Convened Date	Disclosure Date	Disclosure Index
2018 Annual General Meeting	Annual General Meeting	74.61%	May 10 th 2019	May 11 th 2019	Public Announcement: No. 2019-032

2. Extraordinary general meetings convened at the request of preferred shareholders with resumed voting rights:

Applicable Inapplicable

V. Performance of duties by independent directors during the reporting period

1. Attendance of independent directors in board meetings and general meetings

Attendance of independent directors in board meetings and general meetings							
Name of Independent Director	Board meeting presence required in the reporting period (times)	Board meeting presence on site (times)	Board meeting presence by telecommunication (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)
Cheng Tianzong	5	0	4	1	0	N	0
Lu Jianzhong	5	1	4	0	0	N	0
Wang Zhidong	5	1	4	0	0	N	1
Hong Tianfeng	5	0	4	1	0	N	0

2. Objections from independent directors on related issues of the Company

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

Yes No

3. Other details about the performance of duties by independent directors

Were there any suggestions from independent directors accepted by the Company?

Yes No

Details: During the Reporting Period, independent directors strictly followed related rules, regulations, including *Company Act* (《公司法》), *Guidance of Board of Directors for Listed Companies* (《关于在上市公司建立独立董事的指导意见》), *Shenzhen Stock Exchange Listed Companies Standard Operation Guidelines* (《深圳证券交易所上市公司规范运作指引》), *the Articles Association* (《公司章程》), and *Regulations on Independent Directors* (《独立董事工作条例》). They focused on the Company operation, 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 and the shareholders as a whole. For details, please refer to *Independent Directors’ 2019 Debriefings* disclosed on www.cninfo.com.cn.

VI. Performance of duties by special committees under the Board during the Reporting Period

1. Strategy Committee

During the reporting period, the Strategy Committee, based on the domestic and foreign conditions and the characteristics of the industry, conducted research into and offered suggestions on the Company's assets operation projects and major investment decisions and examined and assessed the implementation of the aforesaid matters. Besides, the Strategy Committee listened to the reports of the management executives on operation and management of the Company's business modules and explored the Company's future long-term strategic development plan based on the Company's current development conditions, to inform the Company's sustainable and healthy development

with strategic insights.

2. Audit Committee

The Audit Committee mainly maintains communication between internal auditors and external auditors and also inspects and supervises audits. During the reporting period, the Audit Committee listened to the reports of the internal audit department, deliberated on the annual audit summary reports of the external auditors, and offered suggestions and insights on recruitment of external auditors. They carefully investigated implementation of the Company's accounting system and standards and reviewed the Company's financial report. They conducted routine on-spot inspection on the audits of the Company's overseas subsidiaries and its domestic branches and subsidiaries, thoroughly learned their operation, management and internal control and offered professional insights for guidance. They examined and supervised the rationality, reasonability and efficiency of the Company's internal control system. Besides, the Audit Committee convened special work conferences to learn and track implementation of the major matters of the Finance Center and Internal Control Department and clarified the requirements for internal control of the Company.

3. Nomination Committee

The primary responsibility of the Nomination Committee is to examine and audit the criteria and procedure for selecting directors, senior managerial staff and other personnel and offer suggestions. During the reporting period, the Nomination Committee carefully investigated the criteria and procedure for selecting the Company's directors and senior managerial staff, communicated with the relevant departments, cautiously audited the resume and qualification of directors and senior managerial staffs, thus practically fulfilling the Nomination Committee's responsibility.

4. Remuneration and Appraisal Committee

During the reporting period, the Remuneration and Appraisal Committee prudently examined the remuneration for the senior managerial staffs and the overall remuneration policy and scheme of the Company and offered professional suggestions on the appraisal criteria for the aforesaid personnels. They deliberated on the 2019 Remuneration and Performance Appraisal Plan of the Company and also tracked and supervised implementation of this plan. They deliberated on the matters concerning the second unlocking of the 2016 restricted incentive shares

and offered guidance.

VII. Performance of duties by the Supervisory Committee

Were there any risks to the Company identified by Supervisory Committee when performing its duties during the Reporting Period?

Yes No

The Supervisory Committee of the Company will strictly abide by provisions of the *Company Law*, *Standard Operation Guidelines on Enterprises Listed on SMEs Board at Shenzhen Stock Exchange*, *Articles of Association*, *Rules of Procedures of Supervisory Committee*, and relevant laws, regulations and rules, diligently perform its duties, supervise the legalization and standardization of the corporate finance and directors and senior management personnel when executing their positions, and practically safeguard the legitimate rights and interests of the Company, staff and shareholders.

In 2019, the Company's Board of Supervisors convoked a total of 4 meetings, and reviewed a total of 18 proposals which mainly involved in aspects of the Company's daily operation, financial information and its disclosure, and vesting of restricted incentive share plan, and etc., for details or Supervisory Committee resolutions, please refer to www.cninfo.com.cn. Meanwhile, the Company's Supervisory Committee also organized on-site special working meetings, listened to the senior management's report on the operation and development of each module of the Company, deeply understood the measures of Company's operational and financial situation, the establishment and implementation of internal control system, and protection of employees' rights and interests, etc.

Supervisory Committee's opinions on relevant matters in 2019:

1. Normative Operation Conditions of the Company

During the reporting period, the Supervisory Committee members have supervised the Company's daily operation situation by various means of attending the board meeting and the shareholders' meeting, and listening to and review special report. The Board of Supervisors believes that the Company has established a fairly sophisticated internal control system, all significant decisions are scientific and reasonable, and decision-making processes are legal. Directors and senior management personnel of the Company are diligent and responsible when executing duties; and behaviors of violating laws and regulations, damaging interests of the Company and legitimate rights and interests of shareholders were not found.

2. Checking the financial situation of the Company

During the reporting period, the Supervisory Committee carefully listened to reports of annual financial works by person in charge of finance and accounting, understood audit work arrangement of external auditors, and the Supervisory Committee believes that preparation and deliberation procedure of the Company's periodic report conforms to provisions of laws, administrative regulations and CSRC (China Securities Regulatory Commission) regulations, the report contents truly, correctly and completely reflects actual conditions of the Company, and is free of any false record, misleading statement or significant omission. There is no behavior violating confidentiality provisions founded for personnel who participated in preparation and deliberation procedure of periodic reports.

3. Self-evaluation report about internal control of year 2018

During the reporting period, the Supervisory Committee has listened to reports regarding construction and implementation situations for the internal control system of the Company and its branches and subsidiaries by Internal Audit Department, R&D Management Department and other relevant departments. After a careful study and discussion, the Supervisory Committee believes that the Company has established a fairly sophisticated internal control system which conforms to relevant national laws and regulations and fulfills the actual demand of the Company's production and operation management, obtained effective implementation, and has played a role in risk prevention and control effect on each section of the Company's production and operation management. The Board of Directors' 2019 self-evaluation report about internal control can truthfully and objectively reflect the internal control system construction and operation conditions of the Company.

4. External Guarantee Situation of the Company

During the reporting period, the Supervisory Committee has carefully listened to the reports by the person in charge of finance and accounting, understood about demand of guarantees items and relevant implementation situations of the Company and its subsidiaries, and researched and reviewed relevant proposals regarding guarantees provided for subsidiaries by the Company. The Supervisory Committee believes that: The Company provides guarantees for subsidiaries, which fully meets fund demand for its production and management, and is beneficial to further improve its production and operation abilities. The financial risk of the guarantee provided by the Company is in the controllable scope of the Company, and has no significant impact on normal operation of the Company. For guarantees provided to subsidiaries not wholly-owned by the Company, the minority shareholders will not provide proportional guarantees, however, those subsidiaries all have good business prospects and the Company has control power on the subsidiaries' operation and finance, So there's basically no risk in providing a guarantee. There is no contravention between relevant provisions of CSRC and *Articles of Association*. The guarantee conforms

to interests of the Company and general shareholders, and won't have any adverse effect on the Company.

5. Related-party transactions of the Company

During the reporting period, the Supervisory Committee has supervised decision-making process and follow-up performance of daily related-party transactions of the Company by means of attending board meetings and interviewing the senior management personnel. The Supervisory Committee believes that related-party transactions happened to the Company are subject to the principles of voluntariness, fairness and reasonableness, and consensus of the transaction parties, and conform to relevant laws and regulations and provisions of *Articles of Association*. The Board of Directors reviewed related-party transactions according to legal procedures, related directors avoid votes; and the decision-making processes of related-party transactions are legal and compliant. There is no situation damaging interests of the Company and medium and small shareholders.

6. Implementation of resolutions of shareholders' meeting

During the reporting period, the Supervisory Committee has carefully reviewed each proposal of the shareholders' meeting submitted by the Board of Directors, and further inspected practical implementation of each proposal. The Supervisory Committee believes that the Company's Board of Directors can diligently perform relevant resolutions of the Shareholders' Meeting.

7. Restricted share plan of the Company

Status of the Company's restricted incentive stock plan: During the reporting period, the Board of Supervisors examined and audited the proposal on second unlocking of the 2016 Restricted Incentive Stock Plan. The Board of Supervisors believed that, according to the relevant provisions of *2016 Restricted Incentive Stock Plan*, the unlocking conditions were fulfilled for the second unlocking period of the plan and agreed to proceed with the matters of the second unlocking period of 2016 Restricted Incentive Stock Plan according to the relevant provisions of this plan. The Board of Supervisors examined the reason for repurchasing and deregistering restricted stock and the quantity and price thereof. They believed that, according to the relevant provisions of *2016 Restricted Incentive Stock Plan* and due to dimission of some of the incentive objects and the subpar results of 2018 individual performance appraisal, the Company's decision to partially or fully repurchase and deregister the 1,593,506 shares of the restricted stock that were not unlocked conformed to 2016 Restricted Stock Plan and the applicable laws and regulations, and repurchasing and deregistering the restricted stock was legal and valid. Besides, the Board of Supervisors conducted special review of the *List of Incentive Grantees that could be Unlocked for the Second Unlocking Period of 2016 Restricted Incentive Stock Plan*. They believed that unlocking qualification of 2726

incentive grantees of the Company was legal and valid and fulfilled the conditions for the second unlocking period of 2016 Restricted Incentive Stock Plan and authorized the Company to complete the unlocking procedures for the incentive grantees.

During the Reporting Period, the Company strictly followed relevant rules and regulations, strengthened registration management of information insiders and inside information confidentiality management in preparation of periodic reports, resolution and disclosure, and planning, implementation and announcement of significant affairs, and other matters related to the Company's inside information. The Company truthfully filled in and submitted the *Registration Form for Information Insiders*, and reported to Shenzhen Stock Exchange Place in a timely manner.

VIII. 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 2019, 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.

IX. Evaluation report on internal control

1. Any significant internal control deficiencies during the reporting period

Yes No

2. Self-evaluation report on internal control

Disclosure date of full text of self-evaluation report on internal control		April 25 th 2020
Disclosure index of full text of self-evaluation report on internal control		www.cninfo.com.cn
Proportion of assets evaluated in total assets		100.00%
Proportion of revenue evaluated in total revenue per consolidated financial statement		100.00%
Recognition standard of deficiencies		
Nature	Financial report level	Non-financial report level
Qualitative criteria	<p>Significant deficiency: A deficiency or a combination of deficiencies in internal control may prevent significant errors in financial reports from being identified or prevented, e.g.:</p> <p>A. Invalid internal control environment; B. Fraud of directors, supervisors and senior management personnel on the financial report ; C. Significant errors identified by external auditors but not identified during the Company is operating; D. Invalid supervision of audit committee and internal audit system; E. Other deficiencies that may lead to the wrong judgement of financial statement reporter.</p> <p>Important deficiency: 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.:</p> <p>A. Application of accounting policies does not follow the enterprise accounting standard; B. No internal control systems for fraud; C. No control systems or system not effective for unusual or special transactions or no compensatory relevant control; D. One or more deficiencies which prevent the preparation of true and fair financial statements.</p> <p>Normal deficiency: Not significant and not important deficiency.</p>	<p>Internal control deficiencies at non-financial report level are mainly identified by the likelihood of occurrence and the extent of impacts on operating effective in business.</p> <p>Significant deficiency: the high likelihood leading to significant reduction of working efficiency, or significant increase of uncertainty, or significant deviation from the expected target;</p> <p>Important deficiency: a higher likelihood leading to remarkable reduction of working efficiency, or remarkable increase of uncertainty, or remarkable deviation from the expected target;</p> <p>Normal deficiency: a low likelihood leading to reduction of working efficiency, or increase of uncertainty, or deviation from the expected target;</p>
	Quantitative criteria	<p>Significant deficiency</p> <p>potential errors 5% or more of total profits</p> <p>Important deficiency:</p> <p>potential errors 2% or more but below 5% of total profits</p>

	Normal deficiency:	potential errors is 2% or less of total profits	direct losses of assets is below 2% of total profits
Number of significant deficiencies in financial report level		0	
Number of significant deficiencies in non-financial report level		0	
Number of important deficiencies in financial report level		0	
Number of important deficiencies in non-financial report level		0	

X. Audit report or assurance report on internal control

Applicable Inapplicable

Internal Control Audit Report

Comments of Internal Control Audit Report	
We believe that, as of December 31 th 2019, Hangzhou Hikvision Digital Technology Co., Ltd. had maintained effective internal control over financial reporting in all major matters in accordance with <i>Basic Norms of Enterprise Internal Control</i> and other relevant regulations.	
Disclosure of internal control audit report	Disclosure
Date of full disclosure of internal control audit report	April 25 th 2020
Index of full disclosure of internal control audit report	CNINF: 2019 Internal Audit Report
Types of opinions of internal control audit report	Unmodified unqualified opinions
Major defects in non-financial report or not	No

Accounting firm presents internal control audit report with non-standard opinions or not

Yes No

The internal control audit report of the external accounting firm is in line with the self-assessment report of the Board of Directors or not

Yes No

Section XI Corporate Bonds

Whether the Company has publicly issued corporate bonds on stock exchange place, which has not terminated or terminated but fail to collect the full payment before the half year report authorized disclosure date.

Yes No

Section XII Financial Report

I. Audit report

Audit Opinion	Unmodified unqualified audit opinion
Audit Report sign-off Date	April 23 rd 2019
Audit Institution Name	Deloitte Touche Tohmatsu Certified Public Accountants LLP
Audit Report Number	Deloitte Auditors' Report (Audit) No. 20- P02717
Certified Public Accounts Name	Tang Lianjiong, Zhang Shushu

To all shareholders of Hangzhou Hikvision Digital Technology Co., Ltd.:

I. Audit Opinion

We have audited the accompanying financial statements of Hangzhou Hikvision Digital Technology Co., Ltd. (hereinafter referred to as "Hikvision"), including consolidated and parent company's balance sheet as of December 31st 2019, consolidated and parent company's income statement, cash flow statement and statement of changes in owners' equity of 2019 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 31st 2019 and consolidated and parent company's financial performance and cash flows of 2019.

II. 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.

III. 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.

(I) Recognition of Sales Revenues

Description:

As shown in Note (V) (42) and Note (XIV) (1), the operating revenue in 2019 in the consolidated financial statements of the Group for the year ended December 31st 2019 is RMB 57,658,110,065.22. The product sales revenue, a key performance indicator, reaches RMB 56,566,688,245.36, accounting for 98.11% of the operating revenue, which is a significant amount 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 sales abroad by overseas subsidiaries; The domestic sales of products by domestic companies and the overseas sales of overseas subsidiaries are based on the time when the products are signed by customers as the time for the transfer of risks and rewards in the ownership of the goods, while the export of products of domestic companies is based on the port of shipment specified in the contract and the loading of the goods on the vessel designated by the customer within the specified time limit. The timing of the transfer of risk and reward is different under each income model, and there may be risks associated with 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:

- (1) 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 a 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; conducting a background investigation of important customers to check whether there is any indication of existence of abnormal customers.
- (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.

(II) Provision for Decline in Value of Inventories

Description:

As shown in Note (V) (8), as of December 31st 2019, the carrying amount of inventories, excluding completed and unsettled assets formed by construction contracts, in the consolidated financial statements of the Group is RMB 11,197,875,576.92, and the provision for diminution in value of inventories is RMB 441,847,984.51. The carrying value of the Group's inventories is relatively high, so the provision for diminution in value of inventories has a relatively significant influence on the financial statements. As

shown in Note (III) 12.3 and Note (III) 27 to the financial statements, inventories are measured at the lower of cost and net realizable value, on the balance sheet date. The provision for impairment of inventories is made when the net realizable value is lower than the cost. Net realizable value is the estimated selling price for inventories less estimated costs of completion to be incurred, estimated costs to make the sale and relevant taxes. As the management needs to use critical accounting estimates in determining the net realizable value of inventories and the amount is significant, we treat the provision for diminution in value of inventories 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 provision for diminution in value of inventories by the Group's management, and testing the effectiveness of its operation;
- (2) Understanding the Group's accounting policies for the provision for diminution in value of inventories, and evaluate the rationality of the methods and assumptions used by the management of the Group to estimate the provision for diminution in value of inventories;
- (3) Performing the supervision and selective examination procedure for inventory-taking of the Group, with focus on defective, obsoleted or slow-moving inventories, and checking whether there are inventories with an indication of impairment which are not provided for diminution in value of inventories.
- (4) Selecting sample(s) from inventories to test the net realizable value. For the finished product selected as a sample, comparing the book cost of the finished product and the sum of sales expenses and related taxes and fees that will occur, with recent or subsequent actual selling price, and evaluating the reasonableness of the estimated sales expenses and related taxes; for the selected raw material samples, the book cost of the raw material is compared with the actual purchase price of the latest or later period; for the selected unfinished product samples, comparing the book cost of the unfinished product with the actual selling price of the most recent period or the later period for the finished goods after subtracting the estimated cost of the same kind of products from the current period to completion, estimated sales expenses and related taxes, and evaluating the reasonableness of the estimated costs, sales expenses and related taxes and fees that will occur until completion.

IV. 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.

V. 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.

VI. 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.

At December 31st 2019

Consolidated Balance Sheet

Unit: RMB

Item	Notes	Closing balance	Opening balance (restated)
Current Assets:			
Cash and bank balances	(V)1	27,071,948,919.78	26,559,675,452.93
Held-for-trading financial assets	(V)2	181.76	
Financial assets measured at fair value through current profit and loss			1,860,050.59
Notes receivable	(V)3	973,236,789.02	2,569,445,189.92
Accounts receivable	(V)4	21,307,927,200.28	16,619,441,281.18
Receivables for financing	(V)5	1,257,385,053.02	
Prepayments	(V)6	309,685,733.32	460,304,219.65
Other receivables	(V)7	555,246,545.48	586,594,721.43
Inventories	(V)8	11,267,986,843.11	5,725,104,153.41
Non-current assets due within one year	(V)9	528,469,701.75	380,795,020.47
Other current assets	(V)10	754,456,821.72	730,720,129.59
Total Current Assets		64,026,343,789.24	53,633,940,219.17
Non-current Assets:			
Available-for-sale financial assets			290,966,813.00
Long-term receivables	(V)11	1,382,536,761.22	705,512,368.17
Long-term equity investment	(V)12	252,165,321.49	163,301,844.56
Other non-current financial assets	(V)13	312,398,267.44	
Fixed assets	(V)14	5,791,218,720.87	5,082,415,160.10
Construction in progress	(V)15	631,555,479.06	416,092,413.42
Intangible assets	(V)16	1,046,122,507.64	869,913,050.09
Goodwill	(V)17	273,611,961.96	212,269,337.23
Long-term deferred expenses	(V)18	87,611,490.75	-
Deferred tax assets	(V)19	688,849,263.70	534,346,941.25
Other non-current assets	(V)20	865,586,676.92	1,582,750,600.80
Total Non-current Assets		11,331,656,451.05	9,857,568,528.62
Total Assets		75,358,000,240.29	63,491,508,747.79
Current Liabilities:			
Short-term borrowings	(V)21	2,640,082,485.15	3,465,655,688.29
Held-for-trading financial liabilities	(V)22	652,428.18	

At December 31st 2019

Consolidated Balance Sheet-continued

Unit: RMB

Item	Notes	Closing balance	Opening balance (restated)
Current Liabilities:-continued			
Financial liabilities measured at fair value through current profit and loss			290,998.43
Notes payable	(V)23	1,239,584,016.70	463,479,760.54
Accounts payable	(V)24	12,700,075,307.70	10,301,665,725.20
Receipts in advance	(V)25	1,020,989,460.61	641,430,490.22
Payroll payable	(V)26	2,359,674,640.12	1,921,741,131.63
Taxes payable	(V)27	991,342,805.91	1,418,921,664.57
Other payables	(V)28	1,568,744,599.94	2,953,454,987.95
Non-current liabilities due within one year	(V)29	86,123,154.06	3,178,171,147.16
Other current liabilities	(V)30	913,534,538.26	364,984,759.94
Total Current Liabilities		23,520,803,436.63	24,709,796,353.93
Non-current Liabilities:			
Long-term borrowings	(V)31	4,604,168,571.43	440,000,000.00
Long-term payables	(V)32	50,181,416.72	8,000,000.00
Provisions	(V)33	90,570,669.01	77,625,238.49
Deferred income	(V)34	333,589,831.30	293,179,089.13
Deferred tax liabilities	(V)19	51,088,103.96	-
Other non-current liability	(V)35	1,234,739,326.10	-
Total non-current liabilities		6,364,337,918.52	818,804,327.62
Total liabilities		29,885,141,355.15	25,528,600,681.55
Owners' Equity			
Share capital	(V)36	9,345,010,696.00	9,227,270,473.00
Capital reserves	(V)37	4,126,943,698.96	1,956,139,660.52
Less: Treasury shares	(V)38	2,148,273,864.36	364,984,759.94
Other comprehensive income	(V)39	(53,541,146.99)	(49,576,351.10)
Surplus reserves	(V)40	4,672,505,348.00	4,460,712,358.45
Retained earnings	(V)41	28,961,389,145.22	22,359,856,271.42
Total owners' equity attributable to owner of the Company		44,904,033,876.83	37,589,417,652.35
Minority equity		568,825,008.31	373,490,413.89
Total owners' equity		45,472,858,885.14	37,962,908,066.24
Total liabilities and owners' equity		75,358,000,240.29	63,491,508,747.79

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

At December 31st 2019

Balance sheet of the parent company

Unit: RMB

Item	Notes	Closing balance	Opening balance (restated)
Current Assets:			
Cash and bank balances		16,851,590,525.05	19,192,461,228.22
Notes receivable		149,703,073.98	351,793,632.24
Accounts receivable	(XV)1	25,107,965,925.08	15,204,519,161.71
Receivables for financing		84,839,695.67	
Prepayments		160,688,588.99	132,344,929.55
Other receivables	(XV)2	921,275,388.15	522,987,955.34
Inventories		171,243,815.97	168,885,723.93
Non-current assets due within one year		4,513,795.81	-
Other current assets		23,117,398.50	93,661,315.14
Total Current Assets		43,474,938,207.20	35,666,653,946.13
Non-current Assets:			
Available-for-sale financial assets			290,956,813.00
Other non-current financial assets		309,504,047.44	
Long-term accounts receivable		681,568.43	-
Long-term equity investment	(XV)3	5,074,018,030.44	4,361,147,395.90
Fixed assets		2,831,295,145.61	2,844,176,300.34
Construction in progress		153,416,054.28	65,156,482.70
Intangible assets		188,362,883.75	197,147,608.73
Long-term prepaid expenses for amortization		34,199,446.06	-
Deferred tax assets		126,357,792.34	221,779,547.02
Other non-current assets		21,619,464.07	14,601,579.55
Total Non-current Assets		8,739,454,432.42	7,994,965,727.24
Total Assets		52,214,392,639.62	43,661,619,673.37

At December 31st 2019

Balance sheet of the company - continued

Unit: RMB

Item	Notes	Closing balance	Opening balance (restated)
Current Liabilities:			
Short-term borrowings		2,001,781,388.89	-
Accounts payable		450,983,270.08	356,787,605.91
Receipts in advance		227,242,328.23	204,337,524.21
Payroll payable		1,564,304,003.49	1,272,626,004.95
Taxes payable		796,890,945.83	987,057,652.70
Other payables		533,325,191.05	2,529,600,057.31
Non-current liabilities due within one year		9,539,251.98	3,172,727,888.37
Other current liabilities		913,534,538.26	364,984,759.94
Total Current Liabilities		6,497,600,917.81	8,888,121,493.39
Non-current Liabilities:			
Long-term borrowings		3,126,200,000.00	-
Provisions		62,863,096.83	52,956,535.09
Deferred Income		162,018,728.45	186,747,708.01
Other non-current liabilities		1,234,739,326.10	-
Total non-current liabilities		4,585,821,151.38	239,704,243.10
Total liabilities		11,083,422,069.19	9,127,825,736.49
Owners' Equity			
Share capital		9,345,010,696.00	9,227,270,473.00
Capital reserves		4,064,833,739.52	1,883,262,407.46
Less: Treasury shares		2,148,273,864.36	364,984,759.94
Surplus reserves		4,672,505,348.00	4,460,712,358.45
Retained earnings		25,196,894,651.27	19,327,533,457.91
Total owners' equity		41,130,970,570.43	34,533,793,936.88
Total liabilities and owners' equity		52,214,392,639.62	43,661,619,673.37

For the reporting period from January 1st 2019 to December 31st 2019

Consolidated Income Statement

Unit: RMB

Item	Notes	Amount for the current period	Amount for the prior period
I. Total operating income	(V)42	57,658,110,065.22	49,837,132,481.61
Less: Total operating costs	(V)42	31,140,176,777.12	27,483,469,555.24
Business taxes and surcharges	(V)43	417,318,543.55	418,325,053.64
Selling expenses	(V)44	7,256,781,486.68	5,892,500,406.52
Administrative expenses	(V)45	1,822,464,442.07	1,377,244,870.14
Research and Development (R&D) expenses	(V)46	5,483,811,698.36	4,482,780,693.41
Financial expenses	(V)47	(640,068,177.19)	(424,263,559.64)
Including: Interest expenses		192,739,975.98	154,599,429.03
Interest income		699,779,882.35	444,987,461.93
Add: Other Income	(V)48	1,892,323,306.29	2,083,997,067.37
Investment income	(V)49	36,649,237.09	51,929,640.63
Including: Investment gains (losses) in associated enterprise and joint-venture enterprise		7,743,476.93	(9,072,889.02)
Gains from changes in fair values	(V)50	15,321,889.63	13,406,932.17
Credit impairment losses	(V)51	(222,009,426.18)	
Impairment losses of assets	(V)52	(197,891,311.27)	(426,949,808.76)
Asset disposal income		5,535,663.32	4,975,825.83
II. Operating profit		13,707,554,653.51	12,334,435,119.54
Add: Non-operating income	(V)53	65,032,501.54	111,362,918.34
Less: Non-operating expenses	(V)54	17,124,407.28	8,593,484.58
III. Total profit		13,755,462,747.77	12,437,204,553.30
Less: Income tax expenses	(V)55	1,290,278,445.12	1,056,739,998.82
IV. Net profit		12,465,184,302.65	11,380,464,554.48
4.1 Classification by continuous operation			
(a) Net profit on continuous operation		12,465,184,302.65	11,380,464,554.48
(b) Net loss on terminated operation		-	-
4.2 Classification by attribution of ownership			
(a) Profit or loss attributable to minority shareholders		50,596,612.20	28,332,299.27
(b) Net profit attributable to owners of parent company		12,414,587,690.45	11,352,132,255.21
V. Other comprehensive income, net of income tax	(V)39	(4,658,993.77)	(24,062,992.06)
Other comprehensive income attributable to owners of the Company, net of tax		(3,964,795.89)	(21,898,411.75)

For the reporting period from January 1st 2019 to December 31st 2019

Consolidated Income Statement-continued

Unit: RMB

Item	Notes	Amount for the current period	Amount for the prior period
(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		(3,964,795.89)	(21,898,411.75)
1. Exchange differences arising on conversion of financial statements denominated in foreign currencies		(3,964,795.89)	(21,898,411.75)
Other comprehensive income attributable to minority interests, net of tax		(694,197.88)	(2,164,580.31)
VI. Total comprehensive income		12,460,525,308.88	11,356,401,562.42
Total comprehensive income attributable to owners of the parent company		12,410,622,894.56	11,330,233,843.46
Total comprehensive income attributable to minority shareholders		49,902,414.32	26,167,718.96
VII. Earnings per share			
(I) Basic earnings per share	(XVI)2	1.343	1.240
(II) Diluted earnings per share	(XVI)2	1.343	1.234

In the case of a business combination under the common control this year, the net loss realized by the combined party before the merger was RMB 885,138.65, and the net loss realized by the combined party during the prior year was RMB 1,228,310.18.

For the reporting period from January 1st 2019 to December 31st 2019

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	25,712,466,601.80	22,288,214,116.66
Less: Total operating Cost	(XV)4	7,728,486,855.67	6,599,669,485.30
Business taxes and surcharges		274,273,500.24	284,413,700.01
Selling expenses		3,101,749,832.98	2,758,483,789.96
Administrative expenses		725,281,640.65	625,098,237.96
Research and Development (R&D) expenses		4,012,212,610.85	3,502,168,162.60
Financial expenses		(506,021,681.46)	(180,009,521.00)
Including : Interest expenses		107,400,998.19	92,955,424.65
Interest income		579,879,330.28	394,158,854.37
Add: Other income		1,542,338,077.01	1,814,462,323.26
Investment income	(XV)5	25,026,089.44	82,844,595.18
Including: Investment gains (losses) in associated enterprise and joint-venture enterprise		5,089,008.14	(4,200,612.39)
Gains from changes in fair values		17,547,234.44	-
Credit impairment gains		656,135,180.29	
Impairment gains (losses) of assets		51,593,292.77	(226,183,330.78)
Asset disposal income		4,072,096.18	4,138,938.48
II. Operating profit		12,673,195,813.00	10,373,652,787.97
Add: Non-operating income		17,287,915.50	56,661,310.97
Less: Non-operating expenses		8,974,800.59	1,444,733.80
III. Total profit		12,681,508,927.91	10,428,869,365.14
Less: Income tax expenses		999,092,917.90	659,174,965.95
IV. Net profit		11,682,416,010.01	9,769,694,399.19
V. Other comprehensive income, net of income tax		-	-
VI. Total comprehensive income		11,682,416,010.01	9,769,694,399.19

For the reporting period from January 1st 2019 to December 31st 2019

Consolidated Cash Flow Statement

Unit: RMB

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		59,405,106,132.63	51,986,564,929.24
Receipts of tax refunds		3,084,090,410.43	3,721,596,390.15
Other cash receipts relating to operating activities	(V)56(1)	1,989,547,720.88	1,623,989,773.06
Sub-total of cash inflows from operating activities		64,478,744,263.94	57,332,151,092.45
Cash payments for goods purchased and services received		37,422,764,103.72	32,254,846,787.67
Cash paid to and on behalf of employees		8,934,696,624.52	7,091,469,370.06
Payments of various types of taxes		5,192,433,698.75	4,362,695,466.89
Other cash payments relating to operating activities	(V)56(2)	5,161,129,665.81	4,509,853,440.07
Sub-total of cash outflows from operating activities		56,711,024,092.80	48,218,865,064.69
Net Cash flows from Operating Activities	(V)57(1)	7,767,720,171.14	9,113,286,027.76
II. Cash flows from Investing Activities:			
Cash receipts from recovery of investments		548,141,227.41	10,684,968,183.97
Cash receipts from investment income		17,355,010.13	101,672,000.39
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		85,339,813.21	17,971,830.99
Other cash receipts relating to investing activities	(V)56(3)	17,234,624.45	89,505,228.62
Sub-total of cash inflows from investing activities		668,070,675.20	10,894,117,243.97
Net cash paid to acquire subsidiaries and other business units		16,095,782.07	-
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		1,927,278,918.86	2,055,859,307.21
Cash paid to acquire investments		644,715,663.25	7,367,537,654.71
Other cash payments relating to investing activities	(V)56(4)	2,968,783.82	20,000,000.00
Sub-total of cash outflows from investing activities		2,591,059,148.00	9,443,396,961.92
Net cash flows from Investing Activities		(1,922,988,472.80)	1,450,720,282.05
III. Cash flows from financing activities:			
Cash receipts from capital contributions		123,530,000.00	97,509,000.00
Including: cash receipts from capital contributions from minority owners of subsidiaries		123,530,000.00	97,509,000.00
Cash receipts from borrowings		9,492,281,861.82	10,346,144,732.55
Other cash receipts relating to financing activities	(V)56(5)	-	2,057,898,876.84
Sub-total of cash inflows from financing activities		9,615,811,861.82	12,501,552,609.39
Cash repayments of borrowings		9,305,661,321.88	8,590,620,738.17
Cash payments for distribution of dividends or profits or settlement of interest expenses		5,754,605,713.66	4,701,738,534.32
Including : Dividends and profits paid by subsidiaries to minority shareholders		2,100,000.00	-
Other cash payments relating to financing activities	(V)52(6)	26,897,116.20	6,555,746.33
Sub-total of cash outflows from financing activities		15,087,164,151.74	13,298,915,018.82
Net cash flows from Financing Activities		(5,471,352,289.92)	(797,362,409.43)
IV. Effect of foreign exchange rate changes on Cash and Cash Equivalents		111,276,866.09	235,182,564.34
V. Net Increase in Cash and Cash Equivalents	(V)57(1)	484,656,274.51	10,001,826,464.72
Add: Opening balance of Cash and Cash Equivalents	(V)57(1)	26,031,011,733.89	16,029,185,269.17
VI. Closing Balance of Cash and Cash Equivalents	(V)57(3)	26,515,668,008.40	26,031,011,733.89

For the reporting period from January 1st 2019 to December 31st 2019

Cash Flow Statements of the parent company

Unit: RMB

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		20,043,914,998.81	22,847,371,972.05
Receipts of tax refunds		1,364,269,467.87	1,651,607,032.63
Other cash receipts relating to operating activities		880,611,125.32	796,433,730.94
Sub-total of cash inflows from operating activities		22,288,795,592.00	25,295,412,735.62
Cash payments for goods acquired and services received		8,911,851,425.42	7,541,359,566.51
Cash payments to and on behalf of employees		4,809,105,203.79	3,610,460,282.38
Payments of various types of taxes		3,547,737,881.19	3,556,689,194.01
Other cash payments relating to operating activities		2,273,874,546.47	2,871,618,240.21
Sub-total of cash outflows from operating activities		19,542,569,056.87	17,580,127,283.11
Net Cash flows from Operating Activities	(XV)8(1)	2,746,226,535.13	7,715,285,452.51
II. Cash flows from Investing Activities:			
Cash receipts from recovery of investments		33,241,636.07	4,350,005,971.53
Cash receipts from investment income		18,757,220.31	97,039,236.04
Net cash receipts from disposals of fixed assets, intangible assets and other long-term assets		92,098,125.61	13,852,133.88
Other cash receipts relating to investing activities		16,718,160,478.21	15,536,557,642.39
Sub-total of cash inflows from investing activities		16,862,257,460.20	19,997,454,983.84
Cash payments to acquire or construct fixed assets, intangible assets and other long-term assets		513,878,473.24	604,984,875.82
Cash payments to acquire investments		633,438,441.87	2,131,183,014.00
Other cash payments relating to investing activities		17,142,547,258.27	15,385,247,510.53
Sub-total of cash outflows from investing activities		18,289,864,173.38	18,121,415,400.35
Net Cash flows from Investing Activities		(1,427,606,713.18)	1,876,039,583.49
III. Cash flows from Financing Activities			
Cash receipts from borrowings		7,279,240,000.00	700,000,000.00
Other cash receipts relating to financing activities		7,534,930,948.45	4,988,766,432.46
Sub-total of cash inflows from financing activities		14,814,170,948.45	5,688,766,432.46
Cash repayments of borrowings		5,372,727,888.37	700,000,000.00
Cash payments for distribution of dividends or profits or settlement of interest expenses		5,679,184,068.78	4,640,094,529.94
Other cash payments relating to financing activities		7,471,674,598.52	3,422,541,181.42
Sub-total of cash outflows from financing activities		18,523,586,555.67	8,762,635,711.36
Net Cash flows from Financing Activities		(3,709,415,607.22)	(3,073,869,278.90)
IV. Effect of foreign exchange rate changes on Cash and Cash Equivalents		47,889,908.40	177,395,997.38
V. Net increase in cash and cash equivalents	(XV)8(1)	(2,342,905,876.87)	6,694,851,754.48
Add: Beginning balance of cash and cash equivalents	(XV)8(1)	18,998,934,287.59	12,304,082,533.11
VI. Closing Balance of Cash and Cash Equivalents	(XV)8(2)	16,656,028,410.72	18,998,934,287.59

For the reporting period from January 1st 2019 to December 31st 2019

Consolidated Statement of Changes in Owners' Equity

Unit: RMB

Item	Amount for the 2019							Minority interests	Total owners' equity
	Owner's Equity Attributable to owners of the Company								
	Share capital	Capital reserves	Less: Treasury share	Other comprehensive income	Surplus reserve	Retained profits			
I. Closing balance of the preceding period	9,227,270,473.00	1,956,139,660.52	364,984,759.94	(49,576,351.10)	4,460,712,358.45	22,360,593,257.53	373,981,737.96	37,964,136,376.42	
Add: Business merger under common control	-	-	-	-	-	(736,986.11)	(491,324.07)	(1,228,310.18)	
II. Opening balance of the current period	9,227,270,473.00	1,956,139,660.52	364,984,759.94	(49,576,351.10)	4,460,712,358.45	22,359,856,271.42	373,490,413.89	37,962,908,066.24	
III. Increase or decrease in the current period	117,740,223.00	2,170,804,038.44	1,783,289,104.42	(3,964,795.89)	211,792,989.55	6,601,532,873.80	195,334,594.42	7,509,950,818.90	
(I) Total comprehensive income	-	-	-	(3,964,795.89)	-	12,414,587,690.45	49,902,414.32	12,460,525,308.88	
(II) Owners' contributions and reduction in capital	117,740,223.00	2,170,804,038.44	1,885,322,227.42	-	-	-	147,532,180.10	550,754,214.12	
1. Capital contribution from shareholders	121,195,458.00	1,936,703,418.84	2,057,898,876.84	-	-	-	123,530,000.00	123,530,000.00	
2. Share-based payment recognized in owners' equity	-	257,542,500.80	-	-	-	-	10,767,293.62	268,309,794.42	
3. Amount formed by business combination not under the common control	-	-	-	-	-	-	13,234,886.48	13,234,886.48	
4. Others	(3,455,235.00)	(23,441,881.20)	(172,576,649.42)	-	-	-	-	145,679,533.22	
(III) Profit distribution	-	-	(102,033,123.00)	-	211,792,989.55	(5,813,054,816.65)	(2,100,000.00)	(5,501,328,704.10)	
1. Transfer to surplus reserves	-	-	-	-	211,792,989.55	(211,792,989.55)	-	-	
2. Distributions to shareholders	-	-	(102,033,123.00)	-	-	(5,601,261,827.10)	(2,100,000.00)	(5,501,328,704.10)	
3. Others	-	-	-	-	-	-	-	-	
IV. Closing 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	

For the reporting period from January 1st 2019 to December 31st 2019

Consolidated Statement of Changes in Owners' Equity-continued

Unit: RMB

Item	Amount for 2018							Minority interests	Total owners' equity
	Owner's Equity Attributable to owners of the Company								
	Share capital	Capital reserves	Less: Treasury share	Other comprehensive income	Surplus reserve	Retained profits			
I. Opening balance of the current period	9,228,865,114.00	1,819,397,715.63	744,583,627.22	(27,677,939.35)	3,483,742,918.53	16,598,328,692.63	246,048,563.87	30,604,121,438.09	
II. Increase or decrease in the current period (restated)	(1,594,641.00)	136,741,944.89	(379,598,867.28)	(21,898,411.75)	976,969,439.92	5,761,527,578.79	127,441,850.02	7,358,786,628.15	
(I) Total comprehensive income (restated)	-	-	-	(21,898,411.75)	-	11,352,132,255.21	26,167,718.96	11,356,401,562.42	
(II) Owners' contributions and reduction in capital	(1,594,641.00)	136,741,944.89	(323,387,643.28)	-	-	-	101,274,131.06	559,809,078.23	
1. Capital contribution from shareholders	-	-	-	-	-	-	97,509,000.00	97,509,000.00	
2. Share-based payment recognized in owners' equity	-	141,703,050.22	-	-	-	-	3,765,131.06	145,468,181.28	
3. Others	(1,594,641.00)	(4,961,105.33)	(323,387,643.28)	-	-	-	-	316,831,896.95	
(III) Profit distribution	-	-	(56,211,224.00)	-	976,969,439.92	(5,590,604,676.42)	-	(4,557,424,012.50)	
1. Transfer to surplus reserves	-	-	-	-	976,969,439.92	(976,969,439.92)	-	-	
2. Distributions to shareholders	-	-	(56,211,224.00)	-	-	(4,613,635,236.50)	-	(4,557,424,012.50)	
3. Others	-	-	-	-	-	-	-	-	
III. Closing balance of the current period (restated)	9,227,270,473.00	1,956,139,660.52	364,984,759.94	(49,576,351.10)	4,460,712,358.45	22,359,856,271.42	373,490,413.89	37,962,908,066.24	

For the reporting period from January 1st 2019 to December 31st 2019

Statement of Changes in Owners' Equity of the parent company

Unit: RMB

Item	Amount for 2019					
	Share capital	Capital reserves	Less: Treasury share	Surplus reserve	Retained profits	Total owners' equity
I. Closing balance of the preceding period	9,227,270,473.00	1,883,262,407.46	364,984,759.94	4,460,712,358.45	19,327,533,457.91	34,533,793,936.88
II. Increase or decrease in the current period	117,740,223.00	2,181,571,332.06	1,783,289,104.42	211,792,989.55	5,869,361,193.36	6,597,176,633.55
(I) Total comprehensive income	-	-	-	-	11,682,416,010.01	11,682,416,010.01
(II) Owners' contributions and reduction in capital	117,740,223.00	2,181,571,332.06	1,885,322,227.42	-	-	413,989,327.64
1. Capital contribution from shareholders	121,195,458.00	1,936,703,418.84	2,057,898,876.84	-	-	-
2. Share-based payment recognized in owners' equity	-	268,309,794.42	-	-	-	268,309,794.42
3. Others	(3,455,235.00)	(23,441,881.20)	(172,576,649.42)	-	-	145,679,533.22
(III) Profit distribution	-	-	(102,033,123.00)	211,792,989.55	(5,813,054,816.65)	(5,499,228,704.10)
1. Transfer to surplus reserve	-	-	-	211,792,989.55	(211,792,989.55)	-
2. Distributions to shareholders	-	-	(102,033,123.00)	-	(5,601,261,827.10)	(5,499,228,704.10)
3. Others	-	-	-	-	-	-
III. Closing balance of the current period	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

For the reporting period from January 1st 2019 to December 31st 2019

Statement of Changes in Owners' Equity of the parent company-continued

Unit: RMB

Item	Amount for 2018					
	Share capital	Capital reserves	Less: Treasury share	Surplus reserve	Retained profits	Total owners' equity
I. Opening balance of the current period	9,228,865,114.00	1,742,755,331.51	744,583,627.22	3,483,742,918.53	15,148,443,735.14	28,859,223,471.96
II. Increase or decrease in the current period	(1,594,641.00)	140,507,075.95	(379,598,867.28)	976,969,439.92	4,179,089,722.77	5,674,570,464.92
(I) Total comprehensive income	-	-	-	-	9,769,694,399.19	9,769,694,399.19
(II) Owners' contributions and reduction in capital	(1,594,641.00)	140,507,075.95	(323,387,643.28)	-	-	462,300,078.23
1. Capital contribution from shareholders	-	-	-	-	-	-
2. Share-based payment recognized in owners' equity	-	145,468,181.28	-	-	-	145,468,181.28
3. Others	(1,594,641.00)	(4,961,105.33)	(323,387,643.28)	-	-	316,831,896.95
(III) Profit distribution	-	-	(56,211,224.00)	976,969,439.92	(5,590,604,676.42)	(4,557,424,012.50)
1. Transfer to surplus reserve	-	-	-	976,969,439.92	(976,969,439.92)	-
2. Distributions to shareholders	-	-	(56,211,224.00)	-	(4,613,635,236.50)	(4,557,424,012.50)
3. Others	-	-	-	-	-	-
III. Closing balance of the current period	9,227,270,473.00	1,883,262,407.46	364,984,759.94	4,460,712,358.45	19,327,533,457.91	34,533,793,936.88

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 30th 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 28th 2010, the Company was listed on the Shenzhen Stock Exchange.

On March 27th 2018, according to the authorization of the Company's first extraordinary shareholders meeting in 2014, the Company completed the procedures of repurchase and cancellation of some of the 1,594,641 restricted stocks that did not meet the incentive conditions, and the share capital of the Company was changed to 9,227,270,473 shares.

On December 20th 2018, pursuant to the Articles of Association of the Company revised by the resolution of 8th Meeting of the fourth session Board of Directors authorized by the 2nd extraordinary general meeting in 2018, the company was approved to issue additional 126,518,281 shares of RMB common stock (adjusted to 121,195,458 shares) to 6,341 (adjusted to 6,095) incentive personnels. The Company completed the registration of shares on January 17th 2019, adjusted the Company's total capital share to 9,348,465,931 shares.

On June 26th 2019, authorized by the Company's first Extraordinary General Meeting in 2014, the Company completed procedures of repurchase and cancellation of some of the 509,625 restricted stocks that did not meet the incentive conditions, and the total share capital of the Company was adjusted to 9,347,956,306 shares.

On September 3rd 2019, authorized by the Company's second Extraordinary General Meeting in 2016, the Company completed procedures of repurchase and cancellation of some of the 2,945,610 restricted stocks that did not meet the incentive conditions, and the total share capital of the Company was adjusted to 9,345,010,696 shares. Please refer to Note (V)-36 for share capital details.

As of December 31st 2019, the Company's total registered capital is RMB 9,345,010,696, with total capital shares of 9,345,010,696 shares (face value RMB 1 per share), of which restricted A-shares were 1,276,701,961 shares, A-shares without restriction are 8,068,308,735 shares.

The Company is engaged in other electronic equipment manufacturing business under electronics industry. Business scope of the Company includes development and production of electronic products (including explosion-proof electrical products, tele-communication equipment and its ancillary equipment, multimedia equipment), transmission and display equipment, fire protection products, big data and IoT software and hardware products, aircraft, robot, intelligent equipment and intelligent system, real-time communication system, auto parts and accessories, and electrical signal equipment for

vehicle, and 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, electronic engineering, and design, construction and maintenance of intelligent systems. For details about business scope of the Company and its subsidiaries, please refer to Note (VII) 1.

The Company's and consolidated financial reports were approved for issuance by the 17th meeting of the fourth session Board of Directors of the Company on April 23rd 2020.

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).

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 31st 2019, 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.

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 31st 2019; and the Company's and consolidated results of operations, the Company's and consolidated changes in shareholders' equity, and the Company's and consolidated cash flows for the year of 2019.

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) 59. The Group adopts RMB to prepare its financial statements.

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 purchasee 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.

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 acquirer's interest in the fair value of the acquiree's identifiable net assets, the acquirer recognizes 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 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 held before the acquisition date involves any changes in the other comprehensive income or in any other owner'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.

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) "13.3.2 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.

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 opening balances and the comparative figures of previous year are presented at the converted amounts of the previous 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 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 and Measurement of Financial Assets

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, some of the 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 merger not under common 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:

- 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 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 and classified as financial asset at fair value through other comprehensive income, the Group will handle impairment on the basis of expected credit loss and recognize loss provision.

For the receivables in the contracts that are generated by the transactions governed by revenue standards and that do not contain any major financial components or the financial components in the contracts that are valid for more than one year, the loss reserve will be measured based on the amount of the expected credit loss in the entire life.

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, the Group will recognize its credit loss provision in 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 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, the Group Management comprehensively assesses the payment cycles of the customer base and the transaction practices traditionally formed. If any contractual payment for any financial instrument is 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.

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 in 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 uses the impairment matrix to identify the credit losses of the financial instruments on a portfolio basis of accounts receivable, other receivables and long-term receivables; and the Group determines credit losses by assessing their probability of breach and loss given default based on their credit rating 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 flows receivable and the cash flows expected to receive by the Group.
- In respect of a financial guarantee contract (for specific accounting policies, please refer to Note (3), 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 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, yet it has not retained the control over 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 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 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 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.

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, 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 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.

10.5 Derivatives and embedded derivatives

Derivatives include foreign exchange forward contract, currency exchange rate swap contract, and foreign exchange option 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 is still unable to be measured 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 explained in Note (III), 10.1, 10.2 and 10.3.

12. Inventories

12.1 Categories of inventories

The Group's inventories mainly include finished goods or commodities held for sale in the daily activities, completed outstanding assets formed in the construction contract, products in the production process, materials and supplies used in the production process or in the process of providing labor service. 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.

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. Long-term Equity Investment

13.1 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.

13.2 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 consolidation consideration, share of book value of owner's equity of merged party in the final controlling party 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. 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 a "package deal": where it is a package deal, the Company accounts each deal as a deal to obtain the control. Otherwise, the Group shall measure the initial investment cost of long-term equity investment accounted using cost method at the sum of book value of equity investment of the combined part originally held and investment cost additionally paid.

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.

Conduct initial measurement according the cost for other equity investment other than the long-term equity investment formed in business merger. In case that the investor may post a significant impact on the investee or execute joint control but not constitute the control right, long-term equity investment cost is the sum of fair value of original-held equity investment plus newly-added investment cost in accordance with *No. 22 Accounting Standards for Business Enterprises---Recognition and Measure of the Financial Instruments*.

13.3 Subsequent measurement and recognition of profit or loss

13.3.1 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.

13.3.2 Long-term equity investment accounted for using the equity method

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 investment, recognize the attributable share of the net profits and losses of the invested entity after it adjusts the net profits of 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 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.

13.4 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.

14. Fixed Assets

14.1 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.

14.2 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:

Class	Depreciation period (years)	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.

14.3 Identification basis and valuation methods for fixed assets acquired under finance leases

On the commencement date of the lease term, record the lower of the fair value of the leasing asset or the present value of the minimum lease payments on the lease commencement date as the entry book value of the leased asset, and book the amount of the minimum lease payments as the entry book value of long-term account payable, and recognize the difference between the entry value of the leased asset and that of the long-term account payables as unrecognized financing expenses. In addition, the initial direct costs directly attributable to the leased item incurred during the process of negotiating the lease and signing the leasing agreement shall be included into the value of the leased assets.

The Group adopts a depreciation policy for a fixed asset held under a finance lease which is consistent with that for its owned fixed asset. If there is reasonable certainty that the Group will obtain ownership of the leased asset at the end of the lease term, the leased asset is depreciated over its useful life. If there is no reasonable certainty that the Group will obtain ownership of the leased asset at the end of the lease term, the leased asset is depreciated over the shorter of the lease term and its useful life.

14.4 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.

15. 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.

16. 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 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.

17. Intangible Assets

17.1 Intangible Assets Valuation Method and Service Life

Intangible assets include land use right, intellectual property (IP) and application software, 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	-

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 (3), 18. Long-term asset impairment.

17.2 Internal Research and Development Expenditure

Expenditure during the research phase is recognized as an expense in the period in which it is incurred.

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.

18. 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 and intangible assets with a finite useful life 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.

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.

Once the impairment loss of such assets is recognized, it can not be reversed in any subsequent period.

19. Long-term unamortized expenses

Long-term unamortized expenses are the expenses that are already incurred but will be shared in the current year and later period with amortization term of more than one year, including the expenses on betterment of leased fixed assets. Long-term unamortized expenses are evenly amortized in installments in three years during the expected benefit period.

20. Employee compensation

20.1 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.

20.2 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.

20.3 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.

21. 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.

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.

22. Share-based Payment

Share-based payment refers to a transaction in which the Group grants the equity instruments or undertakes the equity-instrument-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.

22.1 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.

22.2. 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 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.

23. Revenue

23.1 Revenue from sale of goods

Revenue from sale of goods is recognized when the Group has transferred to the buyer the significant risks and rewards of ownership of the goods, the Group retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold; the amount of revenue can be measured reliably; it is probable that the associated economic benefits will flow to the Group; and the associated costs incurred or to be incurred can be measured reliably.

23.2 Revenue from rendering of services

Revenue from rendering of services is recognized when the amount of revenue can be measured reliably; it is probable that the associated economic benefits will flow to the Group; the stage of completion of the transaction can be determined reliably; and the associated costs incurred or to be incurred can be measured reliably. Revenue from rendering of services is recognized using the percentage of completion method at the balance sheet date. The stage of completion of a transaction for rendering for services is determined based on the proportion that costs incurred to date bear to the estimated total costs of the transaction.

When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue is recognized only to the extent of the costs incurred that will be recoverable, and the costs incurred are recognized as expenses for the period. When it is not probable that the costs incurred will be recovered, revenue is not recognized.

23.3 Construction Contract

Where the outcome of a construction contract can be estimated reliably, contract revenue and costs are recognized using the percentage of completion method at the balance sheet date.

The stage of completion of a contract is determined using the proportion that completed contract work bears to the estimated total contract work.

Where the outcome of a construction contract cannot be estimated reliably, (1) if contract costs are expected to be recoverable, contract revenue is recognized to the extent of contract costs that are expected to be recoverable; and contract costs are recognized as expenses in the period in which they are incurred; (2) if contract costs are not expected to be recoverable, they are recognized as expenses immediately when incurred and contract revenue is not recognized. When the uncertainties that prevented the outcome of the construction contract from being estimated reliably no longer exist, revenue and expenses associated with the construction contract are recognized using the percentage of completion method.

If the estimated total contract costs exceed total contract revenue, the expected loss is recognized immediately as an expense for the period.

The cumulative costs incurred and cumulative gross profits (or losses) recognized for contracts in progress and the progress billings are offset and the net amount is presented in the balance sheet. Where the aggregate of cumulative costs incurred and cumulative gross profits (or losses) recognized exceed the progress billings for contracts in progress, the surplus is shown as inventory. Where the progress billings for contracts in progress exceed the aggregate of cumulative costs incurred and cumulative gross profits (or losses) recognized, the surplus is shown as receipts in advance.

For participation in public infrastructure construction using the Build-Operate-Transfer (BOT) model, the Group recognizes revenue and expenses associated with the construction services rendered during the construction period in accordance with *Accounting Standard for Business Enterprises No.15 – Construction Contracts*. When the construction of the public infrastructure is completed, the Group recognizes revenue and expenses associated with subsequent operations and services in accordance with *Accounting Standard for Business Enterprises No. 14 – Revenue*.

24. Governmental Subsidy

24.1 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.

24.2 Judgment basis and accountant treatment of government subsidy related to income

The Group receives government subsidies including subsidies for Core Electronic Devices, High-end Universal Chip and Basic Software Product Projects, Value-Added-Tax rebate (VAT rebate), subsidies for special projects, and tax refund¹⁻

etc., which are not used for constructions and forms long-term assets in other ways, and therefore are categorized as government subsidy related to income.

For a government grant related to income, for example subsidy for Core Electronic Devices, High-end Universal Chip and Basic Software Product Projects, since 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.

25. Deferred Income Tax Assets / Deferred Income Tax Liabilities

The income tax expenses include current income tax and deferred income tax.

25.1. 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.

25.2 Deferred Income Tax Assets and Deferred Income 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.

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.

25.3 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.

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.

26. Lease

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

26.1 Accounting treatment of operating Lease

26.1.1 The Group as lessee under operating leases

Operating lease payments are recognized on a straight-line basis over the term of the relevant lease, and are either included in the cost of related asset or charged to profit or loss for the period. Initial direct costs incurred are charged to profit or loss for the period. Contingent rents are charged to profit or loss in the period in which they are actually incurred.

26.1.2 The Group as lessor under operating leases

Rental income from operating leases is recognized in profit or loss on a straight-line basis over the term of the relevant lease. Initial direct costs with more than an insignificant amount are capitalized when incurred, and are recognized in profit or loss on the same basis as rental income over the lease term. Other initial direct costs with an insignificant amount are

charged to profit or loss in the period in which they are incurred. Contingent rents are charged to profit or loss in the period in which they actually arise.

26.2. Accounting treatment of the finance lease

26.2.1 The Group as lessee under finance leases

For relevant accounting treatment, refer to Note (III) *14.3 Identification basis, valuation and depreciation method of finance lease of fixed assets*.

Unrecognized finance charges are recognized as finance charge for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred. The net amount of minimum lease payments less unrecognized finance charges is separated into long-term liabilities and the portion of long-term liabilities due within one year for presentation.

26.2.2 The Group as lessor under finance leases

At the commencement of the lease term, the aggregate of the minimum lease receivable at the inception of the lease and the initial direct costs is recognized as a finance lease receivable, and the unguaranteed residual value is recorded at the same time. The difference between the aggregate of the minimum lease receivable, the initial direct costs and the unguaranteed residual value, and the aggregate of their present values is recognized as unearned finance income.

Unearned finance income is recognized as finance income for the period using the effective interest method over the lease term. Contingent rents are credited to profit or loss in the period in which they are actually incurred.

The net amount of financial lease receivables less unearned finance income is separated into long-term debts receivable and the portion of long-term debts receivable due within one year for presentation.

27. 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

Inventories are measured at the lower of cost and net realizable value. For raw materials, the latest actual purchase price is used as the basis for determining the net realizable value; for in-process products, the estimated selling price of the finished product minus the estimated cost to be incurred to completion, estimated sales expenses and related taxes is used as the basis for determining the net realizable value; for the finished product, the estimated selling price minus the estimated sales expenses and related taxes is used as the basis for determining the net realizable value. The Group will regularly conduct a comprehensive stocktaking to review the 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 receivables

The Group uses the impairment matrix to determine the provision for expected credit loss of accounts receivable. By considering the historical loss rates, the Group will determine the proportions in the provision for loss for the accounts receivable with similar risk characteristics. The impairment matrix is determined based on the Group's historical overdue ratio and default situation, and considers reasonable and forward-looking industry information. As of December 31st 2019, the Group had reassessed the observable proportion of historical overdue assets while taking into account the changes of prospective 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 accounts receivable 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 an estimation made by the Group 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.

Deferred income tax assets and deferred income tax liabilities

Deferred income tax assets and deferred income tax liabilities are measured at the applicable income tax rate during the period when the asset is expected to be recovered or the debt is 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 will 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).

28. Significant alternation in accounting policy and accounting estimations

28.1 Significant changes in accounting policies

Changes in accounting policies and reasons	Approval Procedures	Notes
<p><u>New Standards for Financial Instruments</u></p> <p>The Group has implemented the <i>Accounting Standards for Business Enterprise No. 22 – Recognition and Measurement of Financial Instruments</i>, the <i>Accounting Standards for Business Enterprise No. 23 – Transfer of Financial Assets</i>, the <i>Accounting Standards for Business Enterprise No. 24 – Hedging Accounting</i> and the <i>Accounting Standards for Business Enterprise No. 37 – Presentation of Financial Instruments</i> (hereinafter referred to as “New Standards for Financial Instruments”) revised in 2017 by the Ministry of Finance, effective from January 1st 2019.</p> <p>In the classification and measurement of financial assets, the New Standards for Financial Instruments require the classification of financial assets based on their characteristics of contractual cash flows and the business models for management of such assets by enterprises into the three main categories of “financial assets measured at amortized cost”, “financial assets at fair value through other comprehensive income” and “financial assets at fair value through profit and loss of current period”, and cancel the categories of loans and receivables, investment held to maturity and available-for-sale financial assets in the former standards for financial instruments. Investments in equity instruments are generally classified into financial assets at fair value through profit and loss of current period, and investments in equity instruments for non-trading purpose are also allowed to be designated as financial assets at fair value through other comprehensive income, but such designation is irrevocable, and at the time of disposal, the accumulated amount of fair value changes previously included in other comprehensive income must not be transferred to profit and loss of current period.</p> <p>In respect of value impairment, the New Standards for Financial Instruments relating to impairment requirements are applicable to financial assets measured at amortized cost, financial assets at fair value through other comprehensive income, receivables for financing and financial guarantee contracts. The New Standards for Financial Instruments require the adoption of the expected credit loss model to recognize the provision for credit loss for replacing the former model of credit loss occurred. The new impairment model adopts a three-stage model depending on whether credit risk of the relevant project has increased significantly after initial recognition, provision for credit loss is made according to the expected credit loss within 12 months or the expected credit loss during the entire subsisting period. The Group measures the loss provision for the accounts receivable formed by transactions regulated by the income standard based on the amount equivalent to the expected credit loss throughout the lifetime.</p> <p>Recognition and measurement of financial instruments prior to January 1st 2019 were inconsistent with the New Standards for Financial Instruments, the Group has made retrospective adjustments according to the requirements of the New Standards for Financial Instruments. The Group will not adjust the data involved in financial statements for comparison in preceding periods which are not consistent with the requirements of the New Standards for Financial Instruments. The difference between the original book value of financial instruments and the new book value on the date of implementation of the New Standards for Financial Instruments will be accounted under retained earnings or other comprehensive income on January 1st 2019. For details on the effects of adoption of the New Standards for Financial Instruments by the Group on January 1st 2019, please refer to Notes (III) 28.2.</p> <p><u>Amendments to the format of financial statements</u></p> <p>The Group prepared the 2019 Financial Statement in accordance with the <i>Notice on Amending the 2019 Annual Financial Statements of General Enterprises</i> (Accounting Council (2019) No.</p>	<p>Such alternations in accounting policy were approved by the Group at board of director general meeting.</p>	<p>None</p>

<p>6, hereinafter referred to as "Financial Accounting No. 6 Document") issued by the Ministry of Finance on April 30th 2019. Financial Accounting No. 6 Document revised the presentation items on the balance sheet and income statement, and split the "Notes Receivable and Accounts Receivable" item into "Notes Receivable" and "Accounts Receivable" and the "Notes Payable and Accounts Payable" item into "Notes Payable" and "Accounts Payable" items; it also specified or revised the contents of "Non-current Assets due Within One Year", "Deferred Income", "Other Equity Instruments", "Research and Development (R&D) Expenses", "Interest Income" under "Financial Expenses", "Other Income", "Asset Disposal Income", "Non-operating Income" and "Non-operating Expenses"; it adjusted the position of "Impairment Losses of Assets" and specified the contents of "Invested capital of other equity instrument holder". In light of the aforesaid changed items, the Group made retrospective adjustment of the comparative data of the previous year. The changes of accounting policy will not affect the consolidated net profits, the Company's net profits or owner's equity.</p> <p>Besides, as a result of the implementation of the New Financial Instrument Standards and as per <i>Notice on Amending the 2019 Annual Financial Statements of General Enterprises</i> (Accounting Council [2019] No. 6), the "interests receivable" in "other receivables" is changed to the interests that are due and receivable for the relevant financial instruments but not yet received as of balance sheet date (the interests of the financial instruments assessed by the effective interest method is included in the book balance of the financial instruments); "interests payable" in "other payables" is changed to the interests that are due and payable for the relevant financial instruments but not yet paid as of balance sheet date (the interests of the financial instruments assessed by the effective interest method is included in the book balance of the financial instruments). Based on the provisions of the New Financial Instrument Standards, no retrospective adjustment of the comparative data had been done.</p>	
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28.2. Adjustment to relevant items in financial statement at the beginning of the year of first implementation upon first implementation of the New Standards for Financial Instruments

Consolidated Balance Sheet

Unit: RMB

Consolidated Report Items	December 31 st 2018	January 1 st 2019	Adjusted amounts
Current Assets:			
Held-for-trading financial assets	-	1,860,050.59	1,860,050.59
Financial assets measured at fair value through current profit and loss	1,860,050.59	-	(1,860,050.59)
Notes receivable	2,569,445,189.92	295,598,790.07	(2,273,846,399.85)
Receivables for financing	-	2,273,846,399.85	2,273,846,399.85
Non-current Assets:			
Available-for-sale financial assets	290,966,813.00	-	(290,966,813.00)
Other non-current financial assets	-	290,966,813.00	290,966,813.00
Current Liabilities:			
Held-for-trading financial liabilities	-	290,998.43	290,998.43
Financial liabilities measured at fair value through current profit and loss	290,998.43	-	(290,998.43)

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Explanation of the adjustment of each item:
A summary of the impact of the first implementation of the new financial instrument standards on January 1th 2019:

Unit: RMB

Items	Book value as stated under the original standard December 31 st 2018	Impact of the first implementation of the new financial instrument standards			Book value as stated under the new standard January 1 st 2019
		Reclassified			
		Transfer from financial assets originally classified as loans and receivables (Note 1)	Transfer from items that originally classified as available-for-sale financial assets (Note 2)	Transfer from items that originally classified as financial assets / liabilities measured at fair value through current profit and loss (Note 3)	
Assets:					
Held-for-trading financial assets	-	-	-	1,860,050.59	1,860,050.59
Financial assets measured at fair value through current profit and loss	1,860,050.59	-	-	(1,860,050.59)	-
Notes receivable	2,569,445,189.92	(2,273,846,399.85)	-	-	295,598,790.07
Receivables for financing	-	2,273,846,399.85	-	-	2,273,846,399.85
Available-for-sale financial assets	290,966,813.00	-	(290,966,813.00)	-	-
Other non-current financial assets	-	-	290,966,813.00	-	290,966,813.00
Liabilities:					-
Held-for-trading financial liabilities	-	-	-	290,998.43	290,998.43
Financial liabilities measured at fair value through current profit and loss	290,998.43	-	-	(290,998.43)	-

Note 1: carried over from the financial assets originally classified as loans and receivables:

During liquidity management, the Group completes discount or endorsement transfer before due date of some receivable notes. Due to the fact that the Group has transferred almost all risks and benefits to the counterparties, the Group will stop recognition of the discounted or endorsed receivable notes. The business mode by which the Group manages receivable notes is aimed at both collecting contract cash flow and selling such financial asset, therefore as of January 1st 2019, the receivable notes of RMB 2,273,846,399.85 were no longer classified as "loans and receivables" financial assets and were reclassified as "financial assets at fair value through other comprehensive income" and were included in receivables. The receivable notes originally measured at amortized costs were reclassified as measured at fair value, which had little impact on the book value of the receivables items, so the Group will not adjust the retained earnings.

Note 2: carried over from the original available-for-sale financial assets:

As of January 1st 2019, the RMB 290,966,813.00 available-for-sale financial assets held by the Group were reclassified as financial assets at fair value through the current period profits or losses and were included in the other non-current financial assets. The aforesaid available-for-sale financial assets were the equity instrument investments that were not quoted in any active market and whose fair value could not be reliably measured, so these assets were measured at cost as per the original financial instrument standards in the previous period. These equity investments were measured at fair value and had little impact on the book value of the other non-current financial assets, so the Group did not adjust the retained earnings.

Note 3: carried over from the assets originally classified as financial assets/liabilities at fair value through profit or loss:

As of January 1st 2019, the RMB 1,860,050.59 derivative financial assets held by the Group were reclassified as financial assets at fair value through the current period profits or losses as per the New Financial Instrument Standards and they were included in held-for-trading financial assets; the RMB 290,998.43 derivative financial liabilities were reclassified as financial assets at fair value through profit or loss as per the New Financial Instrument Standards and were included in held-for-trading financial liabilities. The derivative financial instruments held by the Group include forward exchange contracts and foreign exchange options, not designated as hedging instruments. The gains or losses due to changes in fair value is directly included in the current period profits and losses.

Balance Sheet of Parent Company

Unit: RMB

Items on the Parent Company's report	December 31 st 2018	January 1 st 2019	Adjusted amounts
Current Aseets:			
Notes receivable	351,793,632.24	121,404,793.77	(230,388,838.47)
Receivables for financing	-	230,388,838.47	230,388,838.47
Non-current Assets:			
Available-for-sale financial assets	290,956,813.00	-	(290,956,813.00)
Other non-current financial assets	-	290,956,813.00	290,956,813.00

Explanation of the adjustment of each item:

Unit: RMB

Items	Book value as stated under the original standard December 31 st 2018	Impact of the first implementation of the new financial instrument standards		Book value as stated under the new standard January 1 st 2019
		Reclassified		
		Transfer from financial assets originally classified as loans and receivables (Note 1)	Transfer from items that originally classified as available-for-sale financial assets (Note 2)	
Assets:				
Notes receivable	351,793,632.24	(230,388,838.47)	-	121,404,793.77
Receivables for financing	-	230,388,838.47	-	230,388,838.47
Available-for-sale financial assets	290,956,813.00	-	(290,956,813.00)	-
Other non-current financial assets	-	-	290,956,813.00	290,956,813.00

Note 1: carried over from the financial assets originally classified as loans and receivables:

During liquidity management, the Company completes discount or endorsement transfer before due date of some receivable notes. Due to the fact that the Company has transferred almost all risks and benefits to the counterparties, the Company will stop recognition of the discounted or endorsed receivable notes. The business mode by which the Company manages receivable notes is aimed at both collecting contract cash flow and selling such financial asset, therefore as of January 1st 2019, the receivable notes of RMB 230,388,838.47 were no longer classified as "loans and receivables" financial assets and were reclassified as "financial assets at fair value through other comprehensive income" and were included in receivables. The receivable notes originally measured at amortized costs were reclassified as measured at fair value, which had little impact on the book value of the receivables items, so the Company will not adjust the retained earnings.

Note 2: carried over from the original available-for-sale financial assets:

As of January 1st 2019, the RMB 290,966,813.00 available-for-sale financial assets held by the Company were reclassified as financial assets at fair value through the current period profits or losses and were included in the other non-current financial assets. The aforesaid available-for-sale financial assets were the equity instrument investments that were not quoted in any active market and whose fair value could not be reliably measured, so these assets were measured at cost as per the original financial instrument standards in the previous period. These equity investments were measured at fair value and had little impact on the book value of the other non-current financial assets, so the Company did not adjust the retained earnings.

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%, 10%, 11%, 13%, 16%, 17% and simple collection rate of 5%, 3% (Note 2)
City maintenance and construction tax	Actual payable turnover tax	7%
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 First Batch of identified High-tech Enterprises of Zhejiang Province in 2017* (GuoKeHuoZi [2017] No. 201) issued by the leading group office of Zhejiang high-tech enterprise identification management work on December 15th 2017, the Company was identified as the high-tech enterprise with a valid term of 3 years, from 2017 to 2019. Therefore, the Company's enterprise income tax rate is 15% for the current reporting period. (2018:15%)

According to 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 Ke [2013] No. 2458), the Company was recognized as a national key software enterprise in 2013. According to the *Notice on Issues Related to Enterprise Income Tax Preferential Policies for Software and Integrated Circuit Industry* (Cai Shui [2016] No. 49), the Company was approved by the tax authorities in August 2019 to pay the 2018 annual corporate income tax at the rate of 10%. As of the approval date of this report, the Company's 2019 income tax concessions have not been verified or filed; therefore, the Company's 2019 corporate income tax is still paid at the rate of 15%. (2018:10%)

- (2) According to the *Notice on Publishing the List of Second Batch of Proposed Identified High-tech Enterprises of Shanghai in 2017* issued by Shanghai High-tech Enterprise Identification Office, the Company's wholly-owned subsidiary, Shanghai Goldway Intelligent Traffic System Ltd. (Shanghai Goldway) was identified as the high-tech enterprise with a valid term of 3 years, from 2017 to 2019. Therefore, its corporate income tax is at a reduced rate of 15% this year. (2018:15%)
- (3) In accordance with the *Replies on Publishing the List of First Batch of identified High-tech Enterprises of Zhejiang Province in 2017* (GuoKeHuoZi [2017] No. 201) issued by the leading group office of Zhejiang high-tech enterprise identification management work on December 15th 2017, the Company's joint-venture subsidiary, Hangzhou Hikrobot Technology Co., Ltd. (Hangzhou Robotic Technology) were identified as the high-tech enterprises with a valid term of 3 years, from 2017 to 2019. Therefore, the enterprise income tax in the current reporting period shall be calculated and paid according to a reduced tax rate of 15%. (2018:15%)
- (4) In accordance with the *Replies on Publishing the List of First Batch of identified High-tech Enterprises of Zhejiang Province in 2017* (GuoKeHuoZi [2017] No. 201) issued by the leading group office of Zhejiang high-tech enterprise identification management work on December 15th 2017, the Company's joint-venture subsidiary, Hangzhou Ezviz Network Co., Ltd. (Ezviz Network) were identified as the high-tech enterprises with a valid term of 3 years, from 2017 to 2019. This year, Ezviz Network did not meet the requirements of high-tech enterprise certification. Therefore, this year's corporate income tax is calculated at 25%. (2018: 25%)

- (5) In accordance with Finance and Taxation [2011] No. 58 Document of Ministry of Finance, State Administration of Taxation (SAT) and General Administration of Customs, the wholly-owned subsidiaries, Chongqing Hikvision Science and Technology Co., Ltd. and Chongqing Hikvision System Technology Co., Ltd., are qualified to enjoy the west development preferential tax policy from 2011 to 2020, therefore, the enterprise income rate shall be calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period. (2018:15%)
- (6) 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 20th 2019, the Company's joint venture subsidiary, Hangzhou Fuyang Baotai Security Technology Service Ltd. (Fuyang Baotai), was recognized as a high-tech enterprise and was valid for 3 years from 2018 to 2020. Therefore, the enterprise income rate shall be calculated and paid on the basis of a reduced tax rate of 15% in the current reporting period. (2018:15%)
- (7) 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 20th 2020, the Company's wholly-owned subsidiary, Hangzhou Hikvision System Technology Ltd. (Hangzhou System), was recognized as a high-tech enterprise and was valid for 3 years from 2019 to 2022. Therefore, the enterprise income rate shall be calculated and paid on the basis of a tax rate of 15% in the current 2019 reporting year. (2018:15%)
- (8) 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 20th 2020, the Company's joint venture subsidiary, Hangzhou HikMicro Sensing Technology Ltd. (Hangzhou Hikmicro), was recognized as a high-tech enterprise and was valid for 3 years from 2019 to 2022. Therefore, Hangzhou HikMicro's income tax rate shall be calculated and paid on the basis of a tax rate of 15% in the current 2019 reporting year. (2018:25%)

According to the *Notice of State Administration of Taxation and Ministry of Finance on the Corporate Income Policy for Further Incentivizing Software Industry and Integrated Circuit Industry* (Finance and Taxation [2012] No. 27) and *Notice on Issues Related to Enterprise Income Tax Preferential Policies for Software and Integrated Circuit Industry* (Finance and Taxation [2016] No. 49), HikMicro is an integrated circuit manufacturer that was founded before December 31st 2017 and has not made profit and that produces the integrated circuit with line width <0.8 micrometers (incl.), so it is exempted from corporate income tax in the first and second years after start of profiting and pays corporate income tax at half of the 25% statutory tax rate in the third to fifth years until the preferential treatment expires. As of the approval date of this report, HikMicro had not profited in 2019.

Note 2: In accordance with the *Notice on Software Product Value-added Tax Policy* (Finance and Taxation [2011] No. 100) of Ministry of Finance and State Administration of Taxation (SAT), as for the self-developed software product sales of the Company, Hangzhou System, the Company's joint-venture subsidiaries such as EZVIZ Network, Hangzhou HikRobot Technology, Hangzhou HikAuto Software, Hangzhou Eziviz Software, Wuhan HIKStorage, and Hangzhou Hikmed Imaging, the VAT shall be calculated and paid with tax rate of 17% at first, then the portion with actual tax bearing excess 3% shall be refunded after State Administration of Taxation (SAT) reviews.

According to Finance and Tax [2018] No. 32, since May 1st 2018, taxpayers are subject to VAT taxable sales or imported goods, and the VAT rates have been adjusted from 17%, 11% and 6% to 16%, 10% and 6% respectively.

According to the State Administration of Taxation Announcement No. 39 of 2019, since April 1st 2019, taxpayers are subject to VAT taxable sales or imported goods, and the VAT rates have been adjusted from 16%, 10% and 6% to 13%, 9%, and 6%, respectively.

The Group chooses to apply a simple collection rate of 5% for part of taxable service income.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

V. Notes to items in the consolidated financial statements

1. Cash and bank balances

Item	Closing Balance			Opening Balance (Restated)		
	Foreign currency amount	Exchange rate for conversion	RMB amount	Foreign currency amount	Exchange rate for conversion	RMB amount
Cash:						
RMB	-	-	26,573.64	-	-	79,737.43
INR	2,522,598.05	0.0975	245,953.31	2,000,830.71	0.0980	196,081.41
USD	18,379.06	6.9762	128,216.03	24,087.34	6.8632	165,316.26
EUR	9,121.04	7.8155	71,285.50	9,765.86	7.8473	76,635.60
GBP	6,402.60	9.1501	58,584.43	8,927.97	8.6762	77,460.86
BRL	8,697.30	1.7312	15,056.77	8,697.30	1.7569	15,280.29
ZAR	17,028.89	0.4943	8,417.38	17,034.95	0.4735	8,066.05
RUB	13,849.47	0.1126	1,559.45	13,899.49	0.0986	1,370.49
AED	586.09	1.8992	1,113.11	585.76	1.8688	1,094.68
HKD	748.00	0.8958	670.06	697.90	0.8762	611.50
Bank balance:						
RMB	-	-	18,788,528,237.06	-	-	20,225,134,883.25
USD	961,564,878.01	6.9762	6,708,068,901.97	707,524,091.98	6.8632	4,855,879,348.05
EUR	52,283,961.33	7.8155	408,625,299.77	51,833,430.49	7.8473	406,752,479.11
INR	1,970,579,846.87	0.0975	192,131,535.07	3,438,377,221.94	0.0980	336,960,967.75
GBP	10,626,622.96	9.1501	97,234,662.71	4,918,810.45	8.6762	42,676,583.25
RUB	620,006,016.25	0.1126	69,812,677.43	534,613,774.24	0.0986	52,712,918.14
PLN	38,087,521.72	1.8324	69,791,574.80	489,691.46	1.8269	894,617.32
BRL	19,927,461.93	1.7312	34,498,422.09	8,376,095.19	1.7569	14,715,961.64
ZAR	30,300,402.08	0.4943	14,977,488.75	22,340,466.04	0.4735	10,578,210.66
AED	6,881,653.06	1.8992	13,069,635.49	7,944,928.08	1.8688	14,847,550.81
AUD	1,809,291.16	4.8843	8,837,120.83	1,821,443.30	4.8250	8,788,463.91
KRW	1,047,156,352.79	0.0060	6,316,447.12	845,397,940.00	0.0061	5,178,062.38
PEN	2,961,257.66	2.0983	6,213,606.95	-	-	-
MYR	2,902,467.91	1.6986	4,930,131.99	337,537.88	1.6479	556,228.67
SGD	733,721.55	5.1739	3,796,201.94	102,603.21	5.0062	513,652.19
THB	15,437,877.88	0.2328	3,593,937.97	13,527,107.82	0.2110	2,854,219.75
IDR	6,911,687,584.70	0.0005	3,468,284.83	4,324,868,647.85	0.0005	2,037,445.62
PHP	951,599.13	0.1374	130,749.72	7,098,709.59	0.1304	925,671.73
COP	1,118,447,390.03	0.0021	2,369,766.33	441,460,035.46	0.0021	921,371.24
MXN	6,193,268.73	0.3684	2,281,600.20	-	-	-
KZT	95,820,928.57	0.0182	1,743,940.90	25,306,904.92	0.0183	463,116.36
RON	1,000,000.00	1.6336	1,633,600.00	-	-	-
VND	5,105,443,812.38	0.0003	1,534,696.41	2,400,000,000.00	0.0003	706,800.00
NZD	299,760.04	4.6973	1,408,062.84	77,267.45	4.5954	355,074.84
ILS	389,225.72	2.0142	783,978.45	-	-	-
UZS	176,266,816.82	0.0007	129,133.07	330,724,362.57	0.0008	271,094.76
HKD	414,424.94	0.8958	371,241.86	1,837,365.44	0.8762	1,609,899.60
CAD	55,723.62	5.3421	297,681.15	828,274.50	5.0381	4,172,929.76
CZK	827,767.54	0.3071	254,207.41	245,451.93	0.3029	74,347.39
TRY	213,239.57	1.1729	250,108.69	371.19	1.2962	481.14
QAR	120,808.09	1.9119	230,972.99	92,830.45	1.8378	170,603.80
KES	1,892,762.74	0.0687	130,032.80	923,936.07	0.0671	61,996.11
HUF	2,310,411.27	0.0236	54,548.81	2,372,916.62	0.0244	57,888.25

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	Closing Balance			Opening Balance (Restated)		
	Foreign currency amount	Exchange rate for conversion	RMB amount	Foreign currency amount	Exchange rate for conversion	RMB amount
PKR	221,503.56	0.0449	9,945.51	-	-	-
JPY	-	-	-	407.98	0.0619	25.25
Other currency funds:						
RMB	-	-	552,442,631.48	-	-	530,958,544.17
USD	9,370,708.66	6.9762	65,371,937.73	5,130,938.50	6.8632	35,214,593.87
EUR	601,625.37	7.8155	4,702,003.07	140,937.52	7.8473	1,105,979.01
GBP	67,710.77	9.1501	619,560.32	-	-	-
BRL	271,326.91	1.7312	469,721.15	498,949.67	1.7569	876,604.67
NZD	56,516.00	4.6973	265,472.61	-	-	-
INR	120,305.95	0.0975	11,729.83	119,281.00	0.0980	11,689.54
ZAR	-	-	-	28,499.20	0.4735	13,494.37
Total			27,071,948,919.78			26,559,675,452.93
Including: deposited in overseas banks			1,045,878,239.66			1,071,979,704.80

Details of other currency funds:

Item	Closing Balance			Opening Balance		
	Foreign currency amount	Exchange rate for conversion	RMB amount	Foreign currency amount	Exchange rate for conversion	RMB amount
Capitals with limitations:						
Bank acceptance bill	-	-	121,763,423.06	-	-	52,522,279.43
Deposits for letter of guarantee	-	-	60,758,739.37	-	-	41,428,996.22
Deposits for letter of Credit in BRL	271,326.91	1.7312	469,721.15	498,949.67	1.7569	876,604.67
Tax Operation Margin for India	120,306.05	0.0975	11,729.83	119,281.00	0.0980	11,689.54
Deposits for letter of Credit in RMB	-	-	-	-	-	60,199,342.63
Deposits for letter of Credit in EUR	-	-	-	137,209.86	7.8473	1,076,726.94
Deposits for letter of Credit in USD	-	-	-	5,133.88	6.8632	35,234.78
Other security deposit	-	-	505,730.42	-	-	504,195.08
Other capitals with limitations	-	-	372,771,567.55	-	-	372,008,649.75
Subtotal			556,280,911.38			528,663,719.04
Capitals without limitations:						
Deposit in Alipay, Tenpay, etc.	-	-	65,519,585.97	-	-	4,280,539.59
Other currency funds in USD	298,523.39	6.9762	2,082,558.84	5,127,923.38	6.8632	35,193,900.56
Other currency funds in ZAR	-	-	-	28,499.20	0.4735	13,494.37
Other currency funds in EUR	-	-	-	3,727.66	7.8473	29,252.07
Subtotal			67,602,144.81			39,517,186.59
Total			623,883,056.19			568,180,905.63

2. Held-for-trading financial assets

Unit: RMB

Item	Closing Balance	Opening Balance
Financial assets measured at fair value through current gain and loss	181.76	1,860,050.59
Including: derivative financial assets	181.76	1,860,050.59
Total	181.76	1,860,050.59

Derivative financial assets, including forward foreign exchange contracts, currency swaps, and foreign exchange option contracts that are not designated as hedging instruments, and gains or losses arising from changes in fair value are recognised directly in current profit or loss.

3. Notes receivable

3.1 Categories of notes receivable

Unit: RMB

Category	Closing Balance	Opening Balance
Bank acceptance bill	696,453,713.94	-
Commercial acceptance bill	276,783,075.08	295,598,790.07
Total	973,236,789.02	295,598,790.07

3.2 The pledged notes receivable by the Group at the closing of the current reporting period

Unit: RMB

Category	Pledged amount at the end of the current reporting period
Bank acceptance bill	3,454,753.01
Total	3,454,753.01

3.3 Notes receivable endorsed by the Group but not yet due at the balance sheet day

Unit: RMB

Category	Derecognized amount by December 31 st 2019	Amount not derecognized by December 31 st 2019
Bank acceptance bill Note (V)-28.3	-	329,309,522.17
Total	-	329,309,522.17

Note: Transfer of financial assets

As of December 31th 2019, the Group gave RMB 329,309,522.17 (2018: RMB 94,097,879.36) undued 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) 28.3.

3.4 As of December 31st 2019, the Group transferred the defaulted notes receivable into accounts receivable.

Unit: RMB

Category	Amounts transferred into accounts receivable by December 31 st 2019
Bank acceptance bill	233,400,000.00
Total	233,400,000.00

3.5 The Group believes that the acceptors of the bank acceptance bills and commercial acceptance bills held by the Group have a high credit rating and there is no significant credit risk, so no loss provision is made.

4. Accounts Receivable

4.1 Disclosure by aging

Unit: RMB

Item	Closing Balance		
	Accounts receivable	Bad debt provision	Proportion (%)
Not overdue	13,883,024,166.77	62,378,767.07	0.45
Within 1 year after the overdue	6,925,070,235.21	425,516,820.36	6.14
1-2 years after the overdue	1,333,460,975.05	466,858,499.60	35.01
2-3 years after the overdue	382,722,637.19	274,378,672.18	71.69
3-4 years after the overdue	122,304,521.49	109,522,576.22	89.55

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	Closing Balance		
	Accounts receivable	Bad debt provision	Proportion (%)
Over 4 years after the overdue	93,844,102.54	93,844,102.54	100.00
Subtotal	22,740,426,638.25	1,432,499,437.97	6.30

4.2 Classification and disclosure of by bad debt provision methods

Unit: RMB

Category	Closing Balance				
	Carrying amount		Bad debt provision		Book Value
	Amount	Proportion (%)	Amount	Proportion (%)	Amount
Provision for bad debts on a single basis	-	-	-	-	-
Provision for bad debts by portfolios	22,740,426,638.25	100.00	1,432,499,437.97	6.30	21,307,927,200.28
Total	22,740,426,638.25	100.00	1,432,499,437.97	6.30	21,307,927,200.28
Category	Beginning Balance				
	Carrying amount		Bad debt provision		Book Value
	Amount	Proportion (%)	Amount	Proportion (%)	Amount
Provision for bad debts on a single basis	-	-	-	-	-
Provision for bad debts by portfolios	17,878,831,244.30	100.00	1,259,389,963.12	7.04	16,619,441,281.18
Total	17,878,831,244.30	100.00	1,259,389,963.12	7.04	16,619,441,281.18

Provision for bad debts by portfolios

Unit: RMB

Customer	Closing balance		
	Carrying amount	Bad debt provision	Proportion (%)
Portfolio A	3,691,656,308.59	73,233,901.26	1.98
Portfolio B	13,783,886,973.45	1,204,204,754.02	8.74
Portfolio C	5,264,883,356.21	155,060,782.69	2.95
Total	22,740,426,638.25	1,432,499,437.97	6.30

Description of accounts receivable for bad debt provision by portfolios

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 types of business 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.

As of December 31st 2019 and January 1st 2019, the credit risk and expected credit losses of accounts receivable from portfolio A are as follows:

Age	Closing balance				Beginning balance			
	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)
Not overdue	0.02	3,012,605,457.25	597,158.52	3,012,008,298.73	0.02	2,214,641,313.02	495,123.73	2,214,146,189.29
Within 1 year after the overdue	6.11	624,571,039.13	38,185,783.11	586,385,256.02	0.94	595,949,030.15	5,609,712.65	590,339,317.50
1-2 years after the overdue	52.96	42,580,562.72	22,551,710.14	20,028,852.58	51.57	25,702,640.73	13,254,324.49	12,448,316.24
2-3 years after the overdue	100.00	10,567,300.34	10,567,300.34	-	100.00	734,171.72	734,171.72	-
3-4 years after the overdue	100.00	361,945.19	361,945.19	-	100.00	2,219,552.46	2,219,552.46	-
Over 4 years after the overdue	100.00	970,003.96	970,003.96	-	100.00	935,460.71	935,460.71	-
Total	1.98	3,691,656,308.59	73,233,901.26	3,618,422,407.33	0.82	2,840,182,168.79	23,248,345.76	2,816,933,823.03

As of December 31st 2019 and January 1st 2019, the credit risk and expected credit losses of accounts receivable from portfolio B are as follows:

Age	Closing balance				Beginning balance			
	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)
Not overdue	0.79	6,328,262,502.43	50,248,953.36	6,278,013,549.07	0.80	3,694,711,482.57	29,563,253.80	3,665,148,228.77
Within 1 year after the overdue	5.56	5,693,144,197.77	316,684,963.73	5,376,459,234.04	5.41	5,243,601,841.04	283,612,815.06	4,959,989,025.98
1-2 years after the overdue	33.24	1,204,463,575.15	400,380,049.11	804,083,526.04	24.23	1,155,732,341.13	280,029,650.29	875,702,690.84
2-3 years after the overdue	69.87	359,638,419.88	251,294,454.87	108,343,965.01	65.04	333,435,912.72	216,876,428.82	116,559,483.90
3-4 years after the overdue	88.54	111,524,139.09	98,742,193.82	12,781,945.27	86.22	212,124,156.03	182,899,482.95	29,224,673.08
Over 4 years after the overdue	100.00	86,854,139.13	86,854,139.13	-	100.00	131,813,671.22	131,813,671.22	-
Total	8.74	13,783,886,973.45	1,204,204,754.02	12,579,682,219.43	10.44	10,771,419,404.71	1,124,795,302.14	9,646,624,102.57

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 For the reporting period from January 1st 2019 to December 31st 2019

 As of December 31st 2019 and January 1st 2019, the credit risk and expected credit losses of accounts receivable from portfolio C are as follows:

Age	Closing balance				Beginning balance			
	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)	Estimated average loss rate (%)	Carrying value (RMB)	Bad debt provision (RMB)	Book value (RMB)
Not overdue	0.25	4,542,156,207.09	11,532,655.19	4,530,623,551.90	0.25	3,585,534,235.10	8,956,015.87	3,576,578,219.23
Within 1 year after the overdue	11.63	607,354,998.31	70,646,073.52	536,708,924.79	11.45	644,707,255.43	73,846,118.36	570,861,137.07
1-2 years after the overdue	50.83	86,416,837.18	43,926,740.35	42,490,096.83	49.18	16,615,994.95	8,171,995.67	8,443,999.28
2-3 years after the overdue	100	12,516,916.97	12,516,916.97	-	100.00	11,979,265.68	11,979,265.68	-
3-4 years after the overdue	100	10,418,437.21	10,418,437.21	-	100.00	7,925,477.55	7,925,477.55	-
Over 4 years after the overdue	100	6,019,959.45	6,019,959.45	-	100.00	467,442.09	467,442.09	-
Total	2.95	5,264,883,356.21	155,060,782.69	5,109,822,573.52	2.61	4,267,229,670.80	111,346,315.22	4,155,883,355.58

4.3 Bad det provision

Provision, re-collection, or reverse of the bad debt allowance in the current reporting period

Unit: RMB

Bed debt provision	Expected credit losses for the entire duration (No credit impairment occurred)	Expected credit losses for the entire duration (Credit impairment has occurred)	Total
Balance on January 1 st 2019	402,083,039.47	857,306,923.65	1,259,389,963.12
The book balance of accounts receivable on January 1 st 2019 is in the current reporting period			
-- Transfer into credit impairment that has occurred	(124,882,400.91)	124,882,400.91	-
Provision during the current reporting period	202,855,091.00	-	202,855,091.00
Derecognition of financial assets (including direct write-downs) and transfer out	-	(37,585,474.02)	(37,585,474.02)
Other changes	7,839,857.87	-	7,839,857.87
Balance on December 31 st 2019	487,895,587.43	944,603,850.54	1,432,499,437.97

In the current reporting period, the Group recorded a bad debt allowance of RMB 202,855,091.00, including an increase of bad debt allowance amount of RMB 7,839,857.87 due to conversion of financial reports prepared in foreign currency; no reversal of bad debts during the current reporting period.

Actual write-off of account receivable during current reporting period:

In the current reporting period, the amount of actual accounts receivable write-off is RMB 38,078,073.02, and RMB 492,599.00 was recollected after writing-off.

4.4 Top five debtors based on corresponding closing balance of account receivables

Unit: RMB

Name of the Party	Relationship with the Company	Book value balance of accounts receivable	Closing balance for bad debt provision	Proportion (%)
Related party A	Related Party	525,556,063.34	41,363,245.59	2.27
Company A	Third party	254,869,313.93	653,316.99	1.19
Company B	Third party	162,150,980.47	446,954.88	0.76
Company C	Third party	102,489,174.15	8,828,723.30	0.44
Company D	Third party	68,662,039.94	6,693,925.99	0.29
Total		1,113,727,571.83	57,986,166.75	4.95

4.5 As of December 31st 2019, there is no termination of accounts receivable booking due to transfer of a financial asset.

4.6 As of December 31st 2019, 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

5.1 Receivables for financing by categories

Unit: RMB

Item	Closing Balance	Opening Balance
Bank acceptance bill	1,257,385,053.02	2,273,846,399.85
Total-	1,257,385,053.02	2,273,846,399.85

5.2 At the end of the reporting period, the Group's pledged receivables for financing

Unit: RMB

Item	Pledged amounts at the end of the reporting period
Bank acceptance bill	272,663,613.54
Total-	272,663,613.54

5.3 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 at December 31 st 2019 (note)	Amount not derecognized at December 31 st 2019
Bank acceptance bill	1,601,320,610.86	-
Total-	1,601,320,610.86	-

Note:

As of December 31st 2019, the Group has discounted the RMB 1,601,320,610.86 (2018: RMB 2,370,887,528.74) undue bank acceptance to banks or other financial institutions or endorsed them to suppliers. According to the discount agreement and applicable laws, if the issuing bank does not fulfill the payment, the holder of the receivable notes has the right to claim for recovery from the Group. The Group Management believes that the Group has transferred such receivable notes and the vast majority of the risks and benefits related to such receivable notes and ownership, therefore the Group could stop recognizing the book value of these receivable notes and relevant payables when the receivable notes are discount^{ed}

or endorsed to the bank or suppliers. The maximum risk exposure of the Group continues to be involved in for these endorsed or discounted receivable notes is equivalent to their book value. The Group Management believes that the receivable notes which the Group has stopped recognizing but continues to be involved in do not have significant fair value.

5.4 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. Prepayments

6.1 Prepayments by aging analysis

Unit: RMB

Aging	Closing Balance		Opening Balance	
	Carrying amount	Proportion (%)	Carrying amount	Proportion (%)
Within 1 year	288,005,514.00	93.00	371,339,135.76	80.67
1-2 years	15,571,671.02	5.03	87,446,891.75	19.00
2-3 years	5,931,322.30	1.92	1,219,965.56	0.27
Over 3 years	177,226.00	0.05	298,226.58	0.06
Total	309,685,733.32	100.00	460,304,219.65	100.00

6.2 Closing balances of top five prepayments parties

As of December 31st 2019, the Group's top five balances of prepayments amounted to RMB 90,415,413.15, accounting for 29.20% of total closing balance of prepayments.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

7. Other receivables

7.1 Summary of other receivables

Unit: RMB

	Closing Balance	Opening Balance (restated)
Other receivables	555,246,545.48	586,594,721.43
Total	555,246,545.48	586,594,721.43

7.2 Other receivables

(1) Other receivables by aging

Unit: RMB

Item	Closing Balance		
	Other receivables	Bad debt provision	Proportion (%)
Not overdue	403,835,258.92	1,212,041.34	0.30
Within 1 year after the overdue	95,161,160.07	4,892,634.45	5.14
1-2 years after the overdue	45,420,674.00	4,831,692.03	10.64
2-3 years after the overdue	28,604,782.86	8,935,352.32	31.24
3-4 years after the overdue	4,312,671.82	2,216,282.05	51.39
Over 4 years after the overdue	3,892,644.00	3,892,644.00	100.00
Subtotal	581,227,191.67	25,980,646.19	4.47

(2) Other receivables by nature of the payment

Item	Closing Balance	Opening Balance (restated)
Temporary payments for receivables	289,318,820.48	354,225,077.10
Guarantee deposits	189,230,714.51	185,672,767.89
Tax rebates	63,470,351.07	30,189,439.56
Investment intention fund	2,968,783.82	20,000,000.00
Others	36,238,521.79	66,275,172.78
Total	581,227,191.67	656,362,457.33

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(3) Provision for bad debts

Unit: RMB

Category	Opening balance (restated)	Amount of changes in the current reporting period			Difference resulted from foreign currency statements Conversion	Closing balance
		Provision	Recollect or reverse	Resell or write off		
Other receivables	69,767,735.90	-	44,488,527.79	-	701,438.08	25,980,646.19
Total	69,767,735.90	-	44,488,527.79	-	701,438.08	25,980,646.19

Changes in bad debt provisions for other receivables

Unit: RMB

bed debts allowance	Stage 1	Stage 2	Stage 3	Total
	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)	
Balance on January 1 st 2019	18,073,466.44	21,735,040.33	29,959,229.13	69,767,735.90
Reversal during the current reporting period	(17,562,863.18)	(16,842,405.88)	(10,083,258.73)	(44,488,527.79)
Other changes	701,438.08	-	-	701,438.08
Balance on December 31 st 2019	1,212,041.34	4,892,634.45	19,875,970.40	25,980,646.19

(4) There is no actual write-off of other receivables during the current reporting period.

(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 bad debt provision
Third party A	Third party	Temporary payments for receivables	15,111,760.00	Not overdue	2.70	95,204.09
Third party B	Third party	Guarantee deposits	8,895,785.00	Within 4 years after overdue	1.53	403,654.94
Third party C	Third party	Guarantee deposits	6,985,642.16	Within 1 year after overdue	1.19	388,401.70
Third party D	Third party	Guarantee deposits	6,158,813.80	Within 1 years after overdue	0.75	1,971,436.30
Third party E	Third party	Temporary payments for receivables	5,996,878.80	Within 3 years after overdue	0.73	1,919,600.90
Total			43,148,879.76		6.91	4,778,297.93

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

- (6) As of December 31st 2019, the Group does not have other receivables related to government subsidies.
- (7) As of December 31st 2019, there is no termination of other receivables booking due to transfer of a financial asset.
- (8) As of December 31st 2019, the Group has no assets/liabilities booked due to any transferred other receivable that the Group continues to be involved in.

8. Inventories

(1) Categories of inventories

Unit: RMB

Category	Closing Balance			Opening Balance		
	Carrying amount	Provision for decline in value of inventories	Book value	Carrying amount	Provision for decline in value of inventories	Book value
Raw materials	4,900,229,585.04	36,718,275.26	4,863,511,309.78	1,558,519,309.65	4,736,249.82	1,553,783,059.83
Work-in-progress	280,637,734.52	-	280,637,734.52	415,593,344.57	-	415,593,344.57
Finished goods	6,017,008,257.36	405,129,709.25	5,611,878,548.11	3,868,735,444.19	316,870,213.78	3,551,865,230.41
Completed but unsettled assets formed by construction contracts	511,959,250.70	-	511,959,250.70	203,862,518.60	-	203,862,518.60
Total	11,709,834,827.62	441,847,984.51	11,267,986,843.11	6,046,710,617.01	321,606,463.60	5,725,104,153.41

(2) Provision for decline in value of inventories

Unit: RMB

Category	Opening balance	Increase in the current reporting period	Decrease in the current reporting period		Effect of foreign currency exchange difference	Closing Balance
			Reversals	Write-off		
Raw materials	4,736,249.82	39,361,473.79	-	7,379,448.35	-	36,718,275.26
Finished goods	316,870,213.78	158,529,837.48	-	72,286,203.95	2,015,861.94	405,129,709.25
Subtotal	321,606,463.60	197,891,311.27	-	79,665,652.30	2,015,861.94	441,847,984.51

The write-offs of provision for inventories in the current reporting period are due to use or sale of inventories.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(3) Completed but unsettled assets formed by construction contracts at December 31st 2019

Unit: RMB

Item	Amount
Accumulated occurred costs of construction	4,105,738,847.21
Accumulated booked gross profit margin	353,958,485.57
Less: estimated losses	-
Settled amounts	3,196,280,342.64
Completed but unsettled assets formed by construction contracts	1,263,416,990.14
Including: booked in other non-current assets (Note (V) 20)	751,457,739.44
Booked in inventories	511,959,250.70

9. Non-current assets due within one year

Unit: RMB

Item	Closing Balance	Opening Balance
Long-term receivables due within one year (Note (V) 11)	528,469,701.75	380,795,020.47
Total	528,469,701.75	380,795,020.47

10. Other current assets

Unit: RMB

Item	Closing balance	Opening balance
Deductible VAT input	616,239,842.99	608,169,769.69
Prepaid corporate income tax	80,344,406.42	31,542,797.57
Prepaid tariff	16,702,795.64	12,880,594.90
Others	41,169,776.67	78,126,967.43
Total	754,456,821.72	730,720,129.59

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

11. Long-term receivables

(1) Details of long-term receivables

Unit: RMB

Item	Closing balance			Opening balance			Range of discount rate
	Carrying amount	Provision for decline in value	Book value	Carrying amount	Provision for decline in value	Book value	
Financial leases receivables	361,658,264.68	16,387,726.08	345,270,538.60	100,574,420.65	-	100,574,420.65	0.54%-6.05%
Including: Unrealized income from financing	17,093,256.64	-	17,093,256.64	4,218,121.83	-	4,218,121.83	-
Installments for selling goods	1,612,991,061.26	47,255,136.89	1,565,735,924.37	985,732,967.99	-	985,732,967.99	4.24%-6.45%
Including: Unrealized income from financing	399,492,567.10	-	399,492,567.10	167,871,990.88	-	167,871,990.88	-
Less: Non-current assets due within one year (Note (V) 9)	580,682,032.92	52,212,331.17	528,469,701.75	380,795,020.47	-	380,795,020.47	-
Total	1,393,967,293.02	11,430,531.80	1,382,536,761.22	705,512,368.17	-	705,512,368.17	-

(2) Bad debt provision

As part of the Group's credit risk management, 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. There are a large number of customers and have 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 2019, the credit risk and expected credit losses of long-term receivables of these customers are as follows:

Unit: RMB

Age	Closing balance		
	Amounts	Bad debt provision	Estimated average loss rate (%)
Not overdue	1,704,687,388.74	13,978,436.59	0.82
Within 1 year after the overdue	193,232,814.09	10,724,421.18	5.55
1-2 years after the overdue	41,870,017.58	10,413,073.37	24.87
2-3 years after the overdue	13,985,763.77	9,335,497.32	66.75
3-4 years after the overdue	14,599,889.33	12,917,982.08	88.48

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Over 4 years after the overdue	6,273,452.43	6,273,452.43	100
Total	1,974,649,325.94	63,642,862.97	3.22

The changes in the Group's long-term receivables' expected credit loss provision for 2019 are as follows:

Unit: RMB

Bed debt provision	Stage 1	Stage 2	Stage 3	Total
	Expected credit losses in the next 12 months	Expected credit losses for the entire duration (No credit impairment occurred)	Expected credit losses for the entire duration (Credit impairment has occurred)	
Balance on January 1 st 2019	-	-	-	-
Provision during the current reporting period	13,978,436.59	10,724,421.18	38,940,005.20	63,642,862.97
Balance on December 31 st 2019	13,978,436.59	10,724,421.18	38,940,005.20	63,642,862.97

(3) As of December 31st 2019, there is no termination of long-term receivables booking due to transfer of a financial asset.

(4) As of December 31st 2019, the Group has no assets/liabilities booked due to any transferred long-term receivable that the Group continue to be involved in.

12. Long-term equity investment

Unit: RMB

The invested entity	Opening Balance	Increase/Decrease in the current reporting period								Closing Balance	Closing balance for impairment provision
		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		
1. Joint venture companies											
Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.) (Note 1)	-	50,000,000.00	-	-	-	-	-	-	-	50,000,000.00	-

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 For the reporting period from January 1st 2019 to December 31st 2019

The invested entity	Opening Balance	Increase/Decrease in the current reporting period								Closing Balance	Closing balance for impairment provision
		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		
Daishan Hailai Yunzhi Technology Ltd. (Note 2)	-	13,320,000.00	-	-	-	-	-	-	-	13,320,000.00	-
Subtotal	-	63,320,000.00	-	-	-	-	-	-	-	63,320,000.00	-
2. Associated Companies											
Wuhu Sensor Technology Ltd.	41,771,440.45	-	-	6,649,526.01	-	-	-	-	-	48,420,966.46	-
Maxio Technology (Hangzhou) Ltd.	106,651,173.63	-	-	3,278,558.46	-	-	-	-	-	109,929,732.09	-
Zhiguang Hailian Big Data Technology Ltd.	10,000,000.00	-	-	(1,315,140.73)	-	-	-	-	-	8,684,859.27	-
Sanmenxia Xiaoyun Vision Technology Ltd.	4,879,230.48	-	-	(562,073.30)	-	-	-	-	-	4,317,157.18	-
Jiixin HaiShi JiaAn Zhicheng Technology Ltd. (Note 3)	-	8,000,000.00	-	(300,988.80)	-	-	-	-	-	7,699,011.20	-
Qinghai Qingtang Big Data Ltd. (Note 4)	-	9,800,000.00	-	(6,404.71)	-	-	-	-	-	9,793,595.29	-
Subtotal	163,301,844.56	17,800,000.00	-	7,743,476.93	-	-	-	-	-	188,845,321.49	-
Total	163,301,844.56	81,120,000.00	-	7,743,476.93	-	-	-	-	-	252,165,321.49	-

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Note 1: As approved according to the Proposal on Investment in and Establishment of Industrial Investment Fund Partnership and the Related Transactions passed by the 12th Conference of the 4th Board of Director held on October 18th 2019 and the Proposal on Adjusting Some of the Fund Providers of Hangzhou Haikang Intelligent Industrial Investment Fund Partnership (L.P.) passed by 13th Conference of the 4th Board of Director held on December 9th 2019, the Group and the CET Fund Management (Tianjin) Ltd. (CET Management), Hangzhou High-tech Venture Capital Ltd. (Hangzhou High-tech), CET(Tianjin)Investment Management Partnership (L.P.) (CET Partnership) and CETHIK Group Ltd. (CETHIK) signed the Partnership Agreement for Hangzhou Hikvision Intelligent Industrial Equity Investment Fund Partnership (L.P.) and, on December 10th 2019, founded the Hangzhou Haikang Intelligent Industrial Equity Investment Fund Partnership (L.P.) (Haikang Intelligent Fund) under joint contribution. Haikang Intelligent Fund is a limited partnership, with subscribed capital contribution of RMB 1,000,010,000, and completed registration at Asset Management Association of China (AMAC) on February 5th 2020. CET Management as the fund manager and the general partner contributes RMB 10,000 and holds 0.0010% shares. The Group, Hangzhou High-tech, CET Partnership and CETHIK, as limited partners, have respectively contributed RMB 600 million, RMB 200 million, RMB 100 million and RMB 100 million in currency and their shareholding ratios are respectively 59.9994%, 19.9998%, 9.9999% and 9.9999%. As of the end of the year, the Group has paid in RMB 50.00 million. Over half of the representatives of the Investment Decision Committee are assigned by the Company and the related party CET Partnership has one-vote veto power over any resolution of the Investment Decision Committee of Haikang Intelligent Fund, therefore the Company and the related party CET Partnership jointly control Haikang Intelligent Fund.

Note 2: The Group and the independent third party Penglai National Assets Investment Group Ltd. (PNAI) of Zhoushan Archipelago New Area have signed the agreement for jointly establishing the Daishan Hailai Yunzhi Technology Ltd. (Daishan Hailai). The Group contributes RMB 13,320,000, which has been paid in as of the end of the year, and controls 66.6% of equity, which is commensurate with the Group's voting power in the board of shareholders of Daishan Hailai. According to the Articles of Association of Daishan Hailai, any issues related to the company's development strategy and long-term planning are subject to approval of over 2/3 of the voting members of the board of shareholders. The board of directors of Daishan Hailai consists of 5 directors, 3 of whom are assigned by the Group. According to the Articles of Association of Daishan Hailai, any major issues related to operation decisions are subject to approval of over 2/3 of the members of the board of directors. Therefore the Group and PNAI jointly control Daishan Hailai.

Note 3: The Group and the independent third party Jiaxing Urban Investment and Development Group Ltd. have signed the agreement for jointly establishing Jiaxing HaiShiJiaAn Zhicheng Technology Ltd. (Haishi Jia'an). The subsidiary Hangzhou Hikvision System Technology Ltd. (Hangzhou System) contributes RMB 8 million, which had been paid in as of the end of the year, and controls 40% of the equity. The board of directors of Haishi Jia'an consists of 3 directors, 1 of whom is assigned by Hangzhou System and has significant influence over Haishi Jia'an.

Note 4: The Group and the independent third party Xining Big Data Ltd have signed the agreement for jointly establishing the Qinghai Qingtang Big Data Ltd. (Qingtang Big Data). The Group contributes RMB 9.8 million, which had been paid in as of the end of the year, and controls 49% of equity. The board of directors of Qingtang Big Data consists of 3 directors, 1 of whom is assigned by the Group and has significant influence over Qingtang Big Data.

13. 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 Ltd. (Note 2)	3.83%	227,792,500.00	-	-	19,516,406.45	247,308,906.45
Hangzhou Confirmware Technology Co., Ltd.	9.52%	26,629,200.00	-	-	2,102,809.18	28,732,009.18
Zhejiang Tuxun Technology Co.,Ltd. (Zhejiang Tuxun)	8.13%	32,430,800.00	-	-	(4,071,981.19)	28,358,818.81
Zhengzhou Guokong Smart City Technology Ltd.	7.00%	3,500,000.00	-	-	-	3,500,000.00
Guangxi Jilian Haibao Technical Service Ltd.	10.00%	-	2,884,220.00	-	-	2,884,220.00
Shenzhen Wanyu Security Service Technology Ltd.	5.00%	-	1,000,000.00	-	-	1,000,000.00
Nanwang Information Industry Group Ltd.	0.25%	604,313.00	-	-	-	604,313.00
Hangzhou Hikvision Equity Investment Partnership (Limited Partnership)	0.0017%	10,000.00	-	-	-	10,000.00
Total		290,966,813.00	3,884,220.00	-	17,547,234.44	312,398,267.44

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.

14. Fixed Assets

(1) Details of fixed assets

Unit: RMB

Items	Building and construction	General-purpose equipment	Special-purpose equipment	Transportation vehicles	Total
Total original carrying amount					
1. Opening balance	4,657,871,649.90	480,490,219.61	1,093,093,470.72	78,724,224.02	6,310,179,564.25
2. Increase in the current reporting period	168,487,344.15	312,928,376.51	804,150,453.15	20,275,855.85	1,305,842,029.66
1) purchase	19,050,132.93	311,407,058.27	619,765,484.62	19,792,834.21	970,015,510.03
2) transferred from construction in progress	149,437,211.22	845,232.96	184,384,968.53	308,089.76	334,975,502.47
3) business merger not under common control	-	676,085.28	-	174,931.88	851,017.16
3. Decrease in the current reporting period	13,419,519.43	22,349,743.16	41,504,059.05	7,633,133.42	84,906,455.06
1) disposal or write-off	13,419,519.43	22,349,743.16	41,504,059.05	7,633,133.42	84,906,455.06
4. Effect of foreign currency exchange difference	3,149,330.33	1,951,829.51	1,996,519.76	119,418.09	7,217,097.69
5. Closing Balance	4,816,088,804.95	773,020,682.47	1,857,736,384.58	91,486,364.54	7,538,332,236.54
Accumulated depreciation					

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 For the reporting period from January 1st 2019 to December 31st 2019

1. Opening balance	549,468,936.19	131,087,047.49	504,998,831.89	42,209,588.58	1,227,764,404.15
2. Increase in the current reporting period	218,094,036.88	111,657,490.28	220,305,287.54	9,831,771.61	559,888,586.31
(1) accrual	218,094,036.88	111,657,490.28	220,305,287.54	9,831,771.61	559,888,586.31
3. Decrease in the current reporting period	4,326,558.81	19,520,081.31	13,211,316.06	6,209,375.05	43,267,331.23
(1) disposal or write-off	4,326,558.81	19,520,081.31	13,211,316.06	6,209,375.05	43,267,331.23
4. Effect of foreign currency exchange difference	432,214.00	1,144,827.09	1,074,978.66	75,836.69	2,727,856.44
5. Closing balance	763,668,628.26	224,369,283.55	713,167,782.03	45,907,821.83	1,747,113,515.67
Provision for decline in value					
1. Opening balance	-	-	-	-	-
2. Increase in the current reporting period	-	-	-	-	-
3. Decrease in the current reporting period	-	-	-	-	-
4. Closing balance	-	-	-	-	-
Total book value					
Closing balance on book value	4,052,420,176.69	548,651,398.92	1,144,568,602.55	45,578,542.71	5,791,218,720.87
Opening balance on book value	4,108,402,713.71	349,403,172.12	588,094,638.83	36,514,635.44	5,082,415,160.10

(2) As of December 31st 2019, the Group did not have any significant idle fixed assets.

(3) Fixed assets leased through financial lease.

Unit: RMB

Item	Original book value	Accumulated depreciation	Provision for impairment	Carrying value
Fixed assets	76,842,631.49	14,964,901.44	-	61,877,730.05

(4) As of December 31st 2019, the Group had not rent out any fixed asset through operating leasing

(5) Fixed assets of which certificates of title have not been granted as of December 31st 2019.

Unit: RMB

Item	Carrying amount	Reason for certificates of title not granted
Office building for branches	23,067,253.22	In the process of obtaining the real estate certificates
Chongqing Production Base-Phase 1 plant	277,289,173.62	In the process of obtaining the real estate certificates after transferred to fixed assets
Total	300,356,426.84	

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

15. Construction in progress

(1) Details of construction in progress

Unit: RMB

Item	Closing balance			Opening balance		
	Carrying amount	Provision	Book value	Carrying amount	Provision	Book value
Public Security Monitoring Site Project	29,514,953.03	-	29,514,953.03	291,404,089.32	-	291,404,089.32
Hangzhou Innovation Industry Base	113,538,634.58	-	113,538,634.58	50,840,516.83	-	50,840,516.83
Chengdu Science and Technology Base Project	242,931,547.66	-	242,931,547.66	6,577,446.74	-	6,577,446.74
Chongqing Science and Technology Base Phase II Project	111,066,438.98	-	111,066,438.98	2,257,412.05	-	2,257,412.05
Others	134,503,904.81	-	134,503,904.81	65,012,948.48	-	65,012,948.48
Total	631,555,479.06	-	631,555,479.06	416,092,413.42	-	416,092,413.42

(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	Transferred to fixed assets during the current reporting period	Effect of foreign currency exchange difference	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	Capitalization rate for interest in the current reporting period (%)	Source of funds
Chengdu Science and Technology Base Project	196,900.00	6,577,446.74	236,354,100.92	-	-	-	242,931,547.66	12.34%	12.34%	-	-	-	Self-financing
Hangzhou Innovation Industry Base	102,600.00	50,840,516.83	62,698,117.75	-	-	-	113,538,634.58	11.07%	11.07%	(5,198,732.06)	(5,198,732.06)	0.85%	Special loan

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	Budget (RMB 0,000)	Opening balance	Increase in the current reporting period	Transferred to fixed assets during the current reporting period	Effect of foreign currency exchange difference	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	Capitalization rate for interest in the current reporting period (%)	Source of funds
Chongqing Science and Technology Base project-phase 2	76,200.00	2,257,412.05	108,809,026.93	-	-	-	111,066,438.98	14.58%	14.58%	-	-	-	Self-financing
Xi'an Science and Technology Base project	227,800.00	1,664,067.68	4,507,504.22	-	-	-	6,171,571.90	0.27%	0.27%	-	-	-	Self-financing
Wuhan Science and Technology Base project	280,600.00	1,641,509.43	2,698,113.21	-	-	-	4,339,622.64	0.15%	0.15%	-	-	-	Self-financing
Wuhan Intelligent Industry Base project	238,700.00	934,836.51	1,435,710.38	-	-	-	2,370,546.89	0.10%	0.10%	-	-	-	Self-financing
Others	-	352,176,624.18	414,051,500.25	334,975,502.47	429,290.26	280,544,795.81	151,137,116.41	-	-	-	-	-	Self-financing
Total	1,122,800.00	416,092,413.42	830,554,073.66	334,975,502.47	429,290.26	280,544,795.81	631,555,479.06	-	-	(5,198,732.06)	(5,198,732.06)		

Note 1: The other reductions in the current reporting period was that the assets of the financial leasing project that were completed and transferred to long-term receivables.

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 2019, the Group did not have any sign of impairment of projects under construction; therefore, no provision for impairment loss was booked.

16. Intangible assets

(1) Details of Intangible assets

Unit: RMB

Item	Land use right	Intellectual property right	Application Software	Total
Total original carrying amount				
1. Opening balance	775,589,326.13	39,270,797.88	233,126,120.86	1,047,986,244.87
2. Increased	230,414,127.57	29,122,756.48	69,694,146.87	329,231,030.92
(1) Purchase	230,414,127.57	29,122,756.48	69,694,146.87	329,231,030.92
3. Decreased	32,960,000.00	1,411,729.58	22,124,419.38	56,496,148.96
(1) Disposal or write-off	32,960,000.00	1,411,729.58	22,124,419.38	56,496,148.96
4. Effect of foreign currency exchange difference	-	11,610.73	200,787.59	212,398.32
5. Closing balance	973,043,453.70	66,993,435.51	280,896,635.94	1,320,933,525.15
Total accumulated amortization				
1. Opening balance	34,866,723.64	19,201,069.47	124,005,401.67	178,073,194.78
2. Increased	19,468,074.60	33,477,784.12	61,955,697.53	114,901,556.25
(1) Accrual	19,468,074.60	33,477,784.12	61,955,697.53	114,901,556.25
3. Decreased	1,043,733.34	1,161,028.83	16,126,360.73	18,331,122.90
(1) Disposal or write-off	1,043,733.34	1,161,028.83	16,126,360.73	18,331,122.90
4. Effect of foreign currency exchange difference		14,365.39	153,023.99	167,389.38
5. Closing balance	53,291,064.90	51,532,190.15	169,987,762.46	274,811,017.51
Provision for decline in value				
1. Opening balance	-	-	-	-
2. Increased	-	-	-	-
3. Decreased	-	-	-	-
4. Closing balance	-	-	-	-
Total book value				
Closing balance on book value	919,752,388.80	15,461,245.36	110,908,873.48	1,046,122,507.64
Opening balance on book value	740,722,602.49	20,069,728.41	109,120,719.19	869,913,050.09

17. Goodwill

(1) Goodwill book value

Unit: RMB

The invested entity	Opening balance	Increased	Decreased	Effect of foreign currency exchange difference	Closing balance
		Business combination not involving enterprises under common control	Liquidation & cancellation		
Secure Holdings Limited (SHL)	137,092,136.66	-	-	2,282,170.67	139,374,307.33
Henan HuaAn Baoquan Intelligence Development Ltd. and its subsidiaries	61,322,871.63	-	-	-	61,322,871.63
Hangzhou Kuangxin Technology Ltd.	-	59,060,454.06	-	-	59,060,454.06
Hundure Technology (Shanghai) Ltd.	13,774,405.88	-	-	-	13,774,405.88
ZAO Hikvision	67,349.64	-	-	-	67,349.64
Hangzhou Haikang Zhicheng Investment and Development Ltd.	12,573.42	-	-	-	12,573.42
Beijing Brainaire Storage Technology Ltd.	42,695,573.44	-	42,695,573.44	-	-
Total	254,964,910.67	59,060,454.06	42,695,573.44	2,282,170.67	273,611,961.96

(2) Provision of impairment in goodwill

Unit: RMB

Invested Company	Opening balance	Increased	Decrease	Effect of foreign currency exchange difference	Closing Balance
		Provision	Liquidation & cancellation		
Beijing Bangnuo Storage Technology Ltd.	42,695,573.44	-	42,695,573.44	-	-
Total	42,695,573.44	-	42,695,573.44	-	-

The key assumptions used in the Group's annual impairment test performed for goodwill at the end of the reporting period:

The recoverable amounts of the relevant assets have been determined on the discounted present value of the future cash flow projections. The cash flow projections are based on 2020-2024 Financial Budgets approved by management covering a 5-year period, with certain discount rates. The sets of cash flows beyond the 5-year period are projected based on 0%-2% growth rate. These growth rates are based on the relevant industry growth forecasts and do not exceed the average long-term growth rate for the relevant industry. Expected cash inflows/outflows, considering budgeted net sales, cost of revenue and operating expenses, have been determined by management based on past performance and expectations for the future market development.

During the prior reporting year, the Group assessed the recoverable amount of goodwill and determined that the goodwill related to Beijing Bangnuo Storage Technology Ltd. was impaired. Therefore, goodwill in the relevant asset group was fully provided with impairment provision amounting to RMB 42,695,573.44. As of the current year end, Beijing Bangnuo Storage Technology Ltd. has completed the cancellation process.

18. 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	-	111,407,214.80	24,002,044.87	206,320.82	87,611,490.75
Total	-	111,407,214.80	24,002,044.87	206,320.82	87,611,490.75

19. Deferred tax assets/deferred tax liabilities

(1) Deferred tax assets that are not presented on net off basis

Unit: RMB

Item	Closing balance		Opening balance	
	Deductible temporary differences	Deferred tax assets	Deductible temporary differences	Deferred tax assets
Provision for impairment losses of assets	272,015,493.85	72,480,367.65	1,364,242,526.16	322,143,179.09
Provision for credit loss	1,409,847,170.59	292,275,236.58		
Payroll payables	353,810,837.41	55,990,855.40	220,173,893.79	33,026,084.07
Share-based payment	273,114,847.21	43,340,918.66	115,893,666.94	18,240,425.31
Provisions	78,353,085.64	15,477,040.83	52,956,535.09	7,943,480.27
Expenditure without invoice	228,359,902.54	52,419,606.75	113,835,410.80	17,075,311.62
Unrealized profit from inter-group transactions	1,157,820,970.68	187,268,546.98	892,163,728.04	133,824,559.21
Changes in the fair value of derivative financial instruments	652,428.18	163,107.05	275,080.00	68,770.00
Deferred income	288,449,840.21	51,155,882.21	186,747,708.01	28,012,156.20
Total	4,062,424,576.31	770,571,562.11	2,946,288,548.83	560,333,965.77

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 For the reporting period from January 1st 2019 to December 31st 2019

(2) Deferred tax liabilities that are not presented on net off basis

Unit: RMB

Item	Closing balance		Opening balance	
	Taxable temporary differences	Deferred tax liabilities	Taxable temporary differences	Deferred tax liabilities
Difference in fixed asset depreciation	680,837,730.59	129,970,264.62	170,081,176.39	25,512,176.46
Difference in amortization of intangible assets	1,386,714.30	208,007.14	695,043.70	104,256.55
Changes in the fair value of derivative financial instruments	181.76	45.44	1,482,366.03	370,591.51
Changes in fair value of other non-current financial assets	17,547,234.44	2,632,085.17		
Total	699,771,861.09	132,810,402.37	172,258,586.12	25,987,024.52

(3) Deferred tax assets or deferred tax liabilities that are presented at the net amount after offset

Unit: RMB

Item	Closing balance		Opening balance	
	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	81,722,298.41	688,849,263.70	25,987,024.52	534,346,941.25
Deferred tax liabilities	81,722,298.41	51,088,103.96	25,987,024.52	-

(4) Unrecognized deferred income tax assets

Unit: RMB

Item	Closing balance	Opening balance
Deductible temporary difference	306,240,573.47	811,602,394.93
Deductible losses	2,630,277,858.25	935,162,077.25
Total	2,936,518,431.72	1,746,764,472.18

(5) Deductible losses of unrecognized deferred income tax assets that will expire in the following years

Unit: RMB

Year	Closing balance	Opening balance
2019	-	5,645,442.54
2020	3,636,058.38	3,636,058.38
2021	90,274,644.51	103,268,429.06
2022	331,787,605.27	331,787,605.27
2023	490,824,542.00	490,824,542.00
2024	1,713,755,008.09	-
Total	2,630,277,858.25	935,162,077.25

20. Other non-current assets

Unit: RMB

Item	Closing balance	Opening balance
Completed but unsettled assets formed by construction contracts (Note (V) 8)	751,457,739.44	1,253,407,742.28
Prepayments for equipment	85,573,983.95	196,992,554.09
Prepayments for infrastructure	13,942,203.53	32,759,311.95
Prepayments for equity investment	13,794,550.00	-
Prepayments for acquisition of land	818,200.00	98,000,000.05
Prepayments for purchase of property	-	1,590,992.43
Total	865,586,676.92	1,582,750,600.80

21. Short-term borrowings

(1) Categories of short-term borrowings

Unit: RMB

Item	Closing balance	Opening balance
Fiduciary loan-principal	2,637,513,739.48	247,000,100.00
Fiduciary loan-interest	2,568,745.67	-
Guaranteed loans	-	3,166,655,588.29
Pledged loans	-	52,000,000.00
Total	2,640,082,485.15	3,465,655,688.29

(2) As of December 31st 2019, the Group did not have any overdue short-term loans that were failed to repay.

22. Held-for-trading financial liabilities

Unit: RMB

Item	Closing balance	Opening balance
Financial liabilities measured at fair value through current profits and losses	652,428.18	290,998.43
Including: derivative financial liabilities	652,428.18	290,998.43
total	652,428.18	290,998.43

Derivative financial liabilities include forward foreign exchange contracts, currency swaps, foreign exchange option contracts, and etc., not designated as a hedging instrument, gains or losses due to changes in fair value is directly included in the current period profits and losses.

23. Notes payable

Unit: RMB

Item	Closing balance	Opening balance
Bank acceptance Bill	1,239,584,016.70	463,479,760.54
Total	1,239,584,016.70	463,479,760.54

As of December 31st 2019, the Group did not have any unpaid matured notes payable.

24. Accounts payable

(1) List of accounts payable

Unit: RMB

Item	Closing balance	Opening balance
Payments for goods	12,526,135,911.98	10,208,299,054.08
Payables on equipment	173,939,395.72	93,366,671.12
Total	12,700,075,307.70	10,301,665,725.20

As of December 31st 2019, the Group did not have any significant accounts payable with aging above one year.

25. Receipts in advance

(1) List of receipts in advance

Unit: RMB

Item	Closing balance	Opening balance
Advanced receipts from sales of goods	535,145,418.68	449,150,259.60
Advanced receipts from construction contracts	485,844,041.93	192,280,230.62
Total	1,020,989,460.61	641,430,490.22

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(2) As of December 31st 2019, the Group did not have any significant receipts in advance with aging above one year.

(3) The settlement of unfinished projects formed by the construction contract at the end of the reporting period

Unit: RMB

Item	Amounts
Accumulated costs	1,132,647,291.15
Accumulated gross profit	153,579,374.20
Less: estimated loss	-
Amount settled	1,426,801,186.34
Settled amount of unfinished projects formed by the construction contract	140,574,520.99

26. Payroll payable

(1) Details of payroll payable

Unit: RMB

Item	Opening balance (restated)	Increase in the current reporting period	Decrease in the current reporting period	Closing balance
1.Short-term remuneration	1,915,387,271.72	8,903,496,913.06	8,468,657,875.40	2,350,226,309.38
2. Termination benefits – defined contribution scheme	6,353,859.91	469,133,219.95	466,038,749.12	9,448,330.74
Total	1,921,741,131.63	9,372,630,133.01	8,934,696,624.52	2,359,674,640.12

(2) List of Short-term remuneration

Unit: RMB

Item	Opening balance	Increase in the current reporting period	Decrease in the current reporting period	Closing balance
1.Wages or salaries, bonuses, allowances and subsidies	1,794,117,599.34	7,859,572,302.82	7,459,150,963.03	2,194,538,939.13
2.Staff welfare	893,122.46	210,311,263.80	211,130,101.54	74,284.72
3.Social insurance contributions	3,234,424.54	298,765,224.54	301,252,922.65	746,726.43
Including: medical insurance	2,987,488.56	263,382,471.95	265,698,720.43	671,240.08
Injury insurance	57,403.50	9,678,213.78	9,710,979.96	24,637.32
Maternity insurance	189,532.48	25,704,538.81	25,843,222.26	50,849.03
4.Housing funds	47,610.40	386,357,199.69	386,271,900.09	132,910.00
5.Labor union and education fund	117,094,514.98	148,490,922.21	110,851,988.09	154,733,449.10
Subtotal	1,915,387,271.72	8,903,496,913.06	8,468,657,875.40	2,350,226,309.38

(3) Defined contribution scheme (Note)

Unit: RMB

Item	Opening balance	Increase in the current period	Decrease in the current period	Closing balance
1.Basic pension insurance	6,270,825.40	451,708,456.17	448,969,976.72	9,009,304.85
2.Unemployment insurance	83,034.51	17,424,763.78	17,068,772.40	439,025.89
Subtotal	6,353,859.91	469,133,219.95	466,038,749.12	9,448,330.74

Note:

During the reporting periods, the employees of the Group are the members of state-managed retirement benefit plan, and unemployment insurance plan, operated by the respective governments of these jurisdictions. The Group is required to contribute specified percentage out of payroll costs to the retirement benefit schemes and unemployment insurance

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

schemes to fund the benefits. The Group has no other material obligation for the payment of pension benefits beyond the contributions described above, and corresponding expenses were booked into profits and losses of related assets during the current period.

The Group shall pay a total of RMB 451,708,456.17 and RMB 17,424,763.78 (2018: RMB 442,866,778.48 and RMB 15,361,837.44) to the pension insurance and unemployment insurance schemes respectively. On December 31st 2019, the Group still had RMB 9,009,304.85 and RMB 439,025.89 (December 31st 2018: RMB 6,270,825.40 and RMB 83,034.51) payable expenses for pension insurance and unemployment insurance plans that were due during the current reporting period but were not paid. The relevant dues have been paid off after the reporting period.

27. Taxes payable

Unit: RMB

Item	Closing balance	Opening balance
Enterprise income tax	553,486,554.42	1,085,546,102.66
Value-added tax	331,490,538.56	242,237,174.61
City construction and maintenance tax	21,992,627.00	26,667,741.79
Education surcharges	9,283,542.86	11,563,769.42
Local education surcharges	6,385,473.76	7,686,512.17
Others	68,704,069.31	45,220,363.92
Total	991,342,805.91	1,418,921,664.57

28. Other payables

28.1 Categories

Unit: RMB

Item	Closing balance	Opening balance (restated)
Dividend payable	108,129,385.24	119,917,640.92
Other payables	1,460,615,214.70	2,833,537,347.03
Total	1,568,744,599.94	2,953,454,987.95

28.2 Dividends payable

Unit: RMB

Item	Closing balance	Opening balance
Dividends of restricted shares	105,679,385.24	117,467,640.92
Dividends of ordinary shares	2,450,000.00	2,450,000.00
Total	108,129,385.24	119,917,640.92

28.3 Other payables

(1) List of other payables according to the nature of the payment

Unit: RMB

Item	Closing balance	Opening balance
Accrued expenses	608,136,188.75	298,013,859.39
Unexpired commercial acceptance bills that were endorsed (Note (V)-3)	329,309,522.17	94,097,879.36
Guarantee and deposit fees	240,507,892.79	212,959,951.64
Collection and payment on behalf	220,858,972.11	124,202,099.26
Investment payable	12,400,000.00	-
Other expense payable	49,402,638.88	46,364,680.54
Share incentive funds (Note)	-	2,057,898,876.84

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Total	1,460,615,214.70	2,833,537,347.03
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Note: As of December 31st 2018, the restricted stock funds received by the Group for 2018 share incentive scheme amounted to RMB 2,057,898,876.84 (see Note XI for details), and the stock registration was not completed by the end of current year. This part of the stock has completed the equity registration work on January 18th 2019.

(2) As of December 31st 2019, the Group did not have any significant other payables aging over one year.

29. Non-current liabilities due within one year

Unit: RMB

Item	Closing balance	Opening balance
Long-term borrowings due within one year (Note (V) 31)	69,893,081.33	2,984,575.25
Long-term payables due within one year (Note (V) 32)	16,230,072.73	2,458,683.54
Bonds Payable due within one year	-	3,172,727,888.37
Total	86,123,154.06	3,178,171,147.16

30. Other current liabilities

Unit: RMB

Item	Closing balance	Opening balance
Subscription payment of restricted shares	913,534,538.26	364,984,759.94
Total	913,534,538.26	364,984,759.94

31. Long-term borrowings

Unit: RMB

Item	Closing balance	Opening balance
Pledged loan (Note 1)	1,348,034,851.48	251,000,000.00
Fiduciary loan (Note 2)	3,136,026,801.28	1,984,575.25
Other borrowing (Note 3)	190,000,000.00	190,000,000.00
Less: Long-term loans due within one year (Note (V) 29)	69,893,081.33	2,984,575.25
Total	4,604,168,571.43	440,000,000.00

Note 1: As of December 31st 2019, RMB 151,622,857.14 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 20th 2028, the annual interest rate is 4.41%.

As of December 31st 2019, RMB 185,600,000.00 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 26th 2035, the annual interest rate is 4.445%.

As of December 31st 2019, RMB 216,000,000.00 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 26th 2040, the annual interest rate is 4.445%.

As of December 31st 2019, RMB 144,000,000.00 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 26th 2035, the annual interest rate is 4.445%.

As of December 31st 2019, RMB 80,000,000.00 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 26th 2034, the annual interest rate is 4.445%.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

RMB 569,000,000.00 of the pledged loan (2018: RMB 251,000,000.00) 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 5th 2031, the annual interest rate is 4.445%.

As of December 31st 2018, 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 5th 2031. Among them, the annual interest rate of RMB 250,000,000.00 loan is 4.445%, and the annual interest rate of RMB 1,000,000.00 loan is 4.900%.

Note 2: As of December 31st 2019, the credit loan with a book value of RMB 3,126,200,000.00 was 400 million euros in credit loans, which was mainly used for the investment and construction of the Company's Hangzhou Innovation Industrial Base project and Xi'an Science and Technology Base project, the maturity date is December 14th 2021, and the interest rate is 0.85%.

Note 3: 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. As of December 31st 2019, CDBDF has aggregately invested RMB 190 million (December 31st 2018: RMB 190 million).

32. Long-term payables

Unit: RMB

Item	Closing balance	Opening balance (restated)
Payables for financial leasing	42,181,416.72	-
Borrowing	8,000,000.00	8,000,000.00
Total	50,181,416.72	8,000,000.00

Unit: RMB

Details of financial lease payables in long-term payables	Closing balance	Opening balance
1 st year after the balance sheet date	19,265,287.22	-
2 nd year after the balance sheet date	21,387,869.19	-
3 rd year after the balance sheet date	14,137,481.89	-
Future years	10,420,815.85	-
Total minimum lease payments	65,211,454.15	-
Unrecognized financing costs	6,799,964.70	-
Finance lease payable	58,411,489.45	-
Including: Finance lease payable due within 1 year	16,230,072.73	-
Finance lease payable due after 1 year	42,181,416.72	-

33. Provisions

Unit: RMB

Item	Closing balance	Opening balance
Product warranty	90,570,669.01	77,625,238.49
Total	90,570,669.01	77,625,238.49

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

34. Deferred income

Unit: RMB

Item	Opening balance	Increase in current reporting period	Decrease in current reporting period	Closing balance	Details
Cloud storage service income	58,690,626.37	228,696,492.06	180,137,571.43	107,249,547.00	Note 1
Government Subsidies	234,488,462.76	99,497,790.44	107,645,968.90	226,340,284.30	Note 2
Total	293,179,089.13	328,194,282.50	287,783,540.33	333,589,831.30	

As of December 31st 2019, 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 Manufacture Base construction	47,975,445.00	33,697,550.44	2,418,930.00	-	79,254,065.44	Related to assets
Projects of core electronic devices, high-end universal chips and basic software products	131,567,063.01	-	68,739,200.00	-	62,827,863.01	Related to incomes
Other special subsidies	22,976,603.81	29,750,000.00	9,260,088.72	-	43,466,515.09	Related to assets
Other special subsidies	31,969,350.94	36,050,240.00	27,227,750.18	-	40,791,840.76	Related to incomes
Subtotal	234,488,462.76	99,497,790.44	107,645,968.90	-	226,340,284.30	

Note 1: This is revenue related to cloud storage service, video service, and telephone service that the Group provides to its customers; and the Group recognized the revenue accordingly during the period the service is actually provided.

Note 2: Refer to government subsidies received by the Group for projects of Core Electronic Devices, High-end Universal Chip and Basic Software Products, Chongqing Manufacture Base construction, and other projects; Actual expenses occurred in the current year for projects of core electronic devices, high-end universal chips and basic software products and other special subsidies related to incomes were recognized in other income; and relevant assets for Chongqing Manufacture Base construction and other special subsidies related to assets were amortized averagely in other income within the assets' useful lives.

35. Other non-current liabilities

Unit: RMB

Item	Closing balance	Opening balance
Subscription for restricted stocks	1,234,739,326.10	-
Total	1,234,739,326.10	-

36. Share capital

Unit: RMB

	Opening balance	Changes for the period					Closing balance
		New issue of shares (Note 1)	Bonus issue	Transfer from Capital Reserve (Note 2)	Others (Note 2)	Subtotal	
2019							
Total shares	9,227,270,473.00	121,195,458.00	-	-	(3,455,235.00)	117,740,223.00	9,345,010,696.00
2018							
Total shares	9,228,865,114.00	-	-	-	(1,594,641.00)	(1,594,641.00)	9,227,270,473.00

Notes to Financial Statements

For the reporting period from January 1st 2019 to December 31st 2019

Note 1: On December 20th 2018, authorized by the Company's 2nd extraordinary general meeting in 2018 and reviewed and decided by the 8th meeting of the fourth board of directors, the Company was approved to grant 126,518,281 shares RMB common shares (121,195,458 shares after adjustments) to 6,341 grantees (6,095 grantees after adjustments), with face value of RMB 1.00 per share and issuing price of RMB 16.98 per share. The Company has completed the equity registration on January 17th 2019, which increased the paid-in capital of RMB 121,195,458.00 in 2019 and resulted in capital reserve of RMB 1,936,703,418.84.

Note 2: On December 26th 2018, pursuant to the *Articles of Association* of the Company revised by the resolution of 9th General Meeting of fourth session Board of Directors authorized by the second Extraordinary General Meeting in 2016, the Company repurchased and cancelled 2,945,610 granted but restricted RMB treasury shares by cash, and the total share capital of the Company decreased by RMB 2,945,610, capital reserve decreased by RMB 21,856,426.20. The procedures for repurchase and cancellation were completed on September 3rd 2019.

On December 3rd 2018, pursuant to the *Articles of Association* of the Company revised by the resolution of 7th General Meeting of fourth session Board of Directors authorized by the first Extraordinary General Meeting in 2014, the Company repurchased and cancelled 509,625 granted but restricted RMB treasury shares by cash, and the total share capital of the Company decreased by RMB 509,625, capital reserve decreased by RMB 1,585,455. The procedures for repurchase and cancellation were completed on June 26th 2019.

On December 15th 2017, pursuant to the *Articles of Association* of the Company revised by the resolution of 26th General Meeting of third session Board of Directors authorized by the first Extraordinary General Meeting in 2014, the Company repurchased and cancelled 1,594,641 granted but restricted RMB treasury shares by cash, and the total share capital of the Company decreased by RMB 1,594,641.00, capital reserve decreased by RMB 4,961,105.33. The procedures for repurchase and cancellation were completed on March 27th 2018.

37. 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
2019				
Share premium	1,828,917,545.39	2,039,710,482.49	34,209,174.82	3,834,418,853.06
Other capital reserves	127,222,115.13	268,309,794.42	103,007,063.65	292,524,845.90
Total	1,956,139,660.52	2,308,020,276.91	137,216,238.47	4,126,943,698.96
2018				
Share premium	1,594,317,396.71	243,326,385.07	8,726,236.39	1,828,917,545.39
Other capital reserves	225,080,318.92	145,468,181.28	243,326,385.07	127,222,115.13
Total	1,819,397,715.63	388,794,566.35	252,052,621.46	1,956,139,660.52

Note 1: The RMB 103,007,063.65 increase in share capital premium during the current year was due to equity-settled share-based payment exercised this year, and other capital reserves were transferred to share capital premium; the RMB 1,936,703,418.84 increase in share capital premium was due to the implementation of share registration in the current year for the restricted stocks granted in the prior year. Please refer to Note (V) 36 Note 1 for details.

The increase in other capital reserves in the current year was calculated as equity-settled share-based payment and was included in the capital reserve of RMB 268,309,794.42. Please refer to Note (XI) for details.

The increase in share capital premium in the prior year was due to the equity-settled share-based payment exercised in the prior year, which transferred RMB 243,326,385.07 other capital reserves to share capital premium.

The increase in other capital reserves in the prior year was due to equity-settled share-based payments and was included in the capital reserve of RMB 145,468,181.28.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Note 2: The decrease of RMB 23,441,881.20 in share premium during the current year was due to the Company's repurchase of 3,455,235 granted but restricted RMB treasury shares by cash, please refer to Note (V) 36-Note 2; The decrease of RMB 10,767,293.62 in share premium during the current year was due to share distributions by equity settlements to minority shareholders.

The decrease of RMB 4,961,105.33 in share premium during the prior year was due to the Company's repurchase of 1,594,641 granted but restricted RMB treasury shares by cash, please refer to Note (V) 36-Note 2; The decrease of RMB 3,765,131.06 in share premium during was due to share distributions by equity settlements to minority shareholders during the prior year.

38. Treasury shares

Unit: RMB

Item	Opening Balance	Increase in the current reporting period (Note 1)	Decrease in the current reporting period (Note 2)	Closing balance
2019				
Restricted shares incentive scheme	364,984,759.94	2,057,898,876.84	274,609,772.42	2,148,273,864.36
Total	364,984,759.94	2,057,898,876.84	274,609,772.42	2,148,273,864.36
2018				
Restricted shares incentive scheme	744,583,627.22	-	379,598,867.28	364,984,759.94
Total	744,583,627.22	-	379,598,867.28	364,984,759.94

Note 1: The increase of treasury shares during the current reporting period was due to granting 121,195,458 shares RMB common shares to 6,095 grantees, with issuing price of RMB 16.98 per share on December 20th 2018, and finished share registration on January 17th 2019. Please refer to Note (V) 36-Note 1.

Note 2: During the current reporting period, the decreased amounts of treasury shares includes a decrease of RMB 1,086,067.50 due to the repurchase and cancellation of 509,625 restricted RMB ordinary shares of 2014 Restricted Share Incentive Scheme; a decrease of RMB 20,383,621.20 due to the repurchase and cancellation of 2,945,610 restricted RMB ordinary shares of 2016 Restricted Share Incentive Scheme; a decrease of RMB 102,033,123 due to provision of cash dividend allocated to restricted shareholders; a decrease of RMB 151,106,960.72 due to unlocking of 21,836,266 shares for the expiry of the 2nd unlocking period of the Company's 2016 restricted share incentive scheme.

During the prior year, the decreased amounts of treasury shares includes a decrease of RMB 5,452,943.05 due to the repurchase and cancellation of 1,594,641 restricted RMB ordinary shares of 2014 Restricted Share Incentive Scheme; a decrease of RMB 56,211,224.00 due to provision of cash dividend allocated to restricted shareholders; a decrease of RMB 91,280,659.43 due to the vesting and exercising of 33,422,536 shares for the maturity of 3rd vesting period of 2014 Restricted Share Incentive Scheme; and a decrease of RMB 226,654,040.80 due to the vesting and exercising of 30,140,165 shares for the maturity of 1st vesting period of 2016 Restricted Share Incentive Scheme.

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 For the reporting period from January 1st 2019 to December 31st 2019

39. Other comprehensive income

Unit: RMB

Item	Opening balance	Change for the current reporting period					Closing balance
		The before-income-tax amount incurred during the current reporting period	Less: transfer to current period P/L from previous other comprehensive income	Less: income tax expense	Attributable to the parent company (after tax)	Attributable to minority shareholders (after tax)	
2019							
Other incomes that may be reclassified subsequently to profit or loss	(49,576,351.10)	(4,658,993.77)	-	-	(3,964,795.89)	(694,197.88)	(53,541,146.99)
Included: Effect on conversion of financial statements denominated in foreign currencies	(49,576,351.10)	(4,658,993.77)	-	-	(3,964,795.89)	(694,197.88)	(53,541,146.99)
Other comprehensive income	(49,576,351.10)	(4,658,993.77)	-	-	(3,964,795.89)	(694,197.88)	(53,541,146.99)
2018							
Other incomes that may be reclassified subsequently to profit or loss	(27,677,939.35)	(24,062,992.06)	-	-	(21,898,411.75)	(2,164,580.31)	(49,576,351.10)
Included: Effect on conversion of financial statements denominated in foreign currencies	(27,677,939.35)	(24,062,992.06)	-	-	(21,898,411.75)	(2,164,580.31)	(49,576,351.10)
Other comprehensive income	(27,677,939.35)	(24,062,992.06)	-	-	(21,898,411.75)	(2,164,580.31)	(49,576,351.10)

40. Surplus reserves

Unit: RMB

Item	Opening balance	Increase in the current reporting period	Decrease in the current reporting period	Closing balance
2019				
Statutory surplus reserves (Note)	4,460,712,358.45	211,792,989.55	-	4,672,505,348.00
Total	4,460,712,358.45	211,792,989.55	-	4,672,505,348.00
2018				
Statutory surplus reserves (Note)	3,483,742,918.53	976,969,439.92	-	4,460,712,358.45
Total	3,483,742,918.53	976,969,439.92	-	4,460,712,358.45

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 withdrawn. The Company withdrew a statutory surplus reserve of RMB 211,792,989.55 this year, and accumulatively withdrawn a

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

statutory surplus reserve of RMB 4,672,505,348.00, which has reached 50% of the Company's share capital at the end of 2019, so no subsequent statutory surplus reserve will be accrued.

The statutory surplus reserve can be used to make up for losses or increase the share capital after approval.

41. Retained earnings

Unit: RMB

Item	2019	2018 (restated)
Retained Earnings at the close of the prior reporting period	22,359,856,271.42	16,598,328,692.63
Add: Net profit attributable to the parent company for the current reporting period	12,414,587,690.45	11,352,132,255.21
Less: Statutory surplus reserved	211,792,989.55	976,969,439.92
Dividends on ordinary shares payable (Note)	5,601,261,827.10	4,613,635,236.50
Retained earnings at the end of the current reporting period	28,961,389,145.22	22,359,856,271.42

Note: According to the resolution of 2018 annual General Meeting dated on May 10th 2019, 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 6 (tax inclusive), the rest of retained earnings were all carried forward for future distributions.

42. Operating income/operating cost

Unit: RMB

Item	2019		2018	
	Revenue	Cost	Revenue	Cost
Operating income	57,080,710,049.95	30,823,984,977.93	49,295,187,751.22	27,196,229,537.02
Other operating income	577,400,015.27	316,191,799.19	541,944,730.39	287,240,018.22
Total	57,658,110,065.22	31,140,176,777.12	49,837,132,481.61	27,483,469,555.24

43. Business Taxes and Surcharges

Unit: RMB

Items	2019	2018
City construction and maintenance tax	193,991,607.90	211,078,359.19
Education surcharges	83,931,204.13	90,741,825.21
Local education surcharges	56,338,987.32	60,416,824.31
Stamp duty	27,143,633.24	23,482,129.33
Real estate tax	36,404,025.90	22,533,688.75
Tax on use of land	5,196,493.82	5,802,424.47
Vehicle and vessel tax	171,445.08	230,511.99
Others	14,141,146.16	4,039,290.39
Total	417,318,543.55	418,325,053.64

44. Selling expenses

Unit: RMB

Items	2019	2018
Payroll	3,887,374,487.37	3,042,017,625.28
Marketing Expenses	1,189,955,197.73	1,009,897,096.88
Shipping, transportation, and vehicle expense	743,840,798.66	615,804,479.82
Travelling expenses	419,804,042.73	361,180,853.78
Office expenses	209,868,651.76	169,194,478.31
Business hospitality expenses	209,295,672.81	160,025,004.46
Rental expenses	177,800,427.54	139,899,056.72
Professional Intermediary expenses	161,222,028.36	142,079,756.94
Depreciation and amortization expenses	74,726,169.24	79,460,744.36
Others	182,894,010.48	172,941,309.97
Total	7,256,781,486.68	5,892,500,406.52

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

45. Administrative Expenses

Unit: RMB

Items	2019	2018
Payroll	973,611,772.00	820,726,311.40
Office expenses	207,809,854.24	137,359,082.35
Depreciation and amortization expenses	124,598,148.82	91,425,634.46
Professional Intermediary expenses	72,435,016.26	43,200,317.09
Travelling expenses	59,312,055.12	64,067,674.29
Shipping, transportation, utility expense	56,959,599.18	46,011,849.69
Rental expenses	29,478,819.26	22,313,258.20
Business hospitality expenses	10,658,155.86	5,186,034.09
Others	287,601,021.33	146,954,708.57
Total	1,822,464,442.07	1,377,244,870.14

46. R&D Expenses

Unit: RMB

Items	2019	2018
Payroll	3,984,322,782.34	3,259,555,224.24
Consumables and service fees	563,641,365.06	455,302,393.17
Depreciation and amortization expenses	235,693,987.33	152,029,898.69
Office expenses	213,060,797.71	155,140,877.67
Intermediate testing fees	164,302,894.56	117,034,981.47
Travelling expenses	139,847,661.42	124,739,331.81
New product design fees	77,948,833.47	132,612,918.48
Rental expenses	9,242,161.63	26,312,384.22
Others	95,751,214.84	60,052,683.66
Total	5,483,811,698.36	4,482,780,693.41

47. Financial Expenses

Unit: RMB

Items	2019	2018(restated)
Interest expenses	263,960,347.94	176,236,038.18
Less: Interest income	720,921,071.27	476,093,981.09
Foreign exchange gains	(183,930,899.01)	(208,897,575.81)
Less : Capitalized specific loan interests and foreign exchange differences on specific loan	28,013,146.25	(63,082,765.25)
Others	28,836,591.40	21,409,193.83
Total	(640,068,177.19)	(424,263,559.64)

48. Other income

Unit: RMB

Item	2019	2018
VAT Rebates	1,481,554,615.35	1,772,810,771.85
Special subsidies	405,744,665.57	295,650,812.88
Tax refunds	5,024,025.37	15,535,482.64
Total	1,892,323,306.29	2,083,997,067.37

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

49. Investment income

Details of investment income

Unit: RMB

Item	2019	2018
Long-term equity investment gains (losses) based on equity method	7,743,476.93	(9,072,889.02)
Investment income (losses) on disposal of financial assets measured at fair value through profits and losses		(40,669,470.74)
Investment incomes for available-for-sale financial assets during the holding period		12,256,000.00
Investment income redeemed on matured financial products		89,416,000.39
Investment income during the holding period of other non-current financial assets	17,357,220.31	
Investment income from disposal of held-for-trading financial assets	11,550,750.03	
Investment loss of derecognized financial assets measured at amortized cost	(2,210.18)	
Total	36,649,237.09	51,929,640.63

50. Profits (losses) from changes in fair values

Unit: RMB

Sources of gains/losses from changes in fair values	2019	2018
Held-for-trading financial assets	(1,863,915.06)	
Including: Profits (losses) on the changes in fair value of derivative financial instruments	(1,863,915.06)	
Earnings from changes in fair value arising from other non-current financial assets	17,547,234.44	
Financial assets at fair value through profits and losses		(2,249,271.02)
Including: losses on the changes in fair value of derivative financial instruments		(2,249,271.02)
Held-for-trading financial liabilities	(361,429.75)	
Including: losses on the changes in fair value of derivative financial instruments	(361,429.75)	
Financial liabilities at fair value through profits and losses		15,656,203.19
Including: losses on the changes in fair value of derivative financial instruments		15,656,203.19
Total	15,321,889.63	13,406,932.17

51. Credit impairment loss

Unit: RMB

Items	2019	2018
Credit bad debt losses of accounts receivable	(202,855,091.00)	
Gains on credit bad debt of other receivables	44,488,527.79	
Credit bad debt losses of long-term receivable	(63,642,862.97)	
Total	(222,009,426.18)	-

52. Impairment losses of assets

Unit: RMB

Items	2019	2018 (restated)
Inventory devaluation	(197,891,311.27)	(231,501,431.17)
Bad debt		(152,752,804.15)
Goodwill impairment	-	(42,695,573.44)
Total	(197,891,311.27)	(426,949,808.76)

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

53. Non-operating income

Unit: RMB

Item	2019	2018	The amount booked into current period non-recurring profits and losses
Fines and confiscations	48,610,859.46	88,125,508.92	48,610,859.46
Special subsidies	3,318,626.10	7,622,573.32	3,318,626.10
Tax reduction	23,979.90	495,446.66	23,979.90
Others	13,079,036.08	15,119,389.44	13,079,036.08
Total	65,032,501.54	111,362,918.34	65,032,501.54

Government subsidies included in current profit and loss:

Unit: RMB

Item	2019	2018	Related to assets/Related to incomes
Other special subsidies	3,318,626.10	7,622,573.32	Related to incomes
Tax reduction	23,979.90	495,446.66	Related to incomes
Total	3,342,606.00	8,118,019.98	

54. Non-operating expenses

Unit: RMB

Item	2019	2018	The amount booked into current period non-recurring profits and losses
Losses from disposal of non-current asset	7,589,538.54	922,828.20	7,589,538.54
Local water conservancy construction fund	842,983.10	755,016.33	842,983.10
Others	8,691,885.64	6,915,640.05	8,691,885.64
Total	17,124,407.28	8,593,484.58	17,124,407.28

55. Income tax expenses

(1) Details of Income tax expenses

Unit: RMB

Item	2019	2018
Income tax for the current reporting period	1,731,388,650.59	1,533,491,545.29
Deferred income tax expenses	(103,112,225.43)	(55,276,291.76)
Differences in filing and payment of income tax in previous years	(337,997,980.04)	(421,475,254.71)
Total	1,290,278,445.12	1,056,739,998.82

(2) Reconciliation of income tax expenses to the accounting profit

Unit: RMB

Item	2019	2018 (restated)
Total profit	13,755,462,747.77	12,437,204,553.30
Income tax expenses calculated at applicable tax rates of 15%	2,063,319,412.17	1,865,580,683.00
Impact of non-deductible costs, expenses and losses	16,237,180.91	14,328,775.33
Tax effect of non-taxable income	(2,603,583.05)	(3,329,287.02)
Impact of deductible temporary differences or deductible losses for which no deferred income tax assets is recognized for the current period	270,139,191.78	113,230,724.57
Impact of using deductible temporary differences or deductible losses for which no deferred income tax assets was recognized for the prior periods	(50,147,289.55)	(21,330,045.22)
Differences of income tax annual filing (Note)	(337,997,980.04)	(421,475,254.71)
Impact by different tax rates applicable to different subsidiaries	169,030,658.26	129,320,046.84

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	2019	2018 (restated)
Impact of additional deduction of R&D expenses	(597,165,564.68)	(474,764,267.90)
Others	(240,533,580.68)	(144,821,376.07)
Income tax expenses	1,290,278,445.12	1,056,739,998.82

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 August 2019 to apply enterprise income tax of 10% for 2018, therefore, the enterprise's 2018 income tax expenses was reduced by RMB 337,997,980.04.

56. Notes to consolidated cash flow statement

(1) Other cash receipts relating to operating activities

Unit: RMB

Item	2019	2018 (restated)
Interest income	695,228,454.23	476,093,981.09
Government subsidies	397,596,487.11	475,057,090.12
Others	896,722,779.54	672,838,701.85
Total	1,989,547,720.88	1,623,989,773.06

(2) Other cash payments relating to operating activities

Unit: RMB

Item	2019	2018 (restated)
Office expenses and business expenses	1,194,981,715.54	983,305,464.34
Advertising and Selling services	1,012,053,513.83	760,259,932.32
Shipping and transportation expense	823,922,007.09	673,183,441.02
R&D expense	720,903,726.16	641,409,412.08
Travelling expense	618,963,759.27	515,750,188.76
Outsourcing service fees, fees for hiring intermediaries, etc.	410,388,242.46	421,095,361.96
Rental expense	216,521,408.43	188,524,699.14
Deposits to restricted monetary funds	109,697,678.52	276,503,897.11
Others	53,697,614.51	49,821,043.34
Total	5,161,129,665.81	4,509,853,440.07

(3) Other cash receipts relating to investing activities

Unit: RMB

Item	2019	2018
Receipts of financing lease payments	17,234,624.45	89,505,228.62
Total	17,234,624.45	89,505,228.62

(4) Other cash payments related to investing activities

Unit: RMB

Item	2019	2018
Cash payments for investment intention funds	2,968,783.82	20,000,000.00
Total	2,968,783.82	20,000,000.00

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(5) Other cash receipts relating to financing activities

Unit: RMB

Item	2019	2018
Receipts of subscriptions for share incentives	-	2,057,898,876.84
Total	-	2,057,898,876.84

(6) Other cash payments relating to financing activities

Unit: RMB

Item	2019	2018
Repurchase of restricted shares	26,897,116.20	6,555,746.33
Total	26,897,116.20	6,555,746.33

57. Supplementary information about cash flow statement

(1) Supplementary information about cash flow statement

Unit: RMB

Supplementary information	2019	2018 (restated)
1. Reconciliation of net profit to cash flows from operating activities:		
Net profit	12,465,184,302.65	11,380,464,554.48
Add: Impairment of assets	197,891,311.27	426,949,808.76
Credit loss reserve	222,009,426.18	
Fixed assets depreciation	559,888,586.31	417,518,901.58
Amortization of intangible assets	114,901,556.25	62,161,250.59
Long-term deferred expenses amortization	24,002,044.87	-
Gains on disposal of fixed assets, intangible assets and other long-term assets	(5,535,663.32)	(4,975,825.83)
Gains from changes in fair value	(15,321,889.63)	(13,406,932.17)
Financial expenses	174,491,026.21	81,142,249.58
Investment income	(36,649,237.09)	(51,929,640.63)
Share-based payment based on equity settlement	268,309,794.42	145,468,181.28
Changes in restricted funds	(27,617,192.34)	(89,418,285.57)
Increase in deferred income tax assets	(154,200,329.39)	(55,276,291.76)
Increase in deferred income tax liabilities	51,088,103.96	-
Increase in inventories	(5,742,789,862.91)	(1,021,116,536.92)
Decrease (increase) in operating non-current assets	501,950,002.84	(765,228,940.29)
Increase in operating receivables	(4,673,231,938.92)	(2,355,805,692.65)
Increase in operating payables	3,802,939,387.61	752,485,909.83
Increase in deferred income	40,410,742.17	204,253,317.48
Net cash flows from operating activities	7,767,720,171.14	9,113,286,027.76
2. Significant investing and financing activities not involving cash receipts and payments:		
3. Net changes in cash and cash equivalents:		
Ending balance of cash	26,515,668,008.40	26,031,011,733.89
Less: Opening balance of cash	26,031,011,733.89	16,029,185,269.17
Add: Ending balance of cash equivalents	-	-
Less: Opening balance of cash equivalents	-	-
Net increase in cash and cash equivalents	484,656,274.51	10,001,826,464.72

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(2) Net cash paid for obtaining subsidiaries and other business units during the current year

The current reporting period:

Unit: RMB

	Amounts
Cash or cash equivalents paid for the business combination in this year	79,600,000.00
Including: Hangzhou Kuangxin Technology Ltd.	79,600,000.00
Less: Cash and cash equivalents held by the Company on the day of purchase	63,504,217.93
Including: Hangzhou Kuangxin Technology Ltd.	63,504,217.93
Plus: cash or cash equivalents paid in the prior year for business combinations that occurred in the prior year	-
Net cash paid for obtaining the subsidiary	16,095,782.07

(3) Constituents of cash and cash equivalents

Unit: RMB

Item	Closing balance	Opening balance
Cash	26,515,668,008.40	26,031,011,733.89
Including: Cash on hand	557,429.68	621,654.57
Bank deposit for payment at any time	26,447,508,433.91	25,990,872,892.73
Other monetary capital for payment at any time	67,602,144.81	39,517,186.59
Cash equivalents	-	-
Closing balance of cash and cash equivalents	26,515,668,008.40	26,031,011,733.89

Among the total balance of RMB 623,883,056.19 of the other monetary fund(s) at the end of the reporting period (December 31st 2018: RMB 568,180,905.63); RMB 556,280,911.38 are various guarantee deposits and other restricted funds, etc. (December 31st 2018: RMB 528,663,719.04), not cash and cash equivalents.

58. Assets with restriction in ownership or use rights

Unit: RMB

Item	Book value at the end of the current reporting period	Cause of restriction
Monetary fund(s)	556,280,911.38	Various guarantee deposits and other restricted funds
Notes receivable	329,309,522.17	Endorsed to suppliers
Notes receivable	3,454,753.01	Pledged for issuing bank acceptance bills
Receivables for financing	272,663,613.54	Pledged for issuing bank acceptance bill
Fixed assets	61,877,730.05	Sale and leaseback of fixed assets
Long-term receivables	968,205,409.44	Pledged for long-term borrowings
Total	2,191,791,939.59	

59. Monetary items of foreign currencies

(1) foreign currencies

Unit: RMB

Item	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
Monetary funds			
Including: USD	949,395,651.57	6.9762	6,623,173,944.49
EUR	44,997,253.10	7.8155	351,676,031.61

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	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
PLN	35,648,922.49	1.8324	65,323,085.57
AED	6,882,239.15	1.8992	13,070,748.60
RUB	97,180,418.38	0.1126	10,942,515.11
AUD	760,824.97	4.8843	3,716,097.42
GBP	161,911.15	9.1501	1,481,503.24
ZAR	8,460.21	0.4943	4,181.88
TRY	359.20	1.1729	421.31
INR	1,707.08	0.0975	166.44
Accounts receivable			
Including: USD	339,387,367.43	6.9762	2,367,634,152.67
EUR	5,758,693.23	7.8155	45,007,066.94
Short-term borrowing			
Including: GBP	9,564,000.00	9.1501	87,511,556.40
Accounts Payable			
Including: USD	384,279,017.07	6.9762	2,680,807,278.88
Long-term borrowings			
Including: EUR	401,220,555.55	7.8155	3,135,739,251.94

(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 BV	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	Dubai	USD	Selection based on local economic environment
Hikvision Poland Spolka Z ograniczona Odpowiedzialnoscia.	Poland	PLN	Selection based on local economic environment
Hikvision do Brasil Comercio de Equipamentos de Seguranca 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

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Name of overseas subsidiaries	Main overseas operational office	Recording Currency	Basis of selection
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
Secure Holdings 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
ZAO Hikvision	Russia	RUB	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 Technology Israel Ltd.	Israel	ILS	Selection based on local economic environment
Hikvision Central America S.A.	Panama	USD	Selection based on local economic environment
Hikvision Technology Egypt JSC	Egypt	EGP	Selection based on local economic environment
PT. Hikvision Technology Indonesia	Indonesia	IDR	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
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

60. Government Subsidies

(1) Categories

Unit: RMB

Category	Amount	Financial Report Items	Amount booked in current profit and loss
VAT Rebate	1,481,554,615.35	Other Income	1,481,554,615.35
Special subsidies	635,403,575.97		
Including: other special subsidies	422,163,517.52	Deferred income / Other income/ Non-operating income	337,905,161.67
core electronic devices, high-end universal chip and basic software product projects	131,567,063.01	Deferred income / Other income	68,739,200.00
Chongqing Manufacture Base construction subsidies	81,672,995.44	Deferred income / Other income	2,418,930.00
Tax Refund/Reduction	5,048,005.27	Other income/ Non-operating income	5,048,005.27
Total	2,122,006,196.59		1,895,665,912.29

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(2) There was no refund of government subsidies during the current reporting period.

VI. Changes in consolidation scope

1. Business mergers not involving enterprises under the common control

(1) Business mergers not involving enterprises under common control during the current reporting period

Hangzhou Kuangxin Technology Ltd. (“KuangxinTechnology”)

As of June 4th 2019, the Company signed *Equity Transfer and Capital Increase Agreement for Hangzhou Kuangxin Technology Ltd.* with Kuangxin Technology, and agreed to acquire 68.89% equity of Kuangxin Technology in total held by 13 independent third parties for RMB 62 million. At the same time, the Company increased capital of RMB 50 million to Kuangxin Technology. After the capital increase was completed, the Company holds 80% equity of Kuangxin Technology in total. The acquisition was completed on June 21st 2019. As of December 31st 2019, the Company has paid RMB 49.6 million in equity transfer and RMB 50 million in capital increase.

Unit: RMB

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 (loss) of acquiree from acquisition data to the end of the reporting period
Kuangxin Technology	June 2019	112,000,000.00	80.00	Cash Payments	June 21 st 2019	Equity delivery date for obtaining control of the purchased party	36,139,418.94	1,777,641.20

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(2) Cost of business merger and goodwill

Unit: RMB

Cost of business merger	Kuangxin Technology
– Cash	99,600,000.00
– Other payable	12,400,000.00
Total cost of business merger	112,000,000.00
Less: The fair value share of identifiable net assets obtained	52,939,545.94
Goodwill	59,060,454.06

(3) Acquiree's book value of assets and liabilities at the date of acquisition

Unit: RMB

	Kuangxin Technology	
	Fair value on the date of acquisition	Book value on the date of acquisition
Assets:		
Cash and bank balances	63,504,217.93	63,504,217.93
Accounts receivable	10,398,039.06	10,398,039.06
Prepayments	253,271.03	253,271.03
Other receivables	2,863,363.74	2,863,363.74
Inventories	12,701,841.10	12,701,841.10
Other current assets	300,000.00	300,000.00
Fixed assets	851,017.16	851,017.16
Liabilities:		
Accounts payable	1,001,307.08	1,001,307.08
Advance receipts	2,611,594.30	2,611,594.30
Tax payable	808,638.58	808,638.58
Other payables	20,275,777.64	20,275,777.64
Net assets	66,174,432.42	66,174,432.42
less: minority interests	13,234,886.48	13,234,886.48
Net assets acquired	52,939,545.94	52,939,545.94

(4) The Group uses the asset-based 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.

(5) The Group has no contingent liabilities of the purchased party that need to be assumed in this merger.

2. Business mergers involving enterprises under the common control.

(1) Business mergers involving enterprises under common control during the current reporting period.

Hangzhou EZVIZ Science and Technology Ltd. (EZVIZ Science and Technology)

On April 19th 2019, the Company's parent company, CETHIK signed an entrusted management agreement with Hangzhou EZVIZ Network Co., Ltd. ("EZVIZ Network"), a holding subsidiary of the Company. According to the agreement, CETHIK entrusted EZVIZ Network to exercise the actual operation and management rights of EZVIZ Science and Technology, and is fully responsible for the production, operation and management of EZVIZ Science and Technology. EZVIZ Network does not charge a fixed entrusted management fee from CETHIK. Rather, the EZVIZ Network enjoys 100% of the distributable profits of EZVIZ Science and Technology generated before and after the entrusted management relationship. At the same time, the EZVIZ Network uses the amount of paid-in capital of EZVIZ Science and Technology as the base, and pays the capital occupation fee to CETHIK according to a certain capital

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occupancy rate. EZVIZ Network has the right to unilaterally decide to extend or prematurely terminate the entrusted management relationship. When the entrusted management relationship is terminated, EZVIZ Network can only handle it in one of the following two ways, and EZVIZ Network has the right to decide which method to choose: (1) After liquidation and cancellation of EZVIZ Science and Technology, the investment recovered by CETHIK is only the actual investment amount and the unpaid fund occupation fee payable; (2) If the equity of EZVIZ Science and Technology is transferred to EZVIZ Network or a third party designated by EZVIZ Network, the equity purchase price is only the actual investment amount and the unpaid fund occupation fee payable. Therefore, EZVIZ Network has achieved control of EZVIZ Science and Technology. Since CETHIK is the controlling shareholder of the Company and EZVIZ Science and Technology, and EZVIZ Network is the controlling subsidiary of the Company, this entrusted management of EZVIZ Science and Technology constitutes a business combination under the common control.

Unit: RMB

Name of the acquiree	Equity acquisition ratio (%) (Note)	Basis for Business merger under common control	Date of acquisition	Basis for determining date of acquisition	Income of acquiree from beginning of the year to the date of acquisition	Net loss of acquiree from beginning of the year to the date of acquisition	Income of acquiree from beginning of the prior year to the date of acquisition in prior	Net loss of acquiree from beginning of the prior year to the date of acquisition in prior
EZVIZ Science and Technology	60%	Before and after the merger, the controlling shareholder of the Group and EZVIZ Science and Technology is HIKCET, and	April 19 th 2019	Effective date of entrusted management agreement	-	(885,138.65)	-	(1,228,310.18)

Note: Since the Group holds a total of 60% equity of the merged party EZVIZ Network, and EZVIZ Network holds 100% equity of the merged party EZVIZ Science and Technology, the Group has acquired 60% equity of the merged party EZVIZ Technology. please refer to Note (VII).1.

(2) Cost of business merger

Unit: RMB

Cost of business merger	EZVIZ Science and Technology
- Long-term payables	8,000,000.00

(3) Acquiree's book value of assets and liabilities at the date of acquisition

Unit: RMB

	EZVIZ Science and Technology	
	On the date of acquisition	December 31 st 2018
Assets:		
Cash and bank balances	6,088,546.19	7,272,741.70
Other receivable	162,643.61	14,928.43
Other assets	68,499.44	37,316.45
Liabilities:		
Advance receipts	53,287.00	-
Payroll payable	54,165.26	133,027.59
Tax payable	1,040.12	-
Other payables	324,645.69	420,269.17
Net assets	5,886,551.17	6,771,689.82
less: minority interests	2,354,620.47	2,708,675.93
Net assets acquired	3,531,930.70	4,063,013.89

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(4) The Group has no contingent liabilities of the purchased entity that need to be assumed in this merger.

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 Company	Ratio of contribution (%)
Hikvision Central America S.A. (Central American Commercial)	February 2019	USD 120,000	USD 120,000	100
Hikvision Technology Egypt JSC (Egypt Subsidiary)	May 2019	USD 100,000	USD 100,000	100
Zhengzhou Hikvision Digital Technology Ltd. (Zhengzhou Hikvision) (Note 1)	June 2019	RMB 80 million	RMB 80 million	100
Nanchang Hikvision Digital Technology Ltd. (Nancang Hikvision) (Note 2)	July 2019	RMB 80 million	RMB 80 million	100
Hikvision Digital Technology (Shanghai) Ltd. (Shanghai Hikvision)	July 2019	RMB 80 million	RMB 80 million	100
Zhenping County Haikang Juxin Digital Technology Ltd. (Zhenping Haikang) (Note 3)	July 2019	RMB 59,186,800	RMB 53,268,100	90
PT. Hikvision Technology Indonesia (Indonesian Subsidiary)	July 2019	IDR 10 billion	IDR 10 billion	100
Hikvision Technologies S.R.L., (Romanian Subsidiary)	July 2019	RON 1 million	RON 1 million	100
Hefei Hikvision Digital Technology Ltd. (Hefei Hikvision) (Note 4)	August 2019	RMB 80 million	RMB 80 million	100
Tianjin Hikvision Information Technology Ltd. (Tianjin Hikvision)	September 2019	RMB 50 million	RMB 50 million	100
Ningbo Haikang Parking Systematic Operation Ltd. (Ningbo Parking) (Note 5)	October 2019	RMB 50 million	RMB 35 million	70
Ningguo Hikvision City Operation Service Ltd. (Ningguo City Operation)	October 2019	RMB 18 million	RMB 18 million	100
Hikvision IOT (Thailand) CO.,LTD (Thailand Subsidiary)	November 2019	THB 10 million	THB 10 million	100
Shijiazhuang Hikvision Science and Technology Ltd. (Shijiazhuang Hikvision) (Note 6)	February 2019	RMB 50 million	RMB 50 million	100
Zhejiang Hikvision Fire Control Technology Ltd. (Zhejiang Fire Control) (Note 6)	July 2019	RMB 50 million	RMB 50 million	100
Fuzhou Hikvision Digital Technology Ltd. (Fuzhou Hikvision) (Note 6)	October 2019	RMB 50 million	RMB 50 million	100
Guangzhou Hikvision Technology Ltd. (Guangzhou Hikvision) (Note 6)	November 2019	RMB 200 million	RMB 200 million	100
Hangzhou Hikfire Technology Ltd. (Hangzhou Hikfire) (Note 6)	December 2019	RMB 100 million	RMB 60 million	60
Hikvision West Africa Limited (Nigerian Subsidiary) (Note 6)	February 2019	NGN 28.80 million	NGN 28.80 million	100
Ezviz International Limited (Hongkong EZVIZ) (Note 6)	July 2019	HKD 10,000	HKD 10,000	100
Hikvision Azerbaijan Limited Liability (Azerbaijan Subsidiary) (Note 6)	November 2019	AZN 400,000	AZN 400,000	100
Hikvision Japan K.K. (Japan Subsidiary) (Note 6)	December 2019	JPY 38 million	JPY 38 million	100
Hikvision Argentina S.R.L. (Argentina Subsidiary) (Note 6)	December 2019	ARS 12 million	ARS 12 million	100

Note 1: At the end of the reporting period, the actual paid-up capital of Zhengzhou Hikvision was RMB 55,000,000.00, entirely contributed by the Group.

Note 2: At the end of the reporting period, the actual paid-up capital of Nanchang Hikvision was RMB 20,000,000.00, entirely contributed by the Group.

Note 3: At the end of the reporting period, the actual paid-up capital of Zhenping Hikvision was RMB 56,268,100.00, among them, RMB 53,268,100.00 was paid by the Group and RMB 3,000,000.00 was invested by minority shareholders Zhenping County Juxin Investment Ltd.

Note 4: At the end of the reporting period, the actual paid-up capital of Hefei Hikvision was RMB 35,000,000.00, entirely contributed by the Group.

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Note 5: At the end of the reporting period, the actual paid-up capital of Ningbo Praking was RMB 50,000,000.00, among them, RMB 35,000,000.00 was paid by the Group and RMB 15,000,000.00 was invested by minority shareholders Xiangshan Digital TV Ltd.

Note 6: At the end of the reporting period, Shijiazhuang Hikvision, Zhejiang Fire Control, Fuzhou Hikvision, Guangzhou Hikvision, Hangzhou Hikfire, Nigerian Subsidiary, Hongkong EZVIZ, Azerbaijan Subsidiary, Japan Subsidiary, and Argentina Subsidiary have not completed the actual capital contribution payment yet, so there is no paid-in capital.

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 (%)
Beijing Brainaire Storage Technology Ltd.	March 2019	100
Tianjin Hikvision System Technology Ltd.	December 2019	100

VII. Interest in other entities

1. Equity in subsidiaries

(1) Composition of the corporate group

Name	Location of operation	Place of registration	Nature of business	Shareholding ratio (%)		Acquisition Method
				Direct	Indirect	
Hangzhou Hikvision System Technology Ltd.	Hangzhou	Hangzhou, Zhejiang	System integration, Technology development	100.00	-	Establishment
Hangzhou Hikvision Science and Technology Ltd.	Hangzhou	Hangzhou, Zhejiang	manufacture	100.00	-	Establishment
Hangzhou Hikvision Security Equipment Leasing Services Ltd.	Hangzhou	Hangzhou, Zhejiang	Finance lease	100.00	-	Establishment
Chongqing Hikvision System Technology 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 not involving enterprises under common control
Hikvision Europe BV	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 Science and Technology Ltd.	Chongqing	Chongqing	Manufacture	100.00	-	Establishment
Hangzhou Fuyang Hik Baotai Security Technology Services Ltd. (Note 1)	Hangzhou	Hangzhou, Zhejiang	Construction	-	51.00	Establishment
Hikvision South Africa (Pty) 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 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 Traffic	Shanghai	Shanghai	Manufacture	100.00	-	Business

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Name	Location of operation	Place of registration	Nature of business	Shareholding ratio (%)		Acquisition Method
				Direct	Indirect	
System Ltd.						combination not involving enterprises under common control
ZAO Hikvision	Russia	St. Peterburg	Sales	-	100.00	Business combination not involving enterprises under common control
Beijing Brainaire Storage Technology Ltd. (Note 2)	Beijing	Beijing	Manufacture	100.00	-	Business combination not involving enterprises under common control
Henan Hua'an Intelligence Development Ltd.	Zhengzhou	Zhengzhou Henan	Construction	51.00	-	Business combination not involving enterprises under common control
Henan Hua'an Security Services Ltd. (Note 3)	Zhengzhou	Zhengzhou Henan	Services	-	45.90	Business combination not involving enterprises under common control
Hundure Technology (Shanghai) Ltd.	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 Hikvision Electronics Ltd. (Note 4)	Hangzhou	Hangzhou Zhejiang	Manufacture	71.30	-	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 Ltd.	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 Hikvision Robotics Technology Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment
Hangzhou Hikvision Investment Management Ltd.	Hangzhou	Hangzhou Zhejiang	Investment Management	100.00	-	Establishment
Hangzhou HikAuto Technology Co., Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	60.00	-	Establishment

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Name	Location of operation	Place of registration	Nature of business	Shareholding ratio (%)		Acquisition Method
				Direct	Indirect	
Hangzhou Hikvision Communication Technology Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	70.00	-	Establishment
Hangzhou Hikmicro Sensing Technology Co., Ltd.	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	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 under common control
Tianjin Hikvision System Technology Ltd. (Note 5)	Tianjin	Tianjin	Construction	100.00	-	Establishment
Hikvision Hungary Limited	Hungary	Hungary	Sales	-	100.00	Establishment
Hikvision New Zealand Limited	New Zealand	Auckland	Sales	-	100.00	Establishment
Urumqi Hai Shi Xin An Electronic Technology Ltd.	Urumqi	Urumqi, Xinjiang	Construction	-	90.00	Establishment
Hangzhou Ximu Intelligent Technology 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 HIKAuto Software Ltd.	Hangzhou	Hangzhou, Zhejiang	Technology Development	-	60.00	Establishment
Hangzhou Intelligent Technology Ltd.	Hangzhou	Hangzhou, Zhejiang	Technology Development	-	60.00	Establishment
Wuhan HIK Storage Software Ltd. (Note 8)	Wuhan	Wuhan Hubei	Technology development	-	60.00	Establishment
Chengdu Hikvision Digital Technology Ltd.	Chengdu	Chengdu Sichuan	Technology development	100.00	-	Establishment
MoYuHaiShi Electronic Technology Ltd.	Hetian	Hetian Xinjiang	Construction	-	85.00	Establishment
Hangzhou EZVIZ Software Ltd.	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment
PiShanHaiShi YongAn Electronic	Hetian	Hetian	System integration	-	90.00	Establishment

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Name	Location of operation	Place of registration	Nature of business	Shareholding ratio (%)		Acquisition Method
				Direct	Indirect	
Technology Ltd.		Xinjiang				
Henan Haikang Hua'anBaoQuan Electronics Ltd.	Zhengzhou	Zhengzhou Henan	Construction	51.00	-	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 Ltd.	Xi'an	Xi'an Shanxi	Construction	-	99.00	Establishment
Luo Pu District Hai Shi Ding Xin Electronic Technology Ltd.	Hetian	Hetian Xinjiang	System integration	-	90	Establishment
Yu Tian Hai Shi Mei Tian Electronic Technology Ltd.	Hetian	Hetian Xinjiang	System integration	-	98	Establishment
Xi'An Hikvision Digital Technology Ltd.	Xi'An	Xi'an Shanxi	Technology development	100.00	-	Establishment
Wuhan Hikvision Technology Ltd.	Wuhan	Wuhan Hubei	Technology development	100.00	-	Establishment
Wuhan Hikvision Science and Technology Ltd.	Wuhan	Wuhan Hubei	Sales	100.00	-	Establishment
Wuhan Hikvision Fire Control Technology Ltd.	Wuhan	Wuhan Hubei	Sales	100.00	-	Establishment
Hainan Hikvision System Technology Ltd.	Hainan	Lingshui Hainan	System integration	100.00	-	Establishment
Hangzhou Hikmed Imaging Technology 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 Ltd.	Guiyang	Guiyang, Guizhou	Technology development	55.00	-	Establishment
Xinjiang CET Yihai Information Technology 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 Ltd.	Israel	Israel	Sales	-	100.00	Establishment
Nanjing Hikvision Digital Technology Ltd.	Nanjing	Nanjing, Jiangsu	Sales	100.00	-	Establishment
Shijiazhuang Hikvision Science and Technology Ltd.	Shijiazhuang	Shijiazhuang Hebei	Technology development	100.00	-	Establishment
Zhengzhou Hikvision Digital Technology 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
Hangzhou EZVIZ Science and Technology Ltd. (Note 6)	Hangzhou	Hangzhou Zhejiang	Sales	-	60	Business merger under the common control
Hangzhou Kuangxin Technology Ltd. (Note 7)	Hangzhou	Hangzhou Zhejiang	Technology development	80.00	-	Business merger not involving enterprises under the common control
Hikvision Digital Technolgh (Shanghai) Ltd.	Shanghai	Shanghai	R&D, sales	100.00	-	Establishment
Nanchang Hikvision Digital Technology Ltd.	Nancang	Nancang Jiangxi	Technology development	100.00	-	Establishment

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Name	Location of operation	Place of registration	Nature of business	Shareholding ratio (%)		Acquisition Method
				Direct	Indirect	
Zhejiang Hikvision Fire Control Technology Ltd.	Jiangshan	Jiangshan Zhejiang	Technology development	100.00	-	Establishment
Zhenping County Haikang Juxin Digital Technology Ltd.	Zhenping	Zhenping Henan	System integration	-	90.00	Establishment
Hefei Hikvision Digital Technology Ltd.	Hefei	Hefei Anhui	Technology development	100.00	-	Establishment
Tianjin Hikvision Information Technology Ltd.	Tianjin	Tianjin	Technology development	100.00	-	Establishment
Fuzhou Hikvision Digital Technology Ltd.	Fuzhou	Fuzhou Fujian	System integration	100.00	-	Establishment
Ningguo Hikvision City Operation Service Ltd.	Xuancheng	Xuancheng Anhui	System integration	-	100.00	Establishment
Ningbo Haikang Parking System Operation Ltd.	Ningbo	Ningbo Zhejiang	Technology development	70.00	-	Establishment
Guangzhou Hikvision Technology Ltd.	Guangzhou	Guangzhou Guangdong	Technology development	100.00	-	Establishment
Hangzhou Hikfire Technology 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	-	100.00	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 Science and Technology Ltd. (Note 8)	Hangzhou	Hangzhou Zhejiang	Technology development	-	60.00	Establishment

Note 1: Hangzhou Fuyang HIK Baotai Security Technology Services Ltd. is a subsidiary controlled by Hangzhou System, who holds 51% equity interests. According to the *Articles of Association* of the Company, Hangzhou System has a 50% dividend payout ratio in the said company (Fuyang Baotai).

Note 2: Beijing Brainaire Storage Technology Ltd. was cancelled in 2019.

Note 3: Henan Hua'an Security Services Ltd. is a subsidiary controlled and invested by Henan Hua'an Intelligence Development Ltd.

Note 4: The remaining 28.70% equity interests of Hangzhou Hikvision Electronics Ltd. is held by China Development Bank Fund. Please refer to Note (V) 31 for details.

Note 5: Tianjin Hikvision System Technology Ltd. was cancelled in 2019.

Note 6: The Group controlled Hangzhou EZVIZ Science and Technology Ltd. in 2019 through an entrusted management agreement, and did not directly or indirectly hold its shares. See Note (VI) 2 for details.

Note 7: The Group acquired Hangzhou Kuangxin Technology Ltd. in 2019 through cash and capital increase. Please refer to Note (VI) 1 for details.

Note 8: Wuhan HikStorage Technology Ltd. has been renamed to Hangzhou HikStorage Science and Technology Ltd. in 2019.

2. Equity in joint ventures or associates

(1) Aggregated financial information of insignificant joint-ventures and associates

Unit: RMB

	Closing balance / Amount for 2019	Opening balance / Amount for 2018
Associates:		
The aggregate carrying amount of investments in associates	188,845,321.49	174,900,000.00
The aggregate amount of the following items calculated based on the Company's equity share percentage of the associates		
--Net gains (losses) and total comprehensive gains (losses)	7,743,476.93	(11,598,155.44)
Joint Ventures:		
Total investment book value	63,320,000.00	-
The sum of the following items calculated according to the shareholding ratio		
- Net income (loss) and comprehensive income (loss)	-	-

The Group uses the equity method to account for the aforementioned associates and joint ventures.

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, some of the other receivables, long-term receivables, borrowings, notes payable, accounts payable, other payables, other current liabilities, long-term payables, 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	Ending balance of the current year	Ending balance of the prior year (restated)
Financial assets:		
Measured at fair value through current profit and loss		
Held –for-trading financial assets	181.76	
Financial assets measured at fair value through current profit and loss		1,860,050.59
Other non-current financial assets	312,398,267.44	
Measured at fair value through other comprehensive income		
Receivables for financing	1,257,385,053.02	
Measured at amortized cost		
Cash and bank balances	27,071,948,919.78	26,559,675,452.93
Notes receivable	973,236,789.02	2,569,445,189.92
Accounts receivable	21,307,927,200.28	16,619,441,281.18
Other receivable	491,776,194.41	556,405,281.87
Long-term receivables	1,382,536,761.22	705,512,368.17

Items	Ending balance of the current year	Ending balance of the prior year (restated)
Financial liabilities		
Measured at fair value through current profit and loss		
Held-for-trading financial liabilities	652,428.18	
Financial liabilities measured at fair value through current profit and loss		290,998.43
Measured at amortized cost		
Short-term borrowings	2,640,082,485.15	3,465,655,688.29
Notes payable	1,239,584,016.70	463,479,760.54
Accounts payable	12,700,075,307.70	10,301,665,725.20
Other payables	1,568,744,599.94	2,953,454,987.95
Non-current liabilities due within one year	86,123,154.06	3,178,171,147.16
Other current liabilities	913,534,538.26	364,984,759.94
Long-term debt	4,604,168,571.43	440,000,000.00
Long-term payables	50,181,416.72	8,000,000.00
Other non-current liabilities	1,234,739,326.10	-

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 stand-alone 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 and EUR. 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, RUB, and etc.

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As of December 31st 2019, except for monetary items of foreign currencies set out in Note (V) 59, 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.

Unit: RMB

Currencies	Assets		Liabilities	
	Closing balance	Opening balance	Closing balance	Opening balance
USD	8,990,808,097.16	7,053,425,866.47	2,680,807,278.88	1,526,559,782.05
EUR	396,683,098.55	391,028,998.28	3,135,739,251.94	3,172,727,888.37

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, currency swaps, and foreign exchange options 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 before-tax effect on profit or loss and shareholders' equity for the current period:

Unit: RMB

Change in foreign exchange rates	2019		2018	
	Effect on profit	Effect on shareholders' equity	Effect on profit	Effect on shareholders' equity
5% appreciation of USD against functional	315,500,040.91	315,500,040.91	276,343,304.22	276,343,304.22
5% depreciation of USD against functional	(315,500,040.91)	(315,500,040.91)	(276,343,304.22)	(276,343,304.22)
5% appreciation of EUR against functional	(136,952,807.67)	(136,952,807.67)	(139,084,944.50)	(139,084,944.50)
5% depreciation of EUR against functional	136,952,807.67	136,952,807.67	139,084,944.50	139,084,944.50

2.1.2. Interest rate risk

The interest rate risk of the Group mainly arises from interest-bearing debts such as long-term bank borrowings and short-term bank borrowings. The Group exposes to cash flow interest rate risk arising from financial liabilities bearing variable interest rate, and exposes to fair value interest rate risk arising from financial liabilities bearing fixed interest rate.

The Group determines the relative proportion of fixed interest rate contracts and variable interest rate contracts based on prevailing market environment. As of December 31st 2019, the Group's long-term interest-bearing debts bearing fixed interest rates were mainly Euro-denominated borrowing contracts bearing fixed interest rate with an amount of RMB 3,126,200,000.00 (Note (V), 31) (December 31st 2018: Euro-denominated bonds payable amounted to RMB 3,172,727,888.37 (Note (V), 29).

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 variable interest rates, and have a significant adverse impact on the financial performance of the Group. The management will make adjustments on a timely basis based on the latest market conditions, including arrangements for interest rate swaps to reduce interest rate risk. The Group did not have any interest rate swap arrangement in 2019 and 2018.

At the end of the year, the amount of borrowings of the Group bearing variable interest rate is not significant, and the risk of changes in cash flow of financial instruments due to changes in interest rates is low. Therefore, no interest rate sensitivity analysis is conducted.

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 year, 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 31st 2019, 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 balance (Note (V). 1), notes receivable (Note (5). 3), accounts receivable (Note (V). 4), receivables for financing (Note (V). 5), other receivables (Note (V). 7), non-current assets due within one year (Note (V). 9), long-term receivables (Note (V). 11), 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 overdue debts. 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 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, 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). For long-term receivables, the Group calculates the expected credit losses based on the expected credit loss rate in the next 12 months or the entire duration based on the default risk exposure. For details of the related expected credit loss measurement, see (Note (V). 11).

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.

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 For the reporting period from January 1st 2019 to December 31st 2019

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.

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: RMB

December 31 st 2019				
	Within one year	1-5 years	More than five years	Total
Non-derivative financial liabilities				
Short-term borrowings	2,698,970,098.62	-	-	2,698,970,098.62
Notes payable	1,239,584,016.70	-	-	1,239,584,016.70
Accounts payable	12,700,075,307.70	-	-	12,700,075,307.70
Other payables	1,568,744,599.94	-	-	1,568,744,599.94
Other current liabilities	913,534,538.26	-	-	913,534,538.26
Other non-current liabilities	-	1,234,739,326.10	-	1,234,739,326.10
Long-term debt (including those due within one year)	140,478,495.89	3,919,810,564.35	1,090,203,682.24	5,150,492,742.48
Long-term payables (including those due within one year)	19,265,287.22	45,946,166.93	8,000,000.00	73,211,454.15
Derivative financial liabilities				
Forward foreign exchange contracts- settled in the gross amount				
- Cash inflow	213,036,486.00	-	-	213,036,486.00
- Cash outflow	213,688,914.18	-	-	213,688,914.18
- Net cash outflow	652,428.18	-	-	652,428.18

IX. Fair value disclosure

1. The financial assets and financial liabilities measured at fair value at the end of the reporting period

Unit: RMB

Items	Closing fair value			
	Level 1	Level 2	Level 3	Total
I. Continuous fair value measurement				
(I) Financial assets measured at fair value through profit and loss				
1. Held-for-trading Financial Assets				
-- Derivative financial assets	-	181.76	-	181.76
2. Other non-current financial assets	-	-	312,398,267.44	312,398,267.44
(II) Receivables for financing	-	1,257,385,053.02	-	1,257,385,053.02
Total assets measured continuously at fair value	-	1,257,385,234.78	312,398,267.44	1,569,783,502.22
(III) Financial liabilities measured at fair value through profit and loss				
1. Held-for-trading Financial Liabilities				
- Derivative financial liabilities	-	652,428.18	-	652,428.18
Total liabilities measured continuously at fair value	-	652,428.18	-	652,428.18

2. Information on the estimation technique and important parameters adopted as for continuous Level 2 fair value measurement items

Unit: RMB

	Fair value at December 31 st 2019	Estimation technique	Inputs
Forward Foreign Exchange Contracts (Assets)	181.76	Discounted cash flow approach	Forward exchange rate Discounted rate that reflects the credit risk of counterparty
Forward Foreign Exchange Contracts (Liabilities)	(652,428.18)	Discounted cash flow approach	Forward exchange rate Discounted rate that reflects the credit risk of counterparty
Receivables for financing	1,257,385,053.02	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 at December 31 st 2019	Valuation techniques	Inputs
Other non-current financial assets-- Investment in equity instruments of private companies	312,398,267.44	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 1 st 2019	290,966,813.00
Increase in the current reporting period	3,884,220.00
Decrease in the current reporting period	-
Changes in fair value booked into profit and loss during the current reporting period	17,547,234.44
Book value on December 31 st 2019	312,398,267.44

The total amount included in profit or loss in 2019 includes unrealized gains of RMB 17,547,234.44 (2018: nil) related to financial assets measured at fair value at the end of the year, and such gains or losses are included in the profit or loss from changes in fair value; The realized profit of financial assets measured at fair value included in investment income this year was RMB 17,357,220.31 (2018: RMB 12,256,000.00).

5. Items measured 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 believes that the carrying amounts of financial assets and financial liabilities stated in current assets and current liabilities in financial statements, which are not subsequently measured at fair values by the Group, approximate to their respective fair values.

The Group's financial assets which are not subsequently measured at fair values by the Group include long-term receivables, has insignificant difference between their book value and fair value.

The financial liabilities which are not subsequently measured at fair values by the Group include long-term borrowings, long-term payables, and other non-current liabilities, has insignificant difference between their book value and fair value.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

X. Related parties and related-party 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	38.88	38.88

The ultimate controlling party of the Company is China Electronics Technology Group Co., Ltd. ("CETE").

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

For details of the associates and joint ventures of the Company, see Note (V) 12.

Other joint ventures and associates that had related party transactions with the Group in the current period, or in the prior period and formed balances are as follows:

Name of the associates	Relationship with the Company
Wuhu Sensor Technology Co., Ltd. (Wuhu SensorTech)	Associated company of the Group
Maxio Technology (Hangzhou) Ltd. and its subsidiaries (Maxio Technology and its subsidiaries)	Associated company of the Group
Zhiguang Hailian Big Data Technology Ltd. (Zhiguang Hailian)	Associated company of the Group
Sanmenxia Xiaoyun Vision Technology Ltd. (Xiaoyun Vision Technology)	Associated company of the Group
Jiixin Haishi JiaAn Zhicheng Technology Ltd. (Haishi JiaAn)	Associated company of the Group

4. Information on other related parties

Name	Relationship
Gong Hongjia	Director of the company that holds more than 5% of the share of the Company
Shanghai Fullhan Microelectronics Co., Ltd. (Shanghai Fullhan Micro)	Gong Hongjia or his relative(s) serve(s) as the director(s)
Zhejiang Tuxun Technology Co.,Ltd. (Zhejiang Tuxun)	The Group's senior management serve(s) as director(s) of this company (Note 1)
Confirmware Technology(Hangzhou) Co., Ltd. (Hangzhou Confirmware)	The Group's senior management serve(s) as director(s) of this company (Note 2)
Subsidiaries of CETE (Note 3)	Under common control of the ultimate controlling party of the Company

Note 1: the senior management of the Group had left the post, and 2019 was one year after his departure, therefore, Zhejiang Tuxun was still identified as a related party of the Group for the current reporting period.

Note 2: Due to the departure of the senior management of the Group, this year was one year after he/she left the position, so this year Hangzhou Confirmware was still recognized as a related party of the Group.

Note 3: 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:

Unit: RMB

Related party	Transaction type	Amount occurred in the 2019	Amount occurred in 2018
Subsidiaries of CETE	Purchase of materials and receiving of services	385,462,257.69	300,540,055.04
Shanghai Fullhan Micro	Purchase of materials and receiving of services	366,576,874.81	268,000,337.28
Wuhu SensorTech	Purchase of materials and receiving of services	63,261,094.03	45,607,202.32
Maxio Technology and its subsidiaries	Purchase of materials and receiving of services	49,188,682.39	52,129,576.75
Total		864,488,908.92	666,277,171.39

Sales of commodities / rendering of services:

Unit: RMB

Related party	Transaction content	Amount occurred in the 2019	Amount occurred in 2018
Subsidiaries of CETE	Sales of products and rendering of services	481,423,053.77	501,207,585.45
Xiaoyun Vision Technology	Sales of products	8,014,997.11	-
Wuhu Sensor Tech	Sales of products	4,130,770.44	2,934,921.28
Zhiguang Hailian	Sales of products	4,099,860.19	1,259,520.66
Haishi JiaAn	Sales of products	488,565.32	-
Zhejiang Tuxun	Sales of products	449,431.44	1,368,910.39
Maxio Technology and its subsidiaries	Sales of products	160,288.14	39,051.29
Hangzhou Confirmware	Sales of products	112,261.40	779,678.00
Total		498,879,227.81	507,589,667.07

Statement of capital deposits:

Unit: RMB

Related Party	Content of related party transaction	Amount occurred in the 2019	Balance at the end of the current period	Amount occurred in 2018	Opening Balance
Subsidiaries of CETE (Note)	Deposit into fixed deposits	-	4,000,000,000.00	3,000,000,000.00	4,000,000,000.00
Subsidiaries of CETE (Note)	Deposit into call deposits	-	-	(500,000,000.00)	-
Total		-	4,000,000,000.00	2,500,000,000.00	4,000,000,000.00

Note: the fixed deposits and call deposits that the Group deposited into China Electronic Technology Finance Co., Ltd.

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.

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 For the reporting period from January 1st 2019 to December 31st 2019

(3) Remuneration of key management personnel

Unit: RMB

Item	Amount for the current year	Amount for the prior year
Compensation of key management personnel	44,518,667.00	45,672,000.00

(4) Other related party transaction

Pursuant to resolution of the Company's 7th meeting of the fourth session of the Board of Directors held on December 3rd 2018, the Group's subsidiary Hangzhou Hikmicro signed a financial leasing contract with a subordinate company of CETC, HikMicro will carry out sale and 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%.

6. Receivables from related parties and payables to related parties

(1) Receivables from related parties

Unit: RMB

Item	Related Party	Closing balance		Opening balance	
		Carrying balance	Bad debt provision	Carrying balance	Bad debt provision
Accounts receivable	Subsidiaries of CETE	761,252,308.57	54,524,384.59	707,471,470.74	38,564,084.85
Accounts receivable	Xiaoyun Vision Technology	6,896,577.22	382,760.04	-	-
Accounts receivable	Wuhu Sensor Tech	4,486,674.99	249,010.46	-	-
Accounts receivable	Zhiguang Hailian	4,270,910.00	47,006.81	986,160.75	49,308.04
Accounts receivable	Haishi JiaAn	541,468.80	21,296.76	-	-
Accounts receivable	Maxio Technology and its subsidiaries	158,025.60	1,295.81	-	-
Accounts receivable	Zhejiang Tuxun	130,838.99	1,072.88	345,738.04	17,286.90
Accounts receivable	Hangzhou Confirmware	-	-	298,619.99	15,611.00
Total		777,736,804.17	55,226,827.35	709,101,989.52	38,646,290.79
Notes receivable	Subsidiaries of CETE (Note)	162,553,909.93	-	60,983,163.83	-
Notes receivable	Zhiguang Hailian	244,719.00	-	-	-
Notes receivable	Hangzhou Confirmware	-	-	150,000.00	-
Total		162,798,628.93	-	61,133,163.83	-
Long-term receivables	Subsidiaries of CETE	20,000,000.00	164,000.00	-	-
Total		20,000,000.00	164,000.00	-	-
Prepayments	Subsidiaries of CETE	1,399,872.38	-	13,328,415.31	-
Total		1,399,872.38	-	13,328,415.31	-

Note: Among them, the RMB 32,697,400.57 (2018: RMB 30,440,529.78) notes receivable are the acceptance bills of which the drawer is the related party, and the former endorsers are unrelated third parties.

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(1) Payables to related parties

Unit: RMB

Item	Related Party	Closing balance	Opening balance
Accounts payable	Subsidiaries of CETE	226,498,160.40	166,845,140.44
Accounts payable	Shanghai Fullhan Micro	143,284,053.29	106,744,509.28
Accounts payable	Maxio Technology and its subsidiaries	12,763,683.98	-
Accounts payable	Wuhu Sensor Tech	9,203,484.14	5,944,535.61
Total		391,749,381.81	279,534,185.33
Notes Payable	Subsidiaries of CETE	13,054,828.27	-
Notes Payable	Shanghai Fullhan Micro	7,110,446.00	13,838,900.00
Total		20,165,274.27	13,838,900.00
Receipts in advance	Subsidiaries of CETE	7,172,635.75	2,306,953.47
Total		7,172,635.75	2,306,953.47
Other payables	Subsidiaries of CETE	56,022,589.40	63,683,807.94
Other payables	Shanghai Fullhan Micro	100,000.00	100,000.00
Other payables	Wuhu Sensor Tech	51,200.00	50,000.00
Other payables	Zhejiang Tuxun	-	9,290.00
Total		56,173,789.40	63,843,097.94
Non-current liabilities due within one year	Subsidiaries of CETE	14,601,376.90	-
Long-term payables	Subsidiaries of CETE	41,213,376.82	-
		55,814,753.72	-

XI. Share-based payments

1. Overview of share-based payments

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限制性股票激励计划的意见) (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 25th 2012 and the first extraordinary general meeting for 2012 on August 13th 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.

The total number of subject Shares related to the Restricted Shares granted under the Scheme (excluding lapsed restricted shares) and the total number of subject Shares related to other effective share incentive schemes of the Company (if any) in aggregate shall not exceed 10% of the total issued share capital of the Company. Unless approval is obtained at the general meeting by way of special resolution, the total number of Restricted Shares granted or to be granted to any Participant under this Scheme or other effective share incentive schemes of the Company (if any) in aggregate shall not exceed 1% of the total issued share capital of the Company.

The grant price for restricted shares, being the purchase price by staff, shall be determined by the Board of Directors. The grant price shall not be lower than 50% of the following price, whichever is the highest:

- (I) The closing price of the subject shares of the Company for one trading day prior to publication of the summary Share Incentive Scheme draft;
- (II) The average closing price of the subject shares of the Company for 30 trading days prior to publication of the summary Share Incentive Scheme draft;
- (III) The average price of the subject shares of the Company for 20 trading days prior to publication of the summary Share Incentive Scheme draft; or
- (IV) The unit nominal value of the subject shares of the Company.

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 any year of 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, and no grantees shall be entitled to make another application for unlocking those subject shares in the future years. The cancelled restricted shares will be repurchased by the Company based on the grant price.

On October 24th 2014, after consideration and approval by the general meeting, the Company granted 52,910,082 restricted shares to grantees at a grant price of RMB 9.25 per share ("2014 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 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 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. As of December 31st 2019, the restricted stock granted in 2014 has all vested.

On December 23rd 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 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 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.

On December 20th 2018, authorized by the 2nd 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

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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 has completed the equity registration work in January 2019.

Unit: share

2014 Share Incentive Scheme	2019	2018
Total of equity instruments outstanding at the beginning of the reporting period	-	33,932,161
Total of equity instruments granted during the current reporting period	-	-
Total of equity instruments vested during the current reporting period	-	33,422,536
Total of equity instruments forfeited during the current reporting period (Note)	-	509,625
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 3rd 2018, pursuant to the revised *Articles of Association* and resolutions of the 7th general meeting of 4th session board, and approved by the first extraordinary general meeting of 2014, the Company repurchased and cancelled 509,625 granted and unvested restricted RMB treasury shares in cash settlement. On June 26th 2019, the Company has completed the equity registration procedures.

Unit: share

2016 Share Incentive Scheme	2019	2018
Total of equity instruments outstanding at the beginning of the reporting period	45,404,512	78,490,287
Total of equity instruments granted (share dividend) during the current reporting period	-	-
Total of equity instruments vested during the current reporting period	21,836,266	30,140,165
Total of equity instruments forfeited during the current reporting period (Note)	1,593,506	2,945,610
Total of equity instruments outstanding at the end of the reporting period	21,974,740	45,404,512
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 8.42 per share 24 months	RMB 8.42 per share 36 months

Note: On December 24th 2019, authorized by the Company's second extraordinary shareholders' meeting in 2016 and according to the resolutions and the revised articles of association of the 14th meeting of the fourth board of directors, the Company repurchased and cancelled the granted but not yet unlocked 1,593,506 restricted RMB treasury shares in cash. As of the reporting date, the Company has not completed the equity registration procedures.

On December 26th 2018, pursuant to the revised *Articles of Association* and resolutions of the 26th general meeting of 3rd session board, and approved by the 2nd extraordinary general meeting of 2016, the Company repurchased and cancelled 2,945,610 granted and unvested restricted RMB treasury shares in cash settlement. The Company has completed the equity registration procedures.

Unit: share

2018 Share Incentive Scheme	2019	2018
Total of equity instruments outstanding at the beginning of the reporting period	121,195,458	-
Total of equity instruments granted (share dividend) during the current reporting period	-	121,195,458
Total of equity instruments vested during the current reporting period	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

2018 Share Incentive Scheme	2019	2018
Total of equity instruments forfeited during the current reporting period	-	-
Total of equity instruments outstanding at the end of the reporting period	121,195,458	121,195,458
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 per share and 48 months	RMB 16.98 per share and 60 months

Note: On December 20th 2018, authorized by the Second Extraordinary General Meeting of 2018 and deliberated and approved at the eighth meeting of the fourth board of directors, the Company granted 121,195,458 shares of restricted stock to the incentive grantees. The Company completed the equity registration procedures on January 17th 2019.

2. Information of the share-based payment through equity settlements

Unit: RMB

	2014 Share Incentive Scheme	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	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 release period	Determined based on the results estimation of each release period
Reasons of the significant difference between the estimates of the current reporting period with that of the prior year	None	None	None
Accumulative amount of share-based payment through equity settlement and further included in the capital reserve	363,191,911.52	321,076,594.80	211,031,591.24
Total amount of the expenses recognized according to share-based payment through equity settlement in the current reporting period	-	57,278,203.18	211,031,591.24

3. There is no share-based payment through cash settlements

XII. Commitments and contingencies

1. Significant commitments

(1) Capital commitments

Unit: RMB'000

	Closing balance	Opening balance
Contracted but not yet recognized in financial statements		
- Commitment on construction of long-term assets	10,905,300	10,420,984
- Commitment on external investments	550,000	-
Total	11,455,300	10,420,984

(2) Operating lease commitments

As of the balance sheet date, the Group had the following external commitments in respect of non-cancellable operating leases:

Unit: RMB'000

	Closing balance	Opening balance
Minimum lease payments under non-cancellable operating leases:		
First year subsequent to the balance sheet date	235,585	182,124
Second year subsequent to the balance sheet date	154,430	139,759
Third year subsequent to the balance sheet date	92,851	98,017
Subsequent years	129,063	117,099
Total	611,929	536,999

(3) As of December 31st 2019, the Group has no other significant commitments need to be disclosed.

2. Contingencies

The Group has no significant contingencies to be disclosed.

XIII. Events after the balance sheet date

1. Significant unadjusted events

1.1 Assessment of the impact of the COVID-19 epidemic

In January 2020, the outbreak of COVID-19 Epidemic (the “Epidemic”) broke out across China, which had an adverse impact on the macro-economic conditions. The Group expects that the Epidemic may have certain impact on future sales, collection of accounts receivable, borrowings and etc., while the degree of which will depend on the progress and duration of global Epidemic prevention and control as well as the implementation of prevention and control policies in various places. The Group actively responded to and strictly implemented local government regulations and requirements for Epidemic prevention and control. As of the approval date of the financial statements disclosure, the situation of Epidemic prevention and control in China continued to improve, and the overall progress of Epidemic prevention and control and initiatives to promote economic and social development achieved positive results. However, the rapid spread of the Epidemic globally has brought uncertainty, and the Group will closely monitor the development of Epidemic situation, continue to assess and respond to the possible impact of the Epidemic situations on the Group’s performance and operations.

1.2 Revision to the Company’s performance evaluation indicators for the 2018 Restricted Share Incentive Scheme

The 15th meeting of the fourth Board of Directors of the Company was held on February 28th 2020, on which the *Proposal on Revision to the Company’s Performance Evaluation Indicators for the 2018 Restricted Share Incentive Scheme* was reviewed and approved, and the performance evaluation indicators as set out in the *2018 Restricted Share Incentive Scheme (Revision to Draft)* and its summary and other documents were revised accordingly. The historical comparison value of the compound operating income growth rate and the benchmark companies’ comparison value over the same period will be used as alternative evaluation indicators, that is, if either of the two indicators were satisfied, the Company’s performance evaluation indicator for the current unlocking period is considered to be satisfied. The proposal is still pending on the approval of the general meeting of shareholders.

2. Profit Distribution

Pursuant to the proposal of the 17th meeting of the 4th session Board of Directors on April 23rd 2020, the Company proposed to distribute cash dividend of RMB 7 (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 video products and video services.

1.2 Segment financial reporting

External revenue by product or business segments

Unit: RMB

Item		2019	
		Operating income	Operating cost
Video Surveillance	Front-end equipment	27,175,127,832.29	13,018,006,201.14
	Back-end equipment	7,519,825,167.90	3,700,043,734.49
	Central control equipment	8,822,675,802.63	4,289,265,345.53
	Construction contract	1,091,421,819.86	844,074,602.62
	Other	8,612,324,560.21	6,479,665,731.95
Innovative Business	Smart home business	2,592,271,750.14	1,574,835,597.99
	Robotic business	813,993,602.43	380,163,028.57
	Other innovative business	1,030,469,529.76	854,122,534.83
Total		57,658,110,065.22	31,140,176,777.12

Unit: RMB

Item		2018	
		Operating income	Operating cost
Video Surveillance	Front-end equipment	24,083,382,887.01	12,054,070,919.03
	Back-end equipment	6,779,290,973.76	3,603,440,284.98
	Central control equipment	7,323,448,788.51	3,380,634,705.16
	Construction contract	2,285,061,427.63	2,008,019,572.05
	Other	6,561,947,057.15	4,770,561,559.60
Innovative Business	Smart home business	1,636,697,390.22	997,681,210.62
	Robotic business	657,068,840.55	276,817,693.44
	Other innovative business	510,235,116.78	392,243,610.36
Total		49,837,132,481.61	27,483,469,555.24

External revenue by geographical area & non-current assets by geographical location

Unit: RMB

Item	2019	2018
External revenue generated in domestic area	41,419,508,094.09	35,646,435,049.93
External revenue generated in overseas area	16,238,601,971.13	14,190,697,431.68
Total	57,658,110,065.22	49,837,132,481.61

Unit: RMB

Item (Note)	At December 31 st 2019	At January 1 st 2019
Non-current assets in domestic area	8,401,009,239.65	7,810,496,315.84
Non-current assets in overseas area	294,697,597.55	352,944,245.80
Total	8,695,706,837.20	8,163,440,561.64

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.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

XV. Notes to major items of financial statements of the parent company

1. Accounts receivable

(1) Disclosure by age

Unit: RMB

Aging	Closing Balance		
	Accounts receivable	Bad debt provision	Proportion (%)
Not overdue	9,691,331,173.29	13,403,713.21	0.14
Within 1 year after the overdue	15,265,380,820.50	96,817,338.63	0.63
1-2 years after the overdue	301,509,638.74	74,985,447.15	24.87
2-3 years after the overdue	91,281,703.85	60,930,537.32	66.75
3-4 years after the overdue	39,927,719.04	35,328,094.03	88.48
Over 4 years after the overdue	65,309,887.98	65,309,887.98	100.00
Subtotal	25,454,740,943.40	346,775,018.32	1.36

(2) Classification and disclosure of by bad debt provision methods

Unit: RMB

Category	Closing balance					Opening balance				
	Carrying balance		Bad debt provision		Book value	Carrying balance		Bad debt provision		Book value
	Amount	Percentage (%)	Amount	Percentage (%)	Amount	Amount	Percentage (%)	Amount	Percentage (%)	Amount
Provision for bad debts on a single basis	-	-	-	-	-	-	-	-	-	-
Provision for bad debts by portfolios	25,454,740,943.40	100	346,775,018.32	1.36	25,107,965,925.08	16,178,600,865.87	100.00	974,081,704.16	6.02	15,204,519,161.71
Total	25,454,740,943.40	100	346,775,018.32	1.36	25,107,965,925.08	16,178,600,865.87	100.00	974,081,704.16	6.02	15,204,519,161.71

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Accounts receivable provision for bad debts by portfolios

Unit: RMB

Customer	Closing balance		
	Carrying balance	Bad debt provision	Proportion (%)
Subsidiaries' customers	21,576,057,911.97	-	0.00
Portfolio A	1,862,765.26	222,555.44	11.95
Portfolio B	3,876,600,006.61	346,332,203.32	8.93
Portfolio C	220,259.56	220,259.56	100.00
Total	25,454,740,943.40	346,775,018.32	1.36

Description of accounts receivable for bad debt 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.

(3) Bad debt provision

In the current reporting period, the reversal of bad debts during the current reporting period was RMB 616,606,086.13.

In the current reporting period, the amount of actual accounts receivable write-off was RMB 11,093,198.71, and RMB 392,599.00 was recollected after writing-off.

(4) Top five debtors based on corresponding closing balance of account receivables

Unit: RMB

Name of the Party	Relationship with the Company	Book value balance of accounts receivable	Closing balance for bad debt provision	Proportion (%)
Subsidiary A	Subsidiary	22,167,698,884.32	-	88.29
Company A	Related party	162,750,631.54	4,722,123.62	0.63
Company B	Third party	62,420,946.31	883,694.33	0.25
Company C	Third party	60,846,279.53	739,405.20	0.24
Company D	Third party	39,929,510.12	517,742.96	0.16
Total		22,493,646,251.82	6,862,966.11	89.57

(5) As of December 31st 2019, there is no termination of accounts receivable booking due to transfer of a financial asset.

(6) As of December 31st 2019, the Company has no assets/liabilities booked due to transferred accounts receivable that the Group still continue to be involved in.

2. Other receivables

2.1 By categories

Unit: RMB

Category	Closing balance	Opening Balance
Dividends receivable	2,550,000.00	2,550,000.00
Other receivables	918,725,388.15	520,437,955.34
Total	921,275,388.15	522,987,955.34

2.2 Dividends receivable

Unit: RMB

Invested company	Closing balance	Opening Balance
Subsidiaries of CETE	2,550,000.00	2,550,000.00
Total	2,550,000.00	2,550,000.00

2.3 other receivables

(1) Other receivables by aging

Unit: RMB

Item	Closing Balance		
	Other receivables	Bad debt provision	Proportion (%)
Not overdue	870,056,394.13	536,574.53	0.06
Within 1 year after the overdue	26,734,499.38	1,479,004.45	5.53
1-2 years after the overdue	19,872,855.16	2,114,471.79	10.64
2-3 years after the overdue	7,419,283.89	2,336,500.77	31.49
3-4 years after the overdue	2,281,232.52	1,172,325.39	51.39
Over 4 years after the overdue	2,157,562.18	2,157,562.18	100.00
Subtotal	928,521,827.26	9,796,439.11	1.06

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

(2) Other receivables by nature of the payment

Unit: RMB

Nature	Closing balance	Opening balance
Payments by related parties within the Group	678,798,902.79	254,412,122.73
Temporary payments for receivables	196,954,698.49	235,499,619.96
Guarantee deposit	45,527,954.39	59,549,614.46
Investment deposit	-	20,000,000.00
Others	7,240,271.59	2,190,850.93
Total	928,521,827.26	571,652,208.08

(3) Provision for bad debts

In the current reporting period, Bad debt provision recovered or reversed is nil.

(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: RMB

The name of entity	Relationship with the Company	Nature	Closing balance	Aging	Percentage to total other receivables (%)	Bad debt provision
Subsidiary B	Subsidiary	Internal Payment	309,850,178.44	Not overdue	33.73	-
Subsidiary C	Related party	Internal Payment	85,862,309.68	Not overdue	9.35	-
Subsidiary D	Third party	Internal Payment	70,750,260.61	Not overdue	7.70	-
Subsidiary E	Third party	Internal Payment	39,149,174.89	Not overdue	4.26	-
Subsidiary F	Third party	Internal Payment	23,605,005.00	Not overdue	2.57	-
Total			529,216,928.62		57.61	-

(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

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

3. Long-term equity investment

Unit: RMB

Item	Closing Balance			Opening Balance		
	Carrying Balance	Provisions	Book Value	Carrying Balance	Provisions	Book Value
Investment in subsidiaries	4,878,400,682.40	-	4,878,400,682.40	4,317,555,407.77	73,816,351.77	4,243,739,056.00
Investments in associated enterprises and joint ventures	195,617,348.04	-	195,617,348.04	117,408,339.90	-	117,408,339.90
Total	5,074,018,030.44	-	5,074,018,030.44	4,434,963,747.67	73,816,351.77	4,361,147,395.90

(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 Ltd.	745,219,821.80	31,056,690.61	-	776,276,512.41	-	-
Hangzhou Hikvision Security Equipment Leasing Services Ltd.	200,000,000.00	-	-	200,000,000.00	-	-
Shanghai Goldway Intelligent Traffic System Ltd.	23,000,000.00	-	-	23,000,000.00	-	-
Chongqing Hikvision System Technology Ltd.	700,000,000.00	-	-	700,000,000.00	-	-
Hundure Technology (Shanghai) Ltd.	37,247,790.28	-	-	37,247,790.28	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

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 EZVIZ Network Ltd.	6,641,675.60	2,508,559.95	-	9,150,235.55	-	-
Hangzhou Haikang Zhicheng Investment and Development Ltd.	24,000,000.00	-	-	24,000,000.00	-	-
Hangzhou Hikrobot Technology Co., Ltd.	87,402,825.23	36,195,581.58	-	123,598,406.81	-	-
Hangzhou Hikvision Investment Management Ltd.	100,000.00	-	-	100,000.00	-	-
Hangzhou HikAuto Technology Ltd.	140,813,518.12	42,909,909.47	-	183,723,427.59	-	-
Hangzhou Hikvision Communication Technology Ltd.	7,000,000.00	-	-	7,000,000.00	-	-
Hangzhou Hikmicro Sensing Technology Co., Ltd.	60,000,000.00	60,513,668.74	-	120,513,668.74	-	-
HDT International Ltd.	87,786.14	-	-	87,786.14	-	-
Prama Hikvision Indian Private Limited	1,585,696.80	-	-	1,585,696.80	-	-
Hikvision International Co., Limited	79,423.52	-	-	79,423.52	-	-
Hikvision Australia Pty Ltd.	2,866,850.00	-	-	2,866,850.00	-	-
Hikvision Singapore Pte. Ltd	1,900,590.00	-	-	1,900,590.00	-	-
Hikvision South Africa (Pty) Ltd.	1,578,650.00	-	-	1,578,650.00	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

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 Dubai FZE	1,870,351.40	-	-	1,870,351.40	-	-
Hikvision Brazil Participacoes Ltda.	4,579,750.50	-	-	4,579,750.50	-	-
Hikvision Limited Liability Company	647,249.19	-	-	647,249.19	-	-
Coöperatief Hikvision Europe U.A.	65,485.53	-	-	65,485.53	-	-
Hikvision Korea Limited	1,535,850.00	-	-	1,535,850.00	-	-
Hikvision Colombia SAS	1,337,440.00	-	-	1,337,440.00	-	-
Hikvision Kazakhstan limited liability partnership	4,758.69	-	-	4,758.69	-	-
Hikvision Turkey Technology And Security Systems Commerce Corporation	1,148,115.83	-	-	1,148,115.83	-	-
Chongqing Hikvision Science and Technology Ltd.	100,000,000.00	541,006.38	-	100,541,006.38	-	-
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 Ltd.	67,475,000.00	-	-	67,475,000.00	-	-
Henan Haikang Hua'An Bao Quan Electronics Ltd.	510,000.00	-	-	510,000.00	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

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 Science and Technology Ltd.	1,020,741,963.29	13,262,762.56	-	1,034,004,725.85	-	-
Hangzhou Hikvision Electronics Ltd.	397,745,645.00	3,346,665.36	-	401,092,310.36	-	-
Beijing Brinaire Storage Ltd.	95,878,126.85	-	95,878,126.85	-	-	-
Tianjin Hikvision System Technology Ltd.	10,000,000.00	-	10,000,000.00	-	-	-
Wuhan Hik Storage Technology Ltd.	60,000,000.00	869,464.15	-	60,869,464.15	-	-
Chengdu Hikvision Digital Technology Ltd.	300,000,000.00	-	-	300,000,000.00	-	-
Hangzhou HikAuto Software Ltd.	1,589,417.56	3,893,586.96	-	5,483,004.52	-	-
Hangzhou Haikang Intelligent Technology Ltd	438,438.67	2,287,576.67	-	2,726,015.34	-	-
Hangzhou EZVIZ Software Ltd.	3,739,571.23	8,796,187.08	-	12,535,758.31	-	-
LLC Hikvision Tashkent	833,014.00	-	-	833,014.00	-	-
Xi'An Hikvision Digital Technology Ltd.	50,000,000.00	25,000,000.00	-	75,000,000.00	-	-
Wuhan Hikvision Technology Ltd.	12,600,000.00	-	-	12,600,000.00	-	-
Wuhan Hikvision Science and Technology Ltd.	65,250,000.00	-	-	65,250,000.00	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

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 Hikmed Technology Ltd.	48,000,000.00	769,806.64	-	48,769,806.64	-	-
Guizhou Haikang Transportation Big Data Ltd.	5,500,000.00	11,000,000.00	-	16,500,000.00	-	-
Xinjiang CET Yihai Information Technology Ltd.	24,000,000.00	-	-	24,000,000.00	-	-
Nanjing Hikvision Digital Technology Ltd..	-	35,000,000.00	-	35,000,000.00	-	-
Hangzhou Kuangxin Technology Ltd.	-	112,000,000.00	-	112,000,000.00	-	-
Zhengzhou Hikvision Digital Technology Ltd.	-	55,000,000.00	-	55,000,000.00	-	-
Nanchang Hikvision Digital Technology Ltd.	-	20,000,000.00	-	20,000,000.00	-	-
Hikvision Digital Technology (Shanghai) Ltd.	-	80,000,000.00	-	80,000,000.00	-	-
Hefei Hikvision Digital Technology Ltd.	-	35,000,000.00	-	35,000,000.00	-	-
Tianjin Hikvision Information Technology Ltd.	-	50,000,000.00	-	50,000,000.00	-	-
Ningbo Hikvision Parking System Operation Ltd.	-	35,000,000.00	-	35,000,000.00	-	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

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	-	-
Hangzhou HikStorage Technology Ltd.	-	173,892.83	-	173,892.83	-	-
Total	4,317,555,407.77	666,723,401.48	105,878,126.85	4,878,400,682.40	-	-

(2) Investments in associated enterprises and joint ventures

Unit: RMB

Name of investee	Opening balance	Increase/Decrease during the current reporting period								Closing Balance	Balance of impairment loss provision at the end of the current reporting period
		Additional Investments	Reduce Investments	Investment income recognized under the equity method	Other comprehensive income adjustment	Other changes in equity	Declared cash dividends or profits	Provision for impairment	Others		
1. Joint Ventures											
Hangzhou Haikang Intelligent Industry Equity Investment Fund Partnership (Limited Partnership)	-	50,000,000.00	-	-	-	-	-	-	-	50,000,000.00	-
Daishan Hailai Yunzhi Technology Ltd.	-	13,320,000.00	-	-	-	-	-	-	-	13,320,000.00	-
Subtotal	-	63,320,000.00	-	-	-	-	-	-	-	63,320,000.00	-

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Name of investee	Opening balance	Increase/Decrease during the current reporting period								Closing Balance	Blance of impairment loss provision at the end of the current reporting period
		Additional Investments	Reduce Investments	Investment income recognized under the equity method	Other comprehensive income adjustment	Other changes in equity	Declared cash dividends or profits	Provision for impairment	Others		
2.Associated Enterprises											
Wuhu Sensor Tech Intelligent Technology Ltd.	41,771,440.45	-	-	6,649,526.01	-	-	-	-	-	48,420,966.46	-
Maxio Technology (Hangzhou) Ltd.	65,636,899.45	-	-	(238,972.43)	-	-	-	-	-	65,397,927.02	-
Zhiguang Hailian Big Data Technology Ltd.	10,000,000.00	-	-	(1,315,140.73)	-	-	-	-	-	8,684,859.27	-
Qinghai Qingtang Big Data Ltd.	-	9,800,000.00	-	(6,404.71)	-	-	-	-	-	9,793,595.29	-
Subtotal	117,408,339.90	9,800,000.00	-	5,089,008.14	-	-	-	-	-	132,297,348.04	-
Total	117,408,339.90	73,120,000.00	-	5,089,008.14	-	-	-	-	-	195,617,348.04	-

(3) As of December 31st 2019, there were no restrictions on the capability of transferring fund to the Company from investees in which the Company held long-term equity investment.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

4. Operating income and operating cost

Unit: RMB

Item	2019		2018	
	Income	Cost	Income	Cost
Operating income	22,818,988,903.46	7,351,332,707.12	19,948,078,284.47	6,337,037,884.18
Other operating income	2,893,477,698.34	377,154,148.55	2,340,135,832.19	262,631,601.12
Total	25,712,466,601.80	7,728,486,855.67	22,288,214,116.66	6,599,669,485.30

5. Investment income

(1) Details of investment income

Unit: RMB

Item	2019	2018
Long-term equity investment income calculated by cost method	1,400,000.00	-
Long-term equity investment income (losses) measured by equity method	5,089,008.14	(4,200,612.39)
Investment income (loss) on disposal of long-term equity investment	11,161.99	(9,994,028.47)
Investment gains for available-for-sale financial assets during the holding period		12,256,000.00
Investment income from redemption of bank finance products upon expiry		84,783,236.04
Investment income of other non-current financial assets during the holding period	17,357,220.31	
Gain on disposal of held-for-trading financial assets	1,168,699.00	
Total	25,026,089.44	82,844,595.18

6. Related party transactions

(1) Sales and purchase of goods, provision of services and receiving services

Purchase of goods/receiving of services:

Unit: RMB

Related party	Transaction type	Amount for 2019	Amount for 2018
Subsidiaries of Hikvision (Note)	Purchase of materials and receiving of services	5,671,591,849.30	7,361,353,668.93
Maxio Technology and its subsidiaries	Purchase of materials and receiving of services	4,192,107.01	51,914,266.05
Subsidiaries of CETE	Purchase of materials and receiving of services	39,607,756.46	261,945.55
Shanghai Fullhan	Purchase of materials and receiving of services	36,590,000.00	-
Total		5,751,981,712.77	7,413,529,880.53

Note: Subsidiaries of Hikvision are subsidiaries of the Company. See Note (VII) for details.

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Sales of goods/rendering of services:

Unit: RMB

Related party	Transaction type	Amount for 2019	Amount for 2018
Subsidiaries of Hikvision	Sales of products and rendering of services	17,597,924,722.59	15,251,464,800.88
Subsidiaries of CETE	Sales of products	251,053,117.23	103,277,524.19
Xiaoyun Vision Technology	Sales of products	7,709,012.16	-
Zhiguang Hailian	Sales of products	4,099,860.19	1,259,520.66
Wuhu Sensor Tech	Sales of products	74,446.30	-
Total		17,860,861,158.47	15,356,001,845.73

Statement of capital deposits:

Unit: RMB

Related Party	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 CETE (Note)	Deposit into fixed deposits	-	4,000,000,000.00	3,000,000,000.00	4,000,000,000.00
Subsidiaries of CETE (Note)	Deposit into call deposits	-	-	(500,000,000.00)	-
Total		-	4,000,000,000.00	2,500,000,000.00	4,000,000,000.00

Note: The Company had deposited fixed deposits and call deposits into China Electronic Science and Technology Finance Ltd.

Those transactions above were executed at market prices or at the prices agreed by both parties.

(2) Guarantees with related parties

In the current reporting period, the Company has provided guarantees for its 18 wholly-owned and majority-owned subsidiaries in an amount not exceeding an equivalent of RMB 25.55 billion (2018: RMB 22.45 billion), including the joint liability guarantee for the payment obligations on purchase from suppliers in an amount not exceeding an equivalent of RMB 31.25 billion (2018: RMB 2.5 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 22.42 billion (2018: RMB 19.95 billion).

For details of the Company's guarantees on Safety Chongqing project, please refer to Note X (5).

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

7. Receivables from related parties and payables to related parties

(1) Receivables from related parties

Unit: RMB

Item	Related party	Closing balance		Opening balance	
		Carrying balance	Bad debt provision	Carrying balance	Provision
Accounts receivable	Subsidiaries of Hikvision	20,936,806,929.47	-	13,281,977,578.40	664,098,878.92
Accounts receivable	Subsidiaries of CETE	250,291,208.65	10,516,129.42	77,379,251.13	4,303,331.24
Accounts receivable	Zhiguang Hailian	4,270,910.00	47,006.81	986,160.75	49,308.04
Accounts receivable	Xiaoyun Vision Technology	6,550,814.22	363,570.19	-	-
Total		21,197,919,862.34	10,926,706.42	13,360,342,990.28	668,451,518.20
Notes receivable	Subsidiaries of CETE	-	-	2,168,790.00	-
Total		-	-	2,168,790.00	-
Other receivables	Subsidiaries of Hikvision	678,798,902.79		254,412,122.73	12,720,606.14
Total		678,798,902.79		254,412,122.73	12,720,606.14
Prepayments	Subsidiaries of Hikvision	64,380,038.22	-	11,465,581.45	-
Prepayments	Subsidiaries of CETE	144,569.90	-	6,616,973.90	-
Total		64,524,608.12	-	18,082,555.35	-
Dividend receivables	Subsidiaries of Hikvision	2,550,000.00	-	2,550,000.00	-
Total		2,550,000.00	-	2,550,000.00	-

(2) payables to related parties

Unit: RMB

Item	Related party	Closing balance	Opening balance
Accounts payable	Subsidiaries of Hikvision	877,307,780.01	92,669,607.45
Accounts payable	Subsidiaries of CETE	1,653.61	168,726.74
Accounts payable	Maxio Technology and its subsidiaries	8,560,000.00	-
Total		885,869,433.62	92,838,334.19
Receipts in advance	Subsidiaries of Hikvision	7,682,167.48	8,276,019.65
Receipts in advance	Subsidiaries of CETE	109,309.12	555,320.76
Total		7,791,476.60	8,831,340.41

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	Related party	Closing balance	Opening balance
Other payables	Subsidiaries of Hikvision	219,301,627.42	127,168,684.42
Other payables	Subsidiaries of CETE	150,000.00	180,520.00
Other payables	Shanghai Fullhan Micro	100,000.00	100,000.00
Other payables	Wuhu Sensor Tech	1,200.00	-
Other payables	Zhejiang Tuxun	-	9,290.00
Total		219,552,827.42	127,458,494.42

8. Supplementary information to the cash flow statement

(1) Supplementary information to the cash flow statement

Unit: RMB

Supplementary information	2019	2018
1. Reconciliation of net profit to cash flows from operating activities:		
Net profit	11,682,416,010.01	9,769,694,399.19
Add: Assets impairment provision	(51,593,292.77)	226,183,330.78
Credit loss provision	(656,135,180.29)	
Depreciation of fixed assets	245,879,493.31	220,185,337.21
Amortization of intangible assets	82,358,499.02	36,076,412.59
Amortization of long-term deferred expenses	9,252,020.83	-
Gains on disposal of fixed assets, intangible assets and other long-term assets	(4,072,096.18)	(4,138,938.48)
Gains from change in fair value	(17,547,234.44)	-
Financial expenses	183,074,224.09	32,451,328.20
Investment income	(25,026,089.44)	(82,844,595.18)
Share-based payment through equity settlement	193,304,834.81	104,563,570.17
Change in restricted funds	(2,035,173.70)	(193,518,759.75)
Decrease (Increase) in deferred income tax assets	95,421,754.68	(21,632,515.13)
Decrease of inventories	49,235,200.73	199,234,551.87
Increase in operating receivables	(9,018,892,651.51)	(2,909,749,021.26)
Increase in operating payables	5,315,195.54	214,936,244.29
Increase (Decrease) in deferred income	(24,728,979.56)	123,844,108.01
Net cash flow from operating activities	2,746,226,535.13	7,715,285,452.51
2. Major investing and financing activities not involving cash receipt and payment:		

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Supplementary information	2019	2018
3. Net change in cash and cash equivalents:		
Closing balance of cash	16,656,028,410.72	18,998,934,287.59
Less: Opening balance of cash	18,998,934,287.59	12,304,082,533.11
Add: Closing balance of cash equivalents	-	-
Less: Opening balance of cash equivalents	-	-
Net increase (decrease) in cash and cash equivalents	(2,342,905,876.87)	6,694,851,754.48

(2) Composition of cash and cash equivalents

Unit: RMB

Item	Closing balance	Opening balance
I. Cash	16,656,028,410.72	18,998,934,287.59
Including: Cash on hand	181,655.02	284,520.29
Bank deposit for payment at any time	16,654,913,925.73	18,997,620,001.15
Other monetary funds for payment at any time	932,829.97	1,029,766.15
II. Cash equivalents	-	-
III. Closing balance of cash and cash equivalents	16,656,028,410.72	18,998,934,287.59

On December 31st 2019, the Company's closing balance of other monetary funds was RMB 196,494,944.30 (December 31st 2018: RMB 194,556,706.78), of which RMB 195,562,114.33 were all various guarantee deposits (December 31st 2018: RMB 193,526,940.63), 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	(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 enjoyment according to the state industrial policy)	413,790,429.84	/
Net profit or loss of the subsidiary from the beginning of the reporting period to the merger date, for business combination involving enterprises under common control	(885,138.65)	/
Held- for-trading financial assets, profits and losses from change in fair value of held-for-trading financial liabilities, and investment income from disposal of held-for-trading financial assets and liabilities and available-for-sale financial assets excluding the effective hedging business related to the regular business operation of the Company	26,872,639.66	/
Other non-operating income and expense except the items mentioned above	52,155,026.79	/
Impact of income tax	(86,193,406.35)	/

Notes to Financial Statements

 For the reporting period from January 1st 2019 to December 31st 2019

Item	Amount	Description
The impact of minority equity	(26,616,307.04)	/
Total	377,069,369.03	/

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

Profit for the reporting period	Weighted average return on net assets (%)	Earnings per share	
		Basic earnings per share	Diluted earnings per share
Net profit attributable to ordinary shareholders of the Company	30.53%	1.343	1.343
Net profit excluding non-recurring items of profit or loss attributable to ordinary shareholders of the Company	29.60%	1.302	1.302

Section XIII Documents Available for Reference

1. The financial report was signed by the Company's legal representative.
2. 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.
3. Original copy of all the Company's documents and announcements were published on the newspapers designated by CSRC within 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 25th 2020

Note:

This document is a translated version of the Chinese version 2019 Annual Report (“2019 年年度报告”), and the published announcements in the Chinese version shall prevail. The complete published Chinese 2019 Annual Report may be obtained at www.cninfo.com.cn.