HIKVISION

2019 Environmental, Social and Governance Report

Hangzhou Hikvision Digital Technology Co., Ltd.

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About This Report

Overview

This Report offers full visibility into Hangzhou Hikvision Digital Technology Co., Ltd.' s (hereinafter referred to as "Hikvision", "we" or the "Company") performance and management measures in environmental, social and governance (hereinafter referred to as "ESG") matters, with particular focus on stakeholder concerns.

Reporting Scope

This Report covers data and information about the Company from January 1 to December 31, 2019 (hereinafter referred to as the "reporting period"). Of note some information references data dating back to 2018 or before, or looks forward to 2020. This Report covers Hikvision and its subsidiaries.

Basis of Preparation

This Report is in accordance with the 2016 *GRI Standards* issued by the Global Reporting Initiative (GRI) (hereinafter referred to as the "GRI Standards") , and the *Shenzhen Stock Exchange Social Responsibility Instructions to Listed Companies*. Further, this Report is prepared in accordance with a set of established procedures, including key stakeholders identification, material ESG issues identification and ranking, reporting scope determination, data collection, report preparation and report review, etc.

Data Source and Reliability Assurance

The data and cases included in this Report are mainly from the Company's statistical reports and relevant documents. The Company confirms that this Report does not contain any false or misleading statements, and is responsible for the authenticity, accuracy, and completeness of the content herein.

Confirmation and Approval

After confirmation by management, this Report was approved by the Board of Directors on April 23rd, 2020.

Access and Feedback

This report is available in both Simplified Chinese and English. To download, please visit www.cninfo.com.cn

We highly value stakeholder and reader feedback, as your comments will help us further improve this Report and our ESG performance. Feel free to contact us, our contact information is below:

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2019 Performance Summary

Operation and ESG Management

32	(Mainland China) provincial business centers / first-level subsidiaries
59	branch operations in Hong Kong, Macao, Taiwan and countries/ regions outside China
6 groups	identified main stakeholders
RMB 57.66 billion	direct economic value
15.69%	increase in direct economic value
8 categories	identified highly important issues

Innovation and Product

1,500	new intellectual property items during the reporting period
5,161	accumulated intellectual property items
RMB 5.48 billion	R&D investment during the reporting period
Nearly 8,000	China Energy Conservation Program (CECP) certified products

Employee and Community

40,403	employees around the world a 17.48% increase over 2018
2,978	new graduates hired
Nearly RMB 2.52 million	contribution to charitable environmental protection programmes (value) a 147.18% increase over 2018
100%	security education coverage
51.6 hours	total hours of training per employee
2,084,974 hours	total hours of training received by employees

Environmental

6,404,560 kWh	photovoltaic power generated a 39.15% increase over 2018
100%	hazardous waste legal transfer rate
0	excessive emission and chemical spill event
Nearly 7,500	RoHS certified materials
Nearly 3,000	REACH SVHC certified materials

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Message from Management

For hundreds of years, human society has significantly evolved—from the farming age, to mechanisation, to the information age, and into the current intelligence age. Technological progress has promoted changes in production and people's lives. It has also contributed to humankind's wellbeing by improving production efficiency and the quality of life.

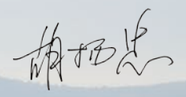
At the same time, it is clear that technological advancements can sometimes present societal challenges. Indeed, the appropriate development, deployment, and use of certain technological advancements have become a global topic of discussion and reflection. The development of video technology presents huge opportunities to improve public security, production efficiency, and quality of life. Notwithstanding these opportunities, we also acknowledge the potential risks inherent in the improper applications of certain technologies.

Government agencies, organizations, media, and people in the countries and regions where we operate expect large multinational like us to shoulder greater social responsibility. Therefore, we strive to be thought-leaders regarding how to use technology for the good, and seek consensus and guidance among different cultures and values, so that our progress benefits broader society as a whole.

Becoming a well-respected global enterprise is our vision, and affords us the self-awareness required to inform our decision-making process as it relates to the ethical application of our technology. At Hikvision, using technology for the good is not just a slogan as we endeavour to guard the organization against any unethical business practices, and to continually pursue the high road to success.

Goodwill enables us to perceive the world in a constructive way, to put ethics ahead of profits, and to gain insights that truly benefit the wellbeing of humankind. See far, go further.

April 2020



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Hikvision is committed to exploring different ways to perceive the world. We try to offer profound insights to innovators, provide multi-dimensional information for decision-makers, and lay a sound foundation for an intelligent society. All with an eye towards partnering with customers, partners and professional institutions to create a safer and better future for mankind.

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 of the world.

Corporate Vision

Empower vision for the security and growth of the world

HIKVISION®

Corporate Values

Dedicated to customers' continual success
Adding value to companies and communities
Acting with honesty and integrity
Pursuing excellence in every endeavor

Brand Slogan

See Far, Go Further

Communication Theme

Let World See More

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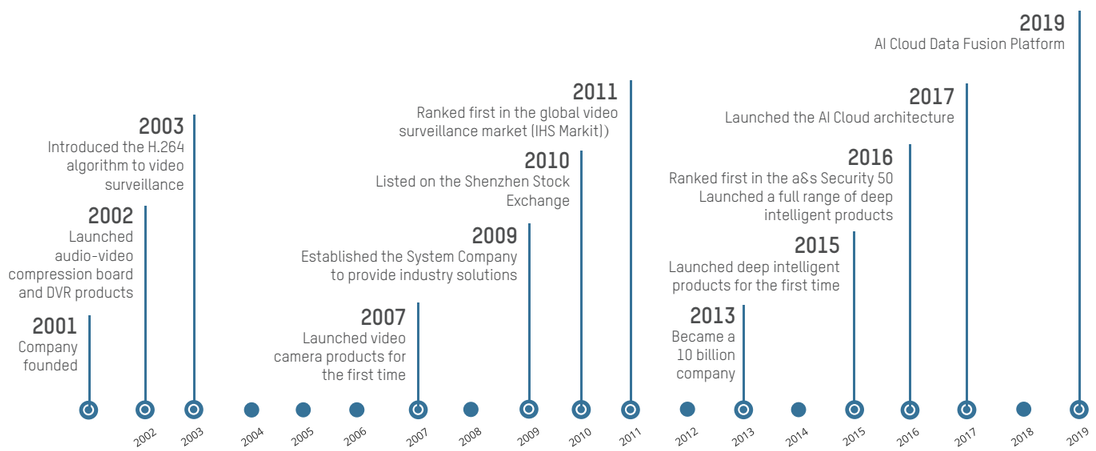
About Hikvision

Hikvision was established as an audio-video compression board provider in November 2001. Over the years, we have been sensitive to the needs of customers and led the market through ongoing innovation in technology and products, thereby driving the industry towards high-definition, networked, intelligent video surveillance. In 2014, we established the Hikvision Research Institute, which focuses on perception, intelligent analysis, cloud storage, cloud computing and video big data studies. In 2016, we incorporated deep learning algorithms into our products and launched a full range of intelligence products. In October of 2017, we led the development of intelligent applications with cloud/edge integration computing architecture and pioneered a Three-layered AI Cloud Architecture (namely Edge Node, Edge Domain and Cloud Centre), to promote the development and application of artificial intelligence in the IoT. In March of 2019, based on our Cloud-Edge Fusion Computing Architecture, we proposed the AI Cloud intelligent IoT-information network data fusion architecture. Throughout its implementation, we focused on solving problems such as scenario-based, fragmented AI application, and difficulties in addressing users' needs. Internally, we unified the software architecture. Externally, we adopted the strategy of open integration. At the same time, we continuously adjusted our business units with the advance of technology and application to better embrace the intelligent era.

During the reporting period, we launched the AI Open Platform, which aims to study and apply cutting-edge technologies, enrich perceptive capability and advance cognitive capability. It draws on Hikvision' s products, devices and cloud service to address scenario-based, fragmented intelligent applications and enables users to enjoy the benefits of intelligent upgrading at minimum cost. Committed to empowering industry users and facilitating industrial upgrading, the platform is available to micro, small and medium enterprises and developers free of charge. This makes it easier and more cost-effective for industry participants to engage in AI development. At the same time, we launched the AI Cloud Data Fusion Platform to help industry users and customers develop their own data governance system. As a result, we have evolved into a provider of intelligent IoT solutions and big data services with video as its core, so that we can lead our industry in the intelligent era .



Milestones of Hikvision

* The security team of the previous IHS Markit technology department is affiliated with Omdia Consulting.

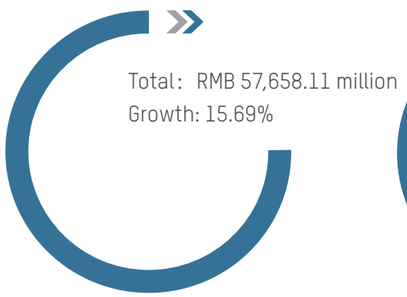
As of December 31, 2019, we have 32 provincial business centers/first-level subsidiaries in Mainland China and 59 subsidiaries and branch offices in Hong Kong, Macao, Taiwan and other countries and regions outside of China. Hikvision's products and solutions were used in more than 150 countries and regions and played important roles in many high-profile projects such as the G20 Hangzhou Summit, Beijing Olympics, Expo Shanghai 2010, APEC (Asia-Pacific Economic Cooperation) sessions, Nuremberg High-Speed Rail Station in Germany, Safe City Programme of Seoul, South Korea, and Beijing Daxing International Airport.

32 Provincial business centers/first-level subsidiaries in Mainland China

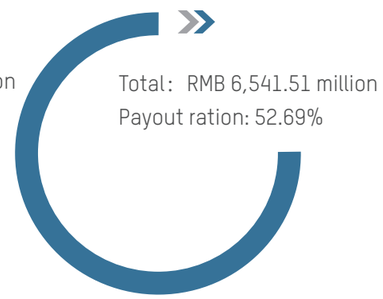
59 Subsidiaries and branch offices in Hong Kong, Macao, Taiwan and other countries and regions outside China

Business performance in 2019

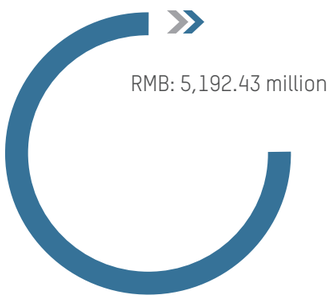
In support of the needs of customers and driven by technological innovation, we continued to increase R&D investment during the reporting period. This lays the foundation for our sustainable, stable, long-term development. We followed-through on many management reform initiatives designed to improve profits, pursue steady scaling growth, create greater value and shared development, and increase shareholder value stakeholders .



Direct economic value



Cash dividend



Tax paid

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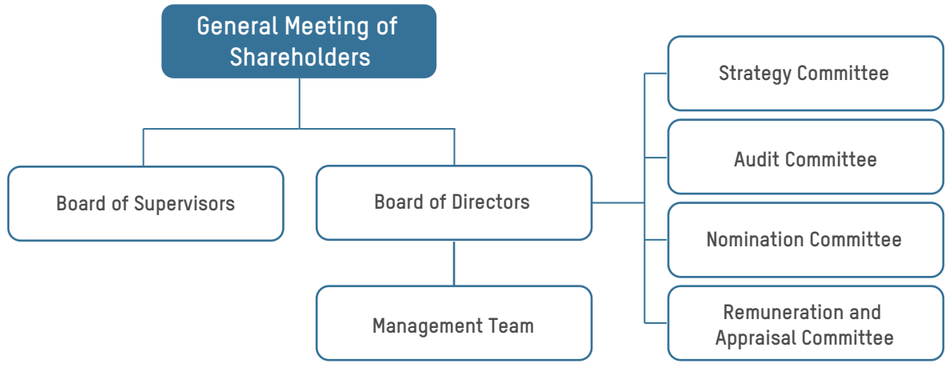
Corporate Governance

The Company is committed to developing sustainable corporate governance system, building an efficient governance structure, and constantly improving compliance mechanism, in order to protect the rights and interests of the Company, customers, shareholders and other stakeholders.

During the reporting period, the Company' s corporate governance and information disclosure strictly complied with the applicable laws and regulations, including without limitation, *the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, Code of Corporate Governance for Listed Companies, Stock Listing Rules of the Shenzhen Stock Exchange and Guidelines of the Shenzhen Stock Exchange for the Standard Operation of Listed Companies (2020 Revision)*. We continuously strengthened the implementation of internal control policies, improved corporate governance structure, and enhanced the value of the Company, as well as its management transparency. The Company' s independent directors performed their duties entrusted by the General Meeting. They have carried out tasks diligently, independently and conscientiously, fully fulfil their duties as independent directors, and supervise the Company' s standard operations, following the concept of protecting the interests of the Company and its shareholders, especially the general public shareholders, as the working principle.



During the reporting period, the Company held one General Meeting. The General Meeting adopted the voting method of both on-site voting and online voting to ensure that the shareholders could fully exercise their rights. In 2019, the General Meeting reviewed and approved 14 proposals, including the *2018 Annual Report and its Summary, Proposal on the Amendment of the Authorization Management System, Proposal on the Amendment of the Company's Articles of Association, Proposal on the Repurchase and Cancellation of Restricted Shares which were Granted but Unlocked in the 2016 Restricted Shares Incentive Scheme,* and etc. In 2019, the Company convened a total of five Board of Directors meetings, where 36 proposals were reviewed and approved. See "Corporate Governance" in the Company' s 2019 Annual Report for details.

Enhancing corporate governance structure and improving risk management ability are important pillars of the commercial enterprise, and also are a prerequisite for the long-term sustaining development. Upholding modern corporate governance and business ethics concepts, namely the concept of legal and compliance, and honesty and trustworthiness, the Company is committed to establishing a standardized, compliant, transparent, and healthy development model. Over the past two years, there have been many media reports related to human rights and cybersecurity concerns related to video surveillance products. In October 2019, we were included on the U.S. Department of Commerce' s Entity List for alleged human rights violations in Xinjiang region. In January 2019, Hikvision retained the services of Arent Fox, led by former U.S. Ambassador Pierre-Richard Prosper, to conduct a review of the Company' s human rights compliance process. The Company has recently received the draft version of Arent Fox' s final report and is reviewing it. The Company is already in process of implementing some of the recommendations provided, such as establishing a global Advisory Committee. The idea of Global Advisory Committee is to help the Company better deal with any potential challenges in the globalization progress, to further enhance our global compliance system; and to ensure that the Company' s operation comply with globally-recognized business ethical standards. The Company is now preparing the establishment of the global Advisory Committee. Our plan is to engage those with expertise in different areas, including human rights, cybersecurity, privacy/data protection, international trade, government policy-making, corporate governance, and etc. The members sitting on the Advisory Committee shall be respected and viewed as practice area leaders among their professional peers, along with having a track record of achievement in their respective field. The Committee is expected to provide independent advice and suggestions to the Board of Directors and senior management team, in order to broaden access to views and expertise on the Company' s future business plan, including technology and product development, and key compliance areas.

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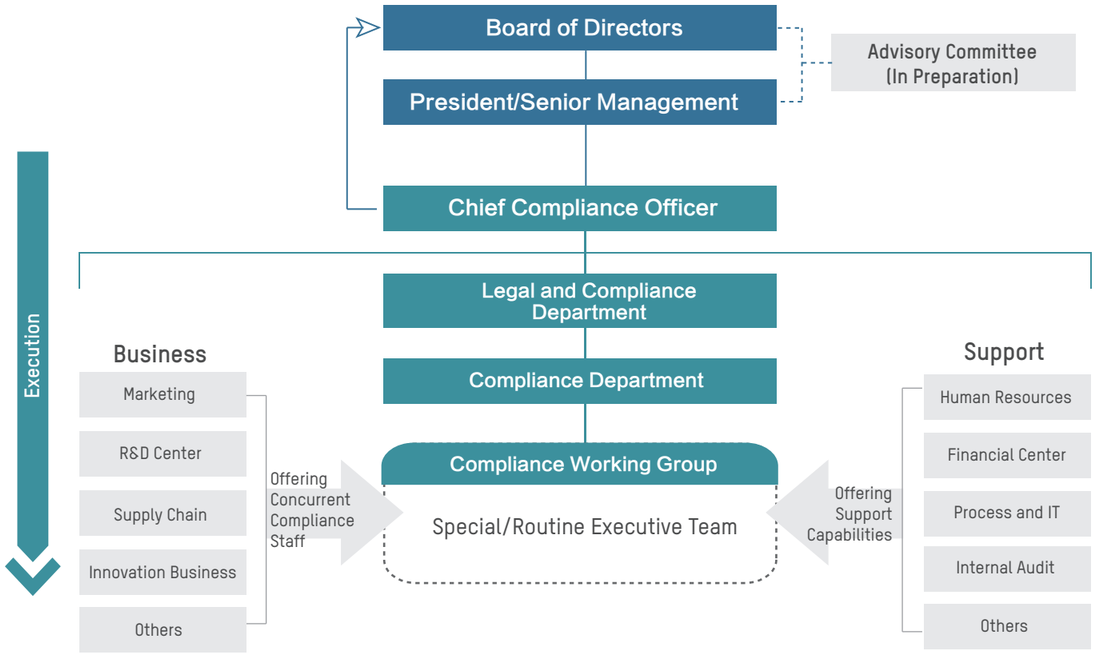

Compliance Operation

Operation with the concept of legal and compliance serves as the cornerstone for the Company' s sustainable development. We are committed to abiding by the applicable laws and regulations in our global operation, upholding integrity and trustworthiness, and conforming to business ethics. At the same time, we keep learning from best practices to continuously improve the stability and soundness of our global operation. During the process of product and technology innovation, we are intensively studying the applicable laws and regulations, precedent cases and best practices, to ensure the compliance in innovation and development. We continuously optimize various operations and service models to improve our management level, as well as user experience.

To date, we have established a Global Compliance Department and appointed a Chief Compliance Officer to better promote the Company' s global compliance system, including without limitation, in the field of integrity construction, fair competition, export control and economic sanction, data protection, human rights governance, intellectual property protection, etc. These initiatives are designed to internationalize our corporate governance system and control capabilities.

To deepen the employees' understanding of corporate culture, corporate values and basic compliance requirements, during this reporting period, we improved and modified the *Code of Ethics and Business Conduct*.

Meanwhile, we promoted compliance culture through multiple ways, such as organizing theme promotion week, training and interaction, and organizing examinations to continuously improve the employees' awareness and skills on compliance.

- In April 2019, the Intellectual Property Protection Promotion Week was organized in the week of April 26th – World Intellectual Property Day, which included series of activities like e-mail posters, quizzes with prizes, online learning and examination, etc.
- From July-August 2019, the Compliance Culture Week was organized to promote compliance values inside of the Company, and to deliver training on compliance value, *Code of Ethics and Business Conduct*, basic compliance requirements on anti-bribery and anti-corruption, data protection and other topics.
- In December 2019, an Anti-monopoly Compliance Week was organized to deliver anti-monopoly-related knowledge, compliance policies and requirements; an online test followed.

Integrity construction	Fair competition	Export control and economic sanction	Data protection	Human rights governance

Integrity Construction

We follow the business concepts of honesty and trustworthiness, legality and compliance, and regard these concepts as the cornerstone of sound and sustainable development worldwide. Anti-bribery and anti-corruption are the basic principles for the establishment of a clean and transparent business environment, are also the inherent requirements of the Company' s values and culture that reflect the management's commitment to building an ethical, honest, and trustworthy operation. Hikvision strongly opposes any bribery and corruption activities, and requires all the employees to carry out their work in a professional, fair, incorruptible and honest manner.

During the reporting period, we released the Hikvision Global Anti-Bribery and Anti-Corruption Manual (Chinese & English bilingual version), which clarifies the Company's and employees' obligations and responsibilities regarding anti-bribery and anti-corruption respectively, requires all the employees to strictly comply with the Company's policies, and offers a guidance on identifying and handling potential bribery and corruption issues; for example, whether it is allowed to give or receive business gifts, how to avoid conflict of interests, etc. At the same time, the document clearly defines relevant training and communication method, consequences if violation, and reporting and protection mechanisms, etc.

Whistleblowing hotline and e-mail for potential bribery and corruption behaviours		
Hotline	0571-88075998-66570	
E-mail	compliance@hikvision.com	jubao@hikvision.com

Whistleblower protection mechanism
In the updated version of *Management Measures for Whistleblowing and Complaint*, the Company improved the protection mechanism for whistle-blowers, internal and external organizations and individuals, who provide clues to non-compliant behaviours - Whistle-blowers may choose to remain anonymous. The Company encourages and supports to report any suspected non-compliant behaviours. The Company endeavours to ensure that no employee or stakeholder will be treated unfairly if he/she refuses to engage in bribery and corruption activities, or reports corruptive behaviours. Such unfair treatment includes dismissal, disciplinary action, threat or other adverse treatment. If any unfair treatment is incurred, he/she may contact Compliance Department and Internal Audit Department to ask for help.

On December 9, 2019, on International Anti-Corruption Day, we put up publicity materials, including without limitation, such as elevator posters and banners in our campus, to carry out anti-corruption promotion and help employees internalize the value of integrity and pragmatism.

In addition, the Company continuously internalizes the integrity culture into the employees' self-consciousness and introspection, including the delivery of anti-bribery training for new employees, the execution of *Employee Integrity Commitment*, etc.

On the basis of the anti-bribery and anti-corruption compliance mechanisms, the Company is committed to promoting the stakeholders to value and conform to the culture of integrity. During the reporting period, in light of development in external practice and our own management practice, we updated the template of the *Integrity Agreement*, and conducted on a specific audit on whether suppliers and distributors have signed and executed the agreement, in order to improve integrity management. As of December 31, 2019, the Company signed the *Integrity Agreement* with 90.94% of domestic suppliers and distributors, of which 100% coverage for domestic distributors.

Fair Competition

Hikvision actively participates in market competition and business development. We are committed to complying with the applicable fair competition laws and regulations and high business ethics standards in the jurisdictions where we operate and advocating a fair and just competition environment. During the reporting period, we developed and issued the Hikvision Anti-Monopoly Compliance Guidelines, which sets forth the general principles and instructions on fair competition that Hikvision and its employees should follow when conducting business in any jurisdiction of our operation. The document clearly defines the responsibilities of Hikvision employees and sets forth the general prohibitions of anti-monopoly laws and the legal consequences if violations. The document guides employees on identifying and handling anti-monopoly compliance risks, regulates their business conduct, and contributes to external and internal fair competition environments.

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In addition, we performed an intensive legal search into the anti-monopoly laws and enforcement practices in ten countries and regions, including China, the United States, the European Union, South Korea, Australia, and Colombia, developed country/region-tailored anti-monopoly guidelines, and organized targeted training and offered more precise compliance guidance for managers, core staffs, sales and other positions at different departments and different regions. In light of the differences in different countries/regions, we will develop and release country/region-specific anti-monopoly compliance guidelines to consolidate a compliance operation globally.

Trade Compliance

Export control and economic sanction are an important part of the Company' s compliance efforts. Under the globalization operation, Hikvision adheres to the applicable export control and economic sanction laws and regulations in China and other major economies in the world, to earnestly perform our export control obligations and to actively foster a responsible international image. As of now, we have established a preliminary compliance system that complies with export controls and economic sanctions regulations of major economies; we have developed an internal export controls and economic sanctions management mechanism, including a set of information management measure on export review. Besides, we carried out specific export control training and publicity activities, in order to effectively mitigate trade compliance risks, to improve our sustainable competitiveness in global markets, and to safeguard the Company' s long-term development.

During the reporting period, the Company was added on the U.S. Department of Commerce' s Entity List. We continue the communication with relevant U.S. government agencies, mainstream media, and every stakeholder in an open and proactive manner to clarify misunderstandings. Adhering to the original aspiration of serving our customers, we are dedicated to provide and deliver products and services in a consistent and steady manner to keep the trust and support of customers and partners. We delivered accurate information to worldwide employees timely to keep the employees' confidence to the Company and further motivate employees to meet challenges and make outstanding contributions. Meanwhile, we strengthened supply chain risk management to ensure our sustainable operation ability while dealing with external uncertainties. In addition, we will further increase R&D efforts - apart from R&D investment in products and systems, we also invest resources in fundamental areas such as detectors and sensors. We remain an open mind to the continued development of the global supply chain system.

Data Protection

Hikvision adheres to the concept of "manipulating power of technology with the heart of awe, and protecting data security with prudence". We attach great importance to the protection of personal data of customers, end users, employees and other data subjects, and stick to process personal data in accordance with the applicable laws and business ethics of the jurisdictions where we operate.

During the reporting period, in the fusion of *the Cybersecurity Law of the People's Republic of China, the General Data Protection Regulation (GDPR)* in the European Union*, the Consumer Privacy Act (CCPA)* in California, the United States, and other applicable laws and regulations, best practices in the worldwide, as well as the general principles of data protection summarized in our daily practices in different regions, we developed and released certain internal standard documentation, such as *Hikvision' s Personal Data Protection Guidance, Standard Procedure for Protecting Data Subjects Rights,* and *Personal Data Retention Policy*, to define our principles and general requirements for processing personal data in our global operation.

For specific scenarios regrading software products, cloud service products and technical services, we established cross-departments teams to evaluate data protection impact assessment and implement compliance requirements accordingly. We also developed a personal data protection mechanism for campus and employment daily management, covering consent notification, the policy and procedure on data subject rights protection, etc.

During the reporting period, we continued our efforts to track on the trend of legislation and enforcement regarding data protection in major countries and regions, and continuously deepen our understanding on the above. We also endeavored to implement the requirements in accordance with the local data protection laws in specific regions. For example, Hikvision' s U.S. operation enhanced its data protection compliance policies in accordance with the CCPA. EU operation started to conduct GDPR review on our data protection practice in the period from 2017 to 2018, and took an active participation in submitting our responses to the European Data Protection Board' s public consultations.

Human Rights Governance

As a security company with video technology as our core competence, we realized the significant potential of video technology. This technology can make positive contributions to economic and social welfare, and our products can provide effective solutions for the improvement of social security and governance efficiency. These products, while providing services to users, are at risk of being used improperly to abuse human rights and infringe on the rights of others. Therefore, we are committed to promoting human rights as we provide our cutting-edge products and services worldwide.

We also realize that an optimal way to do this is with industry participation. Therefore, we encourage the establishment of global video security industry norms, practices and technology policies that promote the respect and protection for human rights, and mitigate the adverse impacts of technological change on the communities we serve.

In our business practice, we respect human rights as stipulated in the *Universal Declaration of Human Rights*, the *International Covenant on Civil and Political Rights*, the *International Covenant on Economic, Social and Cultural Rights*, and the *ILO Declaration on Fundamental Principles and Rights at Work*. At the same time, with reference to the *United Nations Guiding Principles on Business and Human Rights*, we endeavored to incorporate such provisions into our operational processes and policies to guide our business activities and management behaviors and to improve the compliance of our business activities with those rules and regulations. We continue reviewing and updating our policies, processes and management systems to continuously improve our human rights governance capabilities.

In our *Code of Ethics and Business Conduct*, it is expressed that respect for and protection of human rights is one of the basic values of our business operation. We are committed to complying with the applicable laws and regulations of the jurisdictions where we operate, as well as international norms, to better respect and protect human rights in business activities. At the same time, we have established a complaint-reporting mechanism to enable our employees and others affected by our business operation to report issues of concern, including suspected human rights violations. We will also review and improve the mechanism on a regular basis.

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ESG Management

We are committed to incorporating corporate social responsibility and sustainable development into our products and services. With goodwill as our motivation, video perception as the medium, intelligent IoT, and the IoT-information network fusion as the foundation, we aim to ensure a sound ecosystem and offer friendly services and a healthy culture that benefit society and promote safety and wellbeing.

Committed to using technology for good, we strive to achieve harmony between our company, society, individuals, and nature based on the concept of sustainable development. We focus on the macro-planning of corporate environmental, social and governance aspects and their implementation. We align our corporate value with social progress and people' s livelihoods and seek to further integrate business and social responsibility.

In 2019, we received awards and accolades for our sustainability performance:

New Communication Awards of 2019 ESG Communication Award

-- PR Newswire

The 4th China ITS Industry Alliance "Alliance Public Welfare" Award

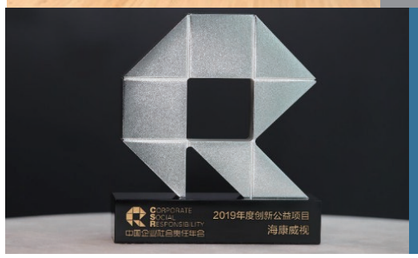
-- China ITS Industry Alliance

2019 Changqing Awards Sustainable Development Inclusion Award

-- CAIJING Magzine

Best Employers of China 2019 Social Responsibility Award

-- Zhaopin.com



China Corporate Social Responsibility Annual Conference Innovative Public Welfare Project Award of 2019

-- Southern Weekly

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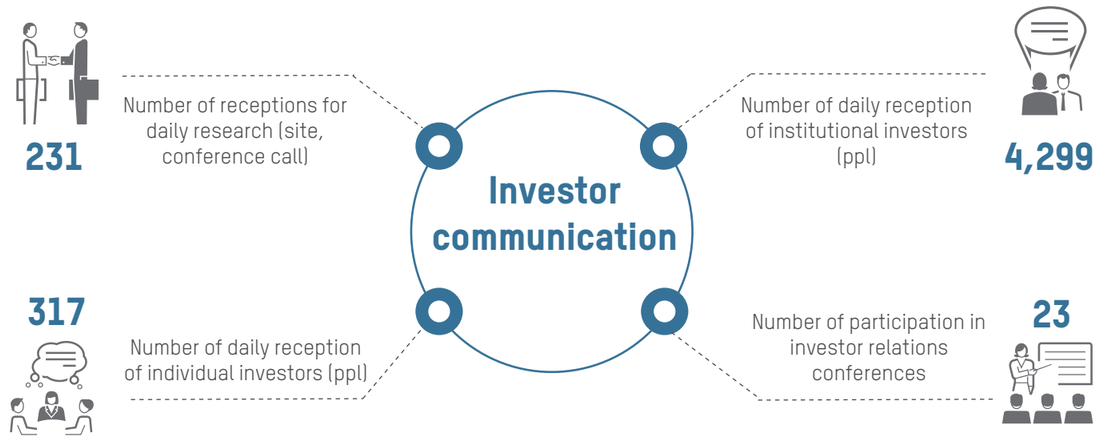
At the same time, we have maintained close communication with our external stakeholders and kept an open mind to ther opinions and suggestions. Throughout these engagements, we have sought out external feedback related to ESG matters. As a result, this external feedback continues to inform our sustainability management strategy.

Stakeholder Engagement

The trust and support of stakeholders is fundamental to our existence and development. Hikvision' s key stakeholders include shareholders/investors, government and regulators, customers, employees, partners and communities. We have established two-way, transparent and regular communications mechanisms for better understanding stakeholers' opinions, demands and expectations, and respond in a timely and effective manner. We aim to maximize the mutual benefits an achieve win-win cooperation and harmonious development.

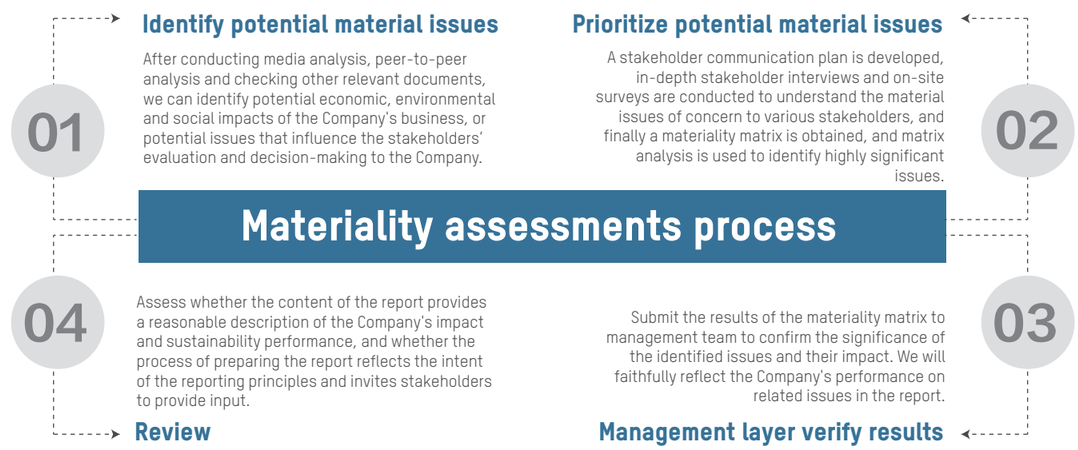
Stakeholder	Issues of concern	Way of communication/response	Frequency
Shareholders/ investors	Economic growth Sustainable operation R&D	Regular report/ interim announcement Site inspection Telephone Email Information session/roadshow	Regular/ irregular Regular/irregular Irregular Irregular Regular/irregular
Government and regulators	Tax payment Employment promotion Environmental protection	Regular report/interim announcement Letter Site inspection	Regular/irregular Irregular Regular/irregular
Clients	R&D Product safety and quality Privacy and information security	Hotline Information feedback Satisfaction survey	Irregular Irregular Regular/irregular
Employees	Compensation and benefits Professional development Employee care	Health check-up Professional training Activities	Regular Regular/irregular Regular/irregular
Partners	Honesty and trustworthiness Supplier management Privacy and information security	Public tendering Site inspection Suppliers' meeting	Irregular Regular/irregular Regular/irregular
Communities	Community communication Environmental protection Product safety and quality	Community activities Media coverage Interview and investigation	Irregular Regular/irregular Irregular

During the reporting period, we continued to strengthen communication with stakeholders, hoping to join hands with all parties to achieve sustainable development in economic, social and environmental values. We established a stakeholder opinion-tracking and feedback mechanism to analyze and respond to stakeholders' concerns regarding ESG risks. We continue to optimise our internal ESG risk management, and regularly review how our risk management plan is implemented. During the reporting period, we organized multiple investor relations communication activities, enhanced the depth and breadth of communication, and formed an effective interaction mechanism.



Identification of Material Issues

In order to respond to stakeholders' concerns in an active and targeted manner, we integratd the opinions and expectations of stakeholders with our own management and development needs, and conducted rigorous and effective materiality assessments on our ESG issues, which include four procedures:



Materiality analysis process

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Hikvision 2019 Matrix of Materiality

Corporate operation	
1	**Economic growth**
2	Sustainable operation
3	Anti-corruption
4	Fair business practice
5	**Factory automation**

Employment	
6	Occupational health and safety
7	**Talent acquisition and development**
8	Diversification and inclusiveness
9	Employee benefits
10	Respect for human rights and labour practice

Environment	
11	**Energy management**
12	Greenhouse gas emissions reduction
13	Hazardous waste reduction and management
14	Chemicals management
15	Environmental protection management
16	Water resource management
17	Waste management
18	Influence of climate change

Operation practices	
19	**Product safety and quality**
20	**Management of clean technology opportunities**
21	**Privacy and information security**
22	**Supply-chain management**
23	Shared development with partners

Community	
24	Public welfare activities
25	Influence on the local economy

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Empowering Intelligentization of People's Livelihood in All Sectors and Industries

Hikvision pays close attention to people's livelihood and facilitates the digital transformation of all industries with video technology-centered IoT technology. Our technology and products are applied to hundreds of sectors including public security, transportation, logistics, retail, manufacturing, rescue, fire protection, education, ecological protection, food safety, and cultural tourism. Considering completely fragmented and customized scenarios, we stick to our original aspiration and endeavor to invest resources into areas that benefit society. At the same time, we continue to consolidate the infrastructure in deep learning, intelligent IoT, and big data etc., explore technology innovation and product innovation, and further ensure the quality of our products and services. Moreover, we have developed the AI Cloud Cloud-Edge Fusion Computation Architecture, the Intelligent IoT-Information Network Fusion Data Architecture, and the Big Data-AI Fusion Technical Architecture to gradually empower all industries with AI technology.

We firmly believe that "Smart Vision" is our technical means, and "goodwill" is our aspiration and motivation. We are committed to using technology for good, and to support people's livelihood and industries.

Preventing and Controlling COVID-19 Epidemic >>>

The COVID-19 epidemic outbreak shocked people across China. When the coronavirus broke out, Wuhan faced tremendous pressure to contain it. We drew on innovative technology and professional experience to gather strength and fight the disease.

Urgent Delivery of Body Temperature Screening Thermal Products to Assist the Emergency of COVID-19 Epidemic in Different Cities and Regions.

Facing the emergency situation of COVID-19 epidemic, Hikvision immediately formed an emergency response team. To support disease prevention and control, employees in R&D, production and supply-chain at all levels worked overtime during the Chinese New Year period to ensure the supply of thermographic temperature measurement instruments. During the outbreak, we fully compensated employees for their overtime and dedication. We endeavoured to reduce the price of thermographic products to four digits. Faced with the crisis, we spared no effort to develop cost-efficient products. We used our technological reserve and remarkable R&D capabilities to do as much as we could to help the world overcome these difficulties.

Wuhan No. 7 Hospital receiving
Hikvision handheld thermal cameras

According to rough statistics, since January 22, we have sent thousands of sets of video collection and analysis products and thermal imaging instruments to Wuhan. On January 23, upon learning that there was still a shortage of thermal imaging instruments in Wuhan, we dispatched all such devices in stock to support Wuhan. These products were installed at the No.7 Hospital of Wuhan and other places for high-precision fever screening, securing "the first line of defense".

During the Spring Festival holiday, on January 27, the third day of the first lunar month, our thermographic product line resumed production. It was a race against time. We continuously optimized the technological processes and worked overtime to guarantee the supply of urgently needed products, including thermographic thermometers, and ensure that they were delivered to the forefront as soon as possible. Our thermographic thermometers and other products have been used in hospitals, railway stations, and other crowded public places in Hubei, Zhejiang, Fujian, Jiangxi, Shandong, Guizhou and other provinces across the country to enable 24/7 fast and accurate fever screening at the forefront of fighting the disease.

In terms of product development, during the Spring Festival holiday, our R&D staff relied on our independently developed sensor to grasp the pattern of temperature compensation by reducing the measuring range and analyzing temperature measurement data. We adopted the advanced automatic production process in the constant temperature and dust-free environment to greatly improve the stability and consistency of products. The product precision is attainable at ≤0.5℃ (no blackbody[01] calibrator) and ≤0.3℃ (with blackbody calibrator). At the same time, we drew on the deep learning technology to enable simultaneous temperature measurement for up to 30 people, greatly improving screening efficiency.

[01] The blackbody calibrator is a device with constant radiation energy, which corrects the deviation of the radiation thermometer with the indication of blackbody calibrator temperature, thereby improving the accuracy of the radiation thermometer.

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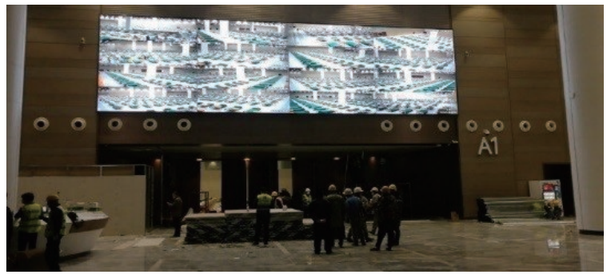
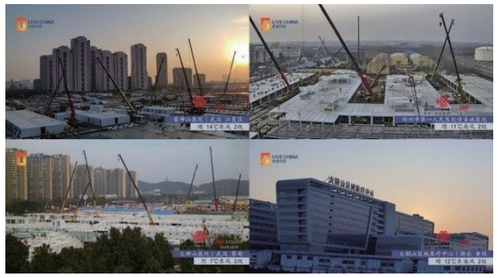
During the outbreak, we made certain that we accomplished two things: fully compensate employees for their overtime work and devotion, while lowering the price of our products. Faced with the crisis, we spared no effort to develop high cost-effictive products to support disease prevention and control with our technological reserve and remarkable R&D capabilities, doing as much as we could to help the world overcome these difficulties. In the future, we will continue to rely on our independent supply capability of core components, consolidate product-end technical advantages, serve more application scenarios, promote thermographic products to the public, and use technology to protect the health and safety of the people.

Regional offices actively support local disease prevention and control

Apart from deploying thermal cameras to the forefront, our regional offices have also participated in disease prevention and control alongside local hospitals. For example, for cabin hospitals in Wuhan, we installed visualization equipment and systems to support hospitals' visualized management of medical quarantine. In Longyan, we installed a video conference system for Kangshan Hospital, a local hospital in Fujian Province like Xiaotangshan.

We assisted CCTV.com (China Central Television) in the "Live: Forefront of the Fight against COVID-19" programme by providing frontline information source perception and integration service support and connecting video stream to CCTV' s Live China platform, allowing people across the country to see the front-line situation.





Collaboration with CCTV Net' s Live China platform

Free access to "Live Classroom" and video conference services

Affected by the epidemic, many schools across China had to postpone their homecoming. Hikvision donated 10,000 sets of "Air Classroom" systems to primary and secondary schools in need. Using these systems, teachers could teach via audio and video online so that students could learn at home. Students enjoyed unlimited access to these lessons. In addition, to help enterprises improve their communication efficiency, Hikvision provided free cloud video conference services to enterprises and individuals in need. Each registered account has access to up to 100-participant[02] cloud video conference services until May 4, 2020.

Providing safe and efficient prevention measures for work resumption

From mid-February 2020, enterprises across China started to resume work and production. Companies were making full preparation for both work resumption and disease prevention. With years of experience in relevant products and algorithms, we have rapidly developed thermal imaging body temperature screening instruments of all kinds to respond to our customers and support work resumption, including handheld thermal cameras, smart body temperature screening turnstiles, thermographic turret/ bullet cameras, body temperature screening safety check gate, and etc. On the premise of ensuring the safety of employees, we resumed our capacity to the maximum to support work resumption.

We are all expecting the end of the epidemic and looking forward to a safer and better future. We will continue to support the sustainable development of mankind and nature with our wisdom, technology, and commitment to using technology for good.

Support work resumption

[02] 100 is the maximum number of participants on video conferencing.

Intelligent Supervision to Empower Pharmaceutical Quality Check >>>

"Hikvision's AI Open Platform and its supporting software and hardware products sharply reduced the developing time of fragmented intelligent applications such as the one for standardized production line operation, and greatly reduced the operation and maintenance workload, thereby effectively controlling the overall cost of the solution," said Huang Shaofeng, chairman of Ausia Biotech, at the Shaping Intelligence 2019 AI Cloud Summit in Hangzhou.

"Video+AI" empower intelligent supervision

Ausia Biotech attaches great importance to production safety. To ensure standardized behavior by employees and reduce hidden safety risks, Ausia Biotech chose to work with Hikvision to empower drug quality management with "video+AI" and thereby achieve smart, refined supervision, including video/AI smart identification, real-time warning of violations and traceable production.

AI Open Platform for faster algorithm development

Standardized operation is meticulous and complicated. How can a camera identify violations quickly? With our AI Open Platform, once operation behaviour movement data is uploaded to the platform, customised algorithm training will begin and enable cameras to identify movements more rapidly. With adjustment and upgrading, the system will grow increasingly intelligent.

Production safety, cost reduction, efficiency improvement, and production traceability are the core values of intelligent supervision for drug production. "Video+AI" regulates the behaviour of staff and fuether enhances the safety, transparency and traceability of drug prodction, giving customers greater confidence in the products.

Ensuring Intelligent Transportation to Guard Trafic Safety >>>

In 2019, villagers in the Mount Mingyue Scenic Area of Yichun City, Jiangxi Province, could finally feel relieveed.

The terrain of Yichun-Cihua Highway is dominated by hills in mountainous areas, withsteep slopes and curved roads. There are many blind spots, and there are disturbances such as forest cover. In 2018, Yichun traffic police piloted Hikvision' s Bend Warning System in Shen Village. This accurately collects parameters such as the presence and movement of vehicles and travelers through video and radio frequency. It analyzes whether they are likely to collide, and displays potential collisions on a screen on the blind-spot side to alert drivers and travellers. The curve warning system operates throughout the night to alert drivers, and is affectionately called "the beacon" by villagers.

As of the end of 2019, three sets of bend warning systems were installed on the Yichun-Cihua Highway, and six were piloted in rural Yichun. They worked well for local traffic police, overcame terrain difficulties and prevented accidents in dangerous sections.

Bend Warning System

In addition, in the field of intelligent transportation, based on the target of "improving road traffic, alleviating traffic congestion, preventing traffic accidents, enhancing road safety, and facilitating travels", we combined video technology and Multi-dimensional Perception Technology to develop innovative applications. 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, and 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.

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Sharing of Education: Attending the Same Class >>>

November 25, 2019, a cloudless sunny day in Yunnan Province. Students were reading aloud in their school in Chuxiong Yi Autonomous Prefecture.

In July 2019, at the signing ceremony of the poverty alleviation through education pairing support programme in Chuxiong, Yunnan, we signed the pairing support agreement with the Education and Sports Bureau of Chuxiong Yi Autonomous Prefecture as an enterprise representative to actively support the development of education in the Chuxiong and support local education with technology.

We donated 16 sets of AI Synchronous Classroom Systems as the first step. According to the arrangements of the local education department, the systems were allocated to four cities and counties: Chuxiong City, Yao'an County, Yongren County and Wuding County. All had weak economies, with poorly equipped primary schools in remote areas.

Following the "one central school + three village schools" model, a "one host and three participants interactive recording and broadcasting" system was established, ensuring the four schools could achieve synchronous teaching and interaction. This arrangement was particularly beneficial for students in subjects such as English, arts and music. The model catered to schools with weak teaching teams, who had difficulty offering all subjects or ensuring education quality, and whose teachers and students had poor access to tech tools. It meant these remote schools could offer quality classes in all subjects. Improved information and teaching in rural schools better prepare students for the digital future.

Equipment Installation

AI Live Classroom

"Poetic Dwelling" Enabled by Intelligent Nature & Environment Protection >>>

The people yearn for blue sky, white clouds and twinkling stars. They are eager for clear water, beautiful shores and swimming fish. They hope for access to safe food and secure places to live. They thirst for natural beauty and idyllic scenes of twittering birds and fragrant flowers. They therefore greatly desire improved ecological and environmental quality.

To make this happen, Anji County actively enhances the construction of ecological civilisation by virtue of smart technology from Hikvision. Through guarding, transforming, sharing and following these wishes, it has gradually developed the "Anji model". The natives of Anji living in this scenic area are not only provide vistiors with a vision of "rich" live, but also the experience of "smart" life.

- Ground Guarding: know all adverse events for a better early warning.
- Sky Overwatch: strengthen the capability to manage emergencies and reduce environmental damage.
- The aid of thermal imaging: reduce the occurrence of disasters and maintain ecological security.
- Overall security: have a clear glance at the warehouse for aided management.

Now, the Anji model is becoming a sample of the sought-after "poetic dwelling" .

Anji "Poetic Dwelling"

Smart Underwater Patrol System-- "Let the World See More Finless Porpoises Smile" >>>

May 2019 marked the official launch of the opening ceremony of the Yangtze Finless Porpoise Reserve Center at Tian-e-zhou Oxbow, Hubei and Smart Patrol Technology Project organized by Hikvision in Shishou, Jingzhou. At present, the first Land and Underwater Patrol System has been mostly implemented, including the living habits patrol system of finless porpoise, water eco-environment patrol system and UAV smart patrol system.

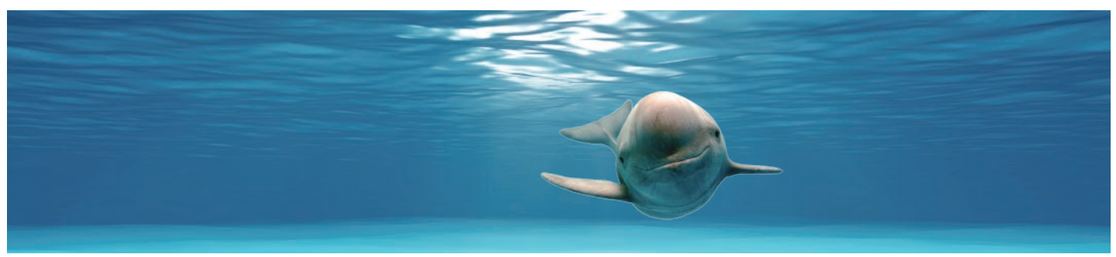
"At the end of 2017, there are about 1,012 finless porpoises around the world," said Tao Le, deputy section chief of patrol management of National Nature Reserve of Baiji Dolphin in Tian-e-zhou Oxbow, Yangtze River, Hubei Province. At present, finless porpoises are included in the category of Critically Endangered by the IUCN Red List.

Swan Oxbow is the most successful natural relocation reserve for cetaceans in the world. It is home to 80 Yangtze finless porpoises, about one-twelfth of the Yangtze finless porpoises in total. In recent years, the number of finless porpoises in the reserve has increased steadily with an annual increase of 8 to 10.

Despite the firstfruits of finless porpoise' s protection, there is still occasional illegal fishing. Due to the particularity and potential danger of the Yangtze finless porpoise patrol operation on the water, specialized patrol equipment is needed. Thus, the patrol being supported by new technology is of vital importance.

Hikvision's Smart Patrol System can play an important role. At the natural reserve, the video command center can monitor more than 80% of the reserve area in real time through a large screen. The monitoring system can quickly locate illegal fishing activity and send video evidence to the patrolman via mobile phone. The patrolman can then quickly reach the fishing location and effectively put a stop to illegal activity.

"It will greatly change the previous human-based patrol mode. A comprehensive patrol system is basically established, including a fixed-point monitoring system, surface vessel patrol, land motorcycle patrol and UAV patrol," said Tao Le, deputy chief of patrol management of Baiji Reserve in Tianezhou. For patrolmen, the application of this smart patrol system can undoubtedly reduce their workload and increase their patrol efficiency, thus indispensably helping to reduce patrol risks.


Smart Underwater Patrol for Yangtze Finless Porpoise

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Supporting Intelligentization of Livestock and Poultry Industry to Safeguard People' s Livelihood >>>

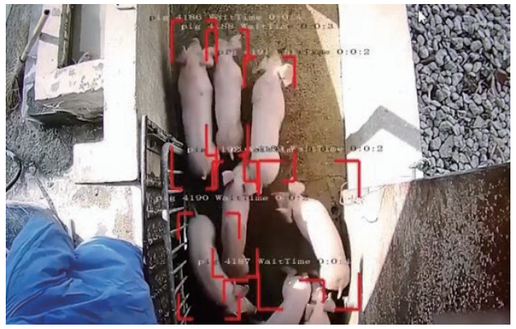
AI-based intelligent detection algorithm for counting pigs

Affected by African swine fever (ASF), large animal husbandry enterprises in China were faced with great pressure from shortages of manpower, resources, funds and time. In particular, they needed to take stock of living assets and detect infection as soon as possible. Pig farmers were badly effected, especially as farms were often spread over large areas.

To help farm owners count livestock, we developed an AI-based intelligent detection algorithm for counting pigs. This combined the algorithm with intelligent analysis hardware. The result is China' s first AI animal-counting project.

We installed high-definition hemispheric cameras above the pigsty pens to take pictures and videos of the pigs in real time, and upload that data to the AI superbrain to calculate the number. The number of pigs slaughtered is obtained through front office analysis by intelligent IPC.

The AI-pig counting project can eliminate misreporting by farmers or employees and reduce financial losses. More importantly, it removes the need for manual counting by workers, greatly reduces infection, prevents the spread of ASF, ensures pork supply and protects people' s health.



Calculating the number of animals slaughtered

Counting lvestock on hand

AI sheep counting project in Otog Front Banner, Inner Mongolia

In recent years, the scale of sheep farming in China has increased. As moderate grazing became a national policy, the industry has become increasingly intensive, and the number of livestock managed by big sheep farmers has grown. This presents challenges for traditional management methods and daily stocktaking.

We developed an intelligent detection algorithm for sheep-counting based on our AI Open Platform, and combined it with smart-edge devices and an industry application platform. We also installed AI cameras on the route to and from the pasture. The result was a complete AI stocktaking solution. In addition to being able to count the number of slaughter, it can also provides automatic sheep counting (AI livestock asset stock-taking system).

Counting sheep that enter and exit the pasture

This technology improves information management and protects herdsmen from anxiety as lost sheep can be quickly detected. It reduces the need for manual intervention and lightens the workload of herders.

Enabling Visualized and Transparent Kitchen to Ensure Food Safety >>>

In recent years, frequent food-safety incidents have attracted wide attention. Regulators of the catering industry were faced with problems such as heavy responsibility and shortage of staff due to the huge number and widespread distribution of catering providers, low efficiency of manual video-based supervision and on-site law enforcement, and noncompliance of providers with safety standards.

Hikvision' s AI Open Platform helps catering providers comply with safety standards, improves the efficiency of government supervision, and engage citizens as supervisors. It ensures food safety so that people can eat safely and well.

No. 44 Primary School of City A employed our AI Open Platform to train an algorithm to detect whether staff at its canteen are wearing uniforms, hats and masks properly. It helps them to conform with the dress code, enhance the transparency of food processing, assure diners of food safety, and help promote the Visual Kitchen.

Remote Patrol , Enabling Upgrade of Property Management Services >>>

Property management providers usually arrange regular patrols to detect abnormalities in cleaning and security, and to ensure the safety and comfort of residents and users. Such patrols require substantial time and labor, and often result in delayed response and poor handling, owing to failure to detect anomalies in time. Our AI Open Platform can help upgrade these services, save time and effort, reduce labour costs, enable real-time monitoring and an effective allocation of manpower, and improve property management and service quality.

Through deep integration of AI and IoT, the Company established strategic cooperation with one of the large real estate developers to upgrade intelligent business service scenarios and achieve the intelligentization of edge perception. The application has already covered 20 to 30 scenarios in four categories: front office, back office, decision-making and operation. The most common function is "Remote Patrol" , whereby surveillance footage is captured every 20 minutes. Security personnel can request all surveillance footage of the estate and make multiple snapshots at once. A patrol report is generated through algorithm analysis. This has greatly reduced the workload of security guards.

Intelligent security goes beyond basic security to a comprehensive upgrade of scenarios and services. The "one-button patrol" function detects and handles abnormal events such as full garbage bins, parking violations, flames or crowding. It reduces accidents and improves proprietors' experience. It also allows quick response when somebody falls or a child is missing, making services smarter and more helpful.

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Intelligent Safeguard in Coal Mining and Metallurgy, Effectively Preventing Potential Safety Risks >>>

Mining and metallurgical enterprises are undergoing a critical transformation. Embracing intelligent manufacturing and enhancing core competitiveness are necessary for these enterprises to deal with the changing times, vagaries of national and international situation or their own development. We employed new technologies such as AI, IoT, and intelligent video analysis to further improve the level of intelligence and informatization of the mining and metallurgical industry, and ultimately assist these enterprises in production safety management, cost reduction, and efficiency improvement.

Jiangzhuang Coal Mine is one of the key mines of Shandong Energy Zaozhuang Mining Group. It is a modern comprehensive-benefit mine that integrates coal production, washing and processing, fine chemicals, combined with heat and power (CHP), and machinery manufacturing. Given the large number of spots, platforms, and processes of the mine, for a long time, the management of the group had been thinking about how to quickly identify various safety hazards and achieve the goal of "zero accident". In May 2019, we formed a joint team with the Zaozhuang Mine to implement the intelligent upgrading project based on the production safety management needs of the mine, aiming to "identify potential safety hazards and form a closed loop". We developed the "AI full visibility intelligent safety control system" based on our "video+AI" technological product system to protect the safety of miners around the clock.

Intellligent Logistics, Improved Business Efficiency >>>

There are logistics parks that provide multiple services at the intersections of different transportation models. They provide multiple services and are important centers for logistics facilities and logistics enterprises. Behind these logistic parks are a basic service platform that serves manufacturers and coordinates the entire supply chain. Transfar Zhilian is one of the most representative enterprises in this sector. Consistently at the frontier of intelligent logistics services, Transfar Zhilian constantly seeks innovation and change.

To continuously improve efficiency, optimize operation, and provide customers with better intelligent services, Transfar Zhilian utilized intelligent technology to upgrade city logistics centers. Transfar Zhilian and Hikvision jointly developed a smart logistics park platform architecture based on Hikvision's intelligent IoT equipment and technology and Transfar Zhilian's business scenarios. The integration of IoT, cloud computing, AI, and other technologies digitized and intelligentized the traditional operation and management model, improved the intelligent level of logistics park management and customer service, and thereby boosted overall logistics efficiency.

In addition to the applications mentioned above, we can also provide complete industry-specific solutions and open platforms to logistics hubs, links, and corporate customers together with Transfar Zhilian, connect data and businesses at the cloud and explore service scenarios of the logistics industry around people, vehicles, goods, and sites, enabling intelligent logistics parks and serving millions of enterprises.

AI-enabled Remote Store Patrol to Improve Retail Management >>>

Media reports show that the total retail sales of social consumer goods in China exceeded RMB 40 trillion in 2018. According to the Sixth China Business Security Survey Report, retail loss in China totaled RMB 181 billion in 2016, with internal and external theft as the main cause. Retail has been exploring loss prevention methods.

In traditional management scenarios, manual patrol represents low efficiency and weak warning ability; old equipment cannot provide data value. We launched "video+AI" digital management to combine intelligent AI technology and mature big data analysis technology to close loopholes in management and reduce retail theft.

The intelligent technical prevention system, when used in retail stores, can monitor real-time transactions and bring abnormal orders to store managers' attention, making it easier to conduct investigations and reduce employee theft.

Integration of Security and Fire Protection >>>

In the past two years, security providers have been passionately developing intelligent security systems for buildings and industrial parks. However, the level of information of fire control systems remained at a low level and lacked early warning and emergency response capabilities, which was a major problem for the upgrading of security management.

Our intelligent IoT solution combining security and fire control transformed fire control from post-accident investigation to early warning. In addition, it has integrated security&fire control coordination, security and fire control patrol, security and fire control smart inspection and security and fire control data.

The combination of intelligent IoT and the fire control system enables integration of intelligent fire alarm, flammable gas leak alarm, water and power safety monitoring, and AI video, and is applied to over ten sectors, such as industrial park, finance, education, hospital, and exhibition. Additionally, we worked with the Tonglu Public Security and Fire Control Division to build an integrated public security and fire safety system for local residents, which realizes unified management of the 373 high-rise buildings and 108 key organizations of the county. After the system was launched, the proportion of fire control facilities in good condition improved significantly, and the number of fire alarms was reduced by over 35%.

Goodwill is the primary motivation that drives us to continuously update technologies and products, and thereby support households and industries with technology. As a technology firm andan important witness and promoter of social progress, we will continue to explore the application of technology in more fields and better fulfill our corporate social responsibility.

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Advances in Technology

We gain insights as we see far forward, and we go further as we act on such insights. We firmly believe that working intensively on technology, products, and services is the only way to better empower customers, create greater value for customers, improve customer satisfaction, gain the trust of the market, and thereby achieve sustainable development.

1.1 R&D and Innovation >>>

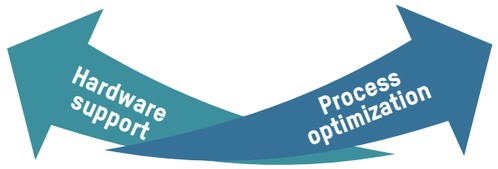
Innovation Mechanism

R&D and innovation are key elements of maintaining and obtaining competitiveness and ensuring long-term sustainable development. They are also driving forces in our mission to employ technology for good and to support households and industries. Therefore, we incorporate external macro-environment factors and sustainable development factors such as the environment, safety and community into our development strategy. Based on the characteristics of our businesses and the market opportunities we discover, we update and iterate technology to accelerate innovative development.

To ensure the competitiveness of our products and technology, we establish an operation mechanism that combines strategic planning, business planning, execution monitoring and performance evaluation to break strategic goals into smaller goals for final implementation. During the reporting period, on the basis of such operation mechanism, we further optimized our R&D management and practice in terms of hardware and process. At the same time, we invested a total of RMB 5.484 billion in R&D, accounting for 9.51% of our annual revenue. This represented a 22.33% increase from 2018.

We established a new Software Experiment Center which includes laboratories, computer rooms, and test rooms at our Shareware R&D Center to enable fast development, fast verification, training and demonstration at the company.

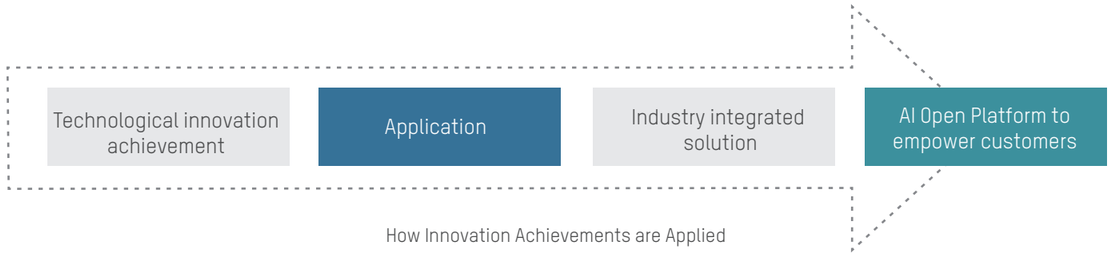
We established an R&D Center in London to actively deploy overseas R&D capabilities and integrate excellent R&D resources.



We established a pipeline development model for software technology architecture and applied it to the software development pipeline management platform. This model could boost efficiency by nearly 50% compared with the traditional model. Moreover, the pipeline development model was promoted to regional R&D units through distributed deployment, which improved their development efficiency and the standardization of the results.

Measures to Optimize R&D Management and Practice

In recent years, while investing in R&D for traditional video surveillance technologies and products, we have made solid efforts to lay the foundation for deep learning, intelligent IoT, big data and other areas. We have applied the technological innovation achievements to our products and brought innovative products and solutions to more than 150 countries and regions. We also constructed an AI Open Platform to gradually empower all sectors.



How Innovation Achievements are Applied

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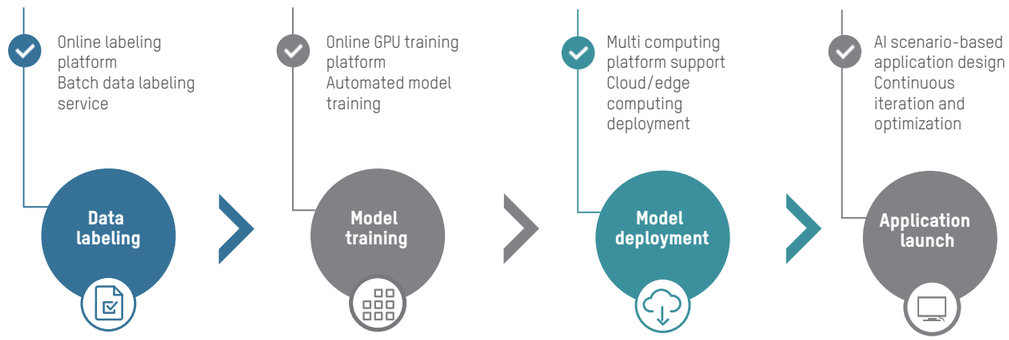
AI Open Platform

There is a robust demand for AI technology in the real economy. Its applications emerge in large numbers in a scenario-based, fragmented manner. Yet it is difficult to actually launch such applications due to limitations in data, algorithm, computing capacity, product, application system and some other factors. In 2019, we launched the AI Open Platform and continuously improved it to support industrial upgrading. The AI Open Platform enabled application developers to launch their models in four simple steps.



By the end of the reporting period, our AI Open Platform has supported more than 250 products including front-end camera, back-end server, and video recorder. It helped application developers to formulate hardware solutions suitable for the application scenarios of specific businesses. In addition, we support on-demand call for algorithms deployed in the cloud. In this way, we offer micro, small and medium enterprises (MSME) and simple scenarios with additional computing power so that they do not need additional hardware.

Dedicated to "empowering industry users and supporting industrial upgrading", 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.

Clean Technology

Exploration of opportunities in the clean technology market is another commitment to social responsibility we have taken on in addition to intensively working on security technology, contributing to a safer society, and empowering households and industries. During the reporting period, we seized opportunities in clean technology development and strived to change the structure of the clean technology market. Hikvision's AI products – and products of our innovative businesses such as Robotics (HikRobot), Infrad Sensor (HikMicro) and etc. – are widely used in intelligent manufacturing, which improve customers' automation and energy efficiency. Our products also play an active role in pollution prevention and contribute to an environmentally friendly society. As of the end of the reporting period, more than 20,000 of our products have earned China Environmental Labelling Product Certification, and about 8,000 have earned China Energy Conservation Product Certification.

China Environmental Labeling Product Certification

China Energy Conservation Product Certification

Cases of Market Applications of Innovative Businesses and Clean Technology

Mobile robot for intelligent warehousing

The mobile robot developed by our innovative business subsidiary Hikvision Robotics can quickly locate goods in a warehouse according to the code of the goods and effectively gather relevant security footage to digitize warehousing information. One mobile robot can handle up to 12,000 pieces of goods per day, which effectively reduces labor costs and improves operating efficiency for the clients.

Omnidirectional forklift for faster warehouse entry and exit

The omnidirectional forklift developed by our innovative business subsidiary Hikvision Robotics moves in any direction and delivers high positioning accuracy. It can be used for material handling in the production process and warehouse entry and exit to improve efficiency for automobile manufacturing, 3C electronics, machinery processing, textile, and other industries.

Intelligent barcode reader for complex code reading needs

The ID5000 intelligent barcode reader developed by our innovative business subsidiary Hikvision Robotics is equipped with a mechanical autofocus lens and a high-performance decoding algorithm. It effectively reads damaged, low-contrast, and poorly printed barcodes, meeting the diverse needs of industrial code reading.

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Battery swapping station to extend battery life

The battery swapping station of our innovative business subsidiary Hikvision Robotics employs our independently developed battery management system, which monitors battery changes in real-time and automatically replaces the battery of mobile robots, extending the battery life of the robot and delivers 24/7 operation as required by customers.

Drones to assist public interests litigation

Drones developed by our innovative business subsidiary Hikvision Robotics assist the Suzhou Procuratorate with water sample collection, gas detection, thermal imaging, 3D modeling, and other tasks regardless of distance and space, which improves the efficiency of public interests litigation and help the Procuratorate and users to gather difficult samples.

Drones for environmental monitoring

The UAV (Unmanned Aerial Vehicle) system developed by our innovative business subsidiary Hikvision Robotics can monitor the distribution of pollution sources, the status of pollution outlets, and the progress of construction. Therefore, it can help investigate illicit pollutant discharge, improve the efficiency of evidence gathering, and provide environment agencies with timely and efficient technical services and bases for decision making.

For production and operation processes, we also actively promote automated production to implement intelligent manufacturing. To upgrade warehousing logistics and production processes with intelligent technology, we deployed nearly 1,000 smart mobile robots that cover a total area of 120,000 square meters. The solution includes production and warehousing modules such as warehouses, inventory transfer between warehouses, production lines, etc. and manages over 80,000 SKUs (stock-keeping units) in real-time and 300,000 SKUs cumulatively. Continuously promoting automated assembly, testing and packaging, assembly production reduces employee fatigue and boosts occupational health while controlling energy consumption and saving resources. During the reporting period, our automated hours-of-work accounted for 21.6% of total hours-of-work, an increase of 4.9% over 2018.

We are also committed to incorporating environmental protection concepts into the product life cycle including R&D, model selection, design, and application.

Examples of Products Designed with Environmental Considerations

Enhance automation

QR code laser engraving on printed circuit board (PCB) products to improve product traceability

Improve energy efficiency

The energy rating of adapter improved from Level V to Level VI, which improves grid conversion efficiency

Reduce energy consumption

Battery camera low-power device selection and design to increase standby time to more than two years

Utilize solar power

Wildlife snapshot camera supports external solar modules (solar panel + battery) to stably monitor biodiversity.

Intellectual Property Rights

We strictly abide by laws and regulations on intellectual property rights of the jurisdictions where we operate such as the *Patent Law of the People's Republic of China*, the *Trademark Law of the People's Republic of China*, and the *Copyright Law of the People's Republic of China*, and continuously enhance our intellectual property rights protection and management system to improve intellectual property in quantity, quality, and more importantly, efficiency. During the reporting period, we obtained 1,339 intellectual property rights and 161 software copyrights. As of December 31, 2019, we had a total of 4,119 intellectual property rights and 1,042 software copyrights.

Invention patent	Utility model patent	Design patent	Software copyright
Granted with 243 in 2019 Cumulative total 755	Granted with 417 in 2019 Cumulative total 1,147	Granted with 679 in 2019 Cumulative total 2,217	Granted with 161 in 2019 Cumulative total 1,042

While ensuring that we do not infringe on the intellectual property rights of others, we take active steps to protect our intellectual property rights. We adopt measures such as platform complaints, administrative complaints, and civil lawsuit to defend our legitimate rights and interests against counterfeit and shoddy goods, trademark infringement, malicious competition, and other violations. During the reporting period, we opened reporting channels including hotline, e-mail, and website.

Channels to report intellectual property infringement to Hikvision	
Phone	0571-88075998-63844
E-mail	weiquan315@hikvision.com
Website	www.hikvision.com/weiquan315
Mailing address	Legal and Compliance Department, No. 518 Network Street, Binjiang District, Hangzhou 0571-88075998-63844

During the reporting period, we were recognized by the industry for our management and practice of R&D and the transformation of R&D achievements:

Award	Issued by
National Science and Technology Progress Award Second Prize	Ministry of Science and Technology of the People's Republic of China
Video Perception – National Next - generation Artificial Intelligence Open Innovation Platform	Ministry of Science and Technology of the People's Republic of China
Zhejiang Science and Technology Progress Award First Prize	People's Government of Zhejiang Province
Smart Emergency Response Best Innovation-Driven Solution Award	China Information Industry Trade Association

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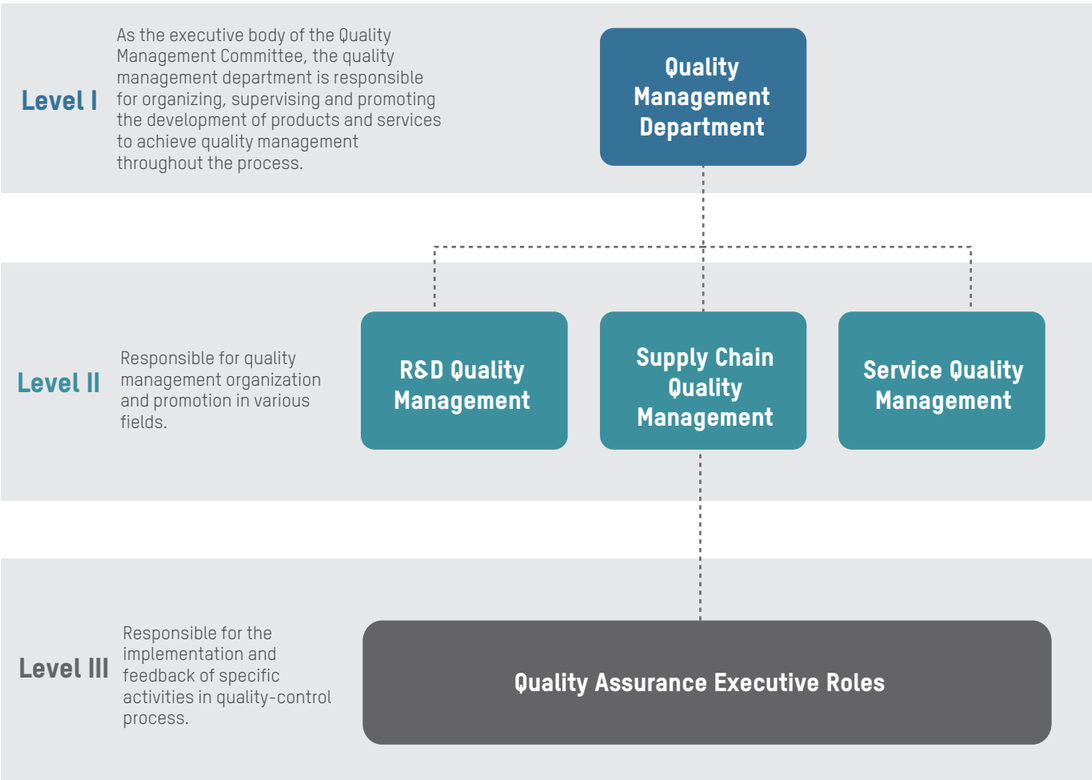
1.2 Product Quality >>>

Quality Management Structure

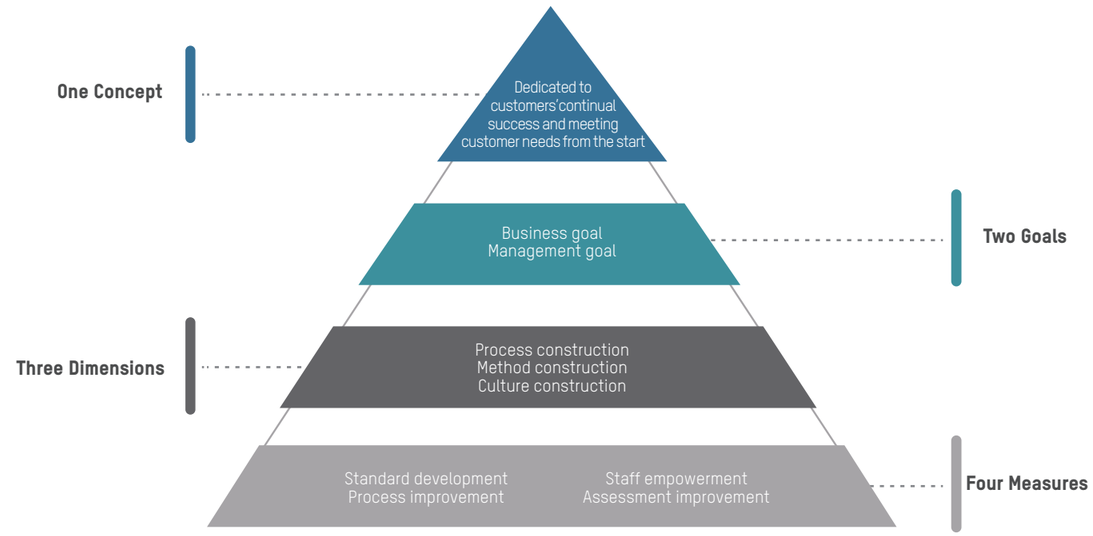
Based on the quality policy of "leading technology, quality first, customer satisfaction, continuous innovation", we set up the Quality Management Committee as the highest-level organization to lead and promote our quality construction, which is responsible for initiating and coordinating breakthrough improvements, and institutionalize them. We promote systematic quality improvement in a top-down manner through the regular operation of the Quality Management Committee. We establish a hierarchical quality management organization covering steps including product development, implementation, and after-sales service, to promote and implement quality management functions:



Quality Management Structure

Quality Management System

Excellent product quality is the key to customers' trust. Hikvision was first certified by the *ISO9001 Quality Management System* in 2005, and updated to the *ISO9001: 2015 Quality Management System Certification* in 2017. At the same time, we established our quality management model based on "one concept, two goals, three dimensions, and four measures." The quality management concept of " dedicated to customers' continual success and meeting customer needs from the start" has been incorporated into our core values to guide employee behaviors. Systematic quality control is implemented to realize our business goals and management goals.



Quality Management Concepts

ISO9001 Quality Management System Certification

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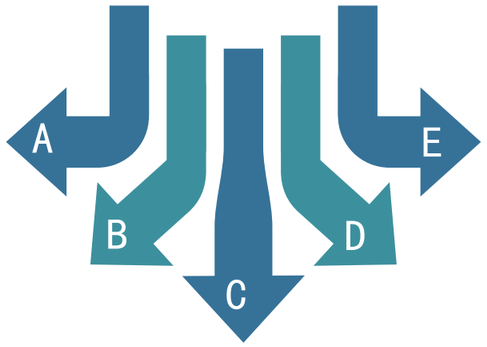
Quality Control Measures

The assurance and improvement of product quality benefit from the concerted efforts of all employees and strict control of each link. We clarify our process with aspects including quality control, quality improvement, quality monitoring and measurement, and control of non-conforming products, and regulate operation methods to standardize our products and solutions, improve the traceability of the entire process, and improve the overall competitiveness of our products and solutions .

Quality Control

Set up new thousand-class and hundred-class clean workshops to produce lens components and optimize the production environment;
Compile and revise standardized management documents or operation instructions;
Implement statistical process control on key processes and key parameters;
Carry out inspection on each production process, including material inspection, production process inspection, final and shipment inspection;
Establish a full-process quality early warning system to reduce quality risks.



Labeling and Traceability

Each product and its important parts are affixed with a unique barcode. The barcode system is used to control and record the unique identification mark of product and is to define the requirements on the labelling in order to ensure the traceability.

Quality Improvement

Establish a sound system to handle quality issues in the production process. Quality issues may be handled by interdepartmental teams. Extensively solicit rationalization proposal, implement quality improvement among all employees.

Control of Non-conforming Products

To ensure the identification and control of non-conforming products and prevent unintended use and delivery, we developed control measures to handle non-conforming products which specify how they should be disposed of.

Product Monitoring and Measurement

Monitor and measure product characteristics at appropriate stages of product realization, keep evidence that suggests conformity with acceptance standards, and record who clears the products.

Quality Control Measures

During the reporting period, Hikvision had no recall event in relation to product quality issues. At the same time, thanks to our efficient and powerful quality management system and execution foundation, we were awarded with titles of the National Quality Integrity Benchmark Model Enterprise, National Model Enterprise for Product and Service Quality Integrity, and National Advanced Enterprise for Quality Trustworthiness for the third consecutive year.

Quality Culture Construction

The emphasis of our quality culture construction lies in four aspects, namely developing a code of quality conduct, strengthening the promotion of quality culture, setting quality culture examples, and promoting experience sharing, so that we can encourage employees to identify with our quality culture and practice such culture throughout their work and ensure that this culture is well understood and implemented .

Solicited opinions, suggestions, and cases of the Code of Quality Conduct.

Translated abstract quality culture concepts into instructions in specific business scenarios to guide and standardize quality-related conduct of employees.

Released the theme of quality culture of the year and promoted the culture by special issues, workstation tips, and desktop wallpapers.

Issued the *Hikvision Quality Culture Handbook* which systematically explains our quality guidelines, the core values of our quality culture, and quality-related cases and courses to help employees better understand the quality culture.

Promoted the stories of "quality culture models" as examples.

Convened the annual quality conference in the first quarter of 2019, rewarding two excellent teams and issuing 19 quality improvement awards.

Commended quality models, excellent liaison officers, and departments in the fourth quarter of 2019.

Organised the "learning from our experiences" activity and shared excellent QCC (Quality Control Circle) cases. This enables the learning from these experiences to be used in similar scenarios by other employees and thereby boost efficiency and reduce mistakes.

Solicit opinions, suggestions, and cases of the Code of Quality Conduct

Release the quality culture theme

Quality Culture Handbook

Stories of quality models

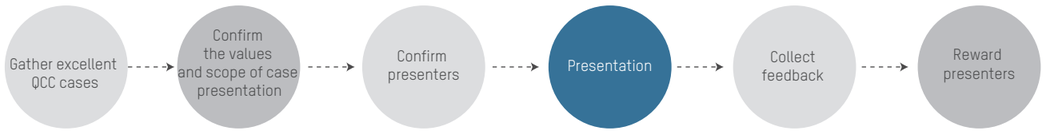
Annual quality conference

Measures to Create a Quality Culture

"Learning from our experiences" and share excellent QCC cases for further value creation

In view of the quality experience that employees found valuable in the 2018 Employee Survey, during the reporting period, we further optimized the knowledge management platform and knowledge contribution incentive mechanism, established a hierarchical sharing mechanism, and organized employees who are in charge of quality culture construction in their departments to hold activities (such as case review, hardware structure lecture, knowledge contest, typical supplier quality case study, etc.) to "learn from our experiences ". As of December 31, 2019, quality experience sharing activities reported by all departments increased by 29.4% over 2018, and the number of experience files on the knowledge management platform increased by 38.7% over 2018.

To make full use of the best improvement experience of each department and add value for the Company and each department, in 2019, we launched an excellent QCC case-sharing event, of which the process is as follows.



- A total of 34 reusable QCC cases collected
- 13 sharing sessions for R&D units and subsidiaries
- 51 pieces of feedback collected after the sharing sessions

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During the reporting period, we were recognized by the industry for our systematic quality management and high-quality delivery.

Award	Issued by
China Electronic Information Industry Market Quality Credit Rating in 2018 (Enterprise with Customer Satisfaction)	China Quality Management Association For Electronics Industry
National Model Enterprise for Product and Service Quality Integrity	China Association for Quality Inspection
National Advanced Enterprise for Quality Trustworthiness	China Association for Quality Inspection
National Quality Inspection Stable Qualified Products	China Association for Quality Inspection
National Quality Integrity Benchmark Model Enterprise	China Association for Quality Inspection
High-quality Development Leader of 2019	Organizing Committee of the 5th Zhejiang Merchants Conference
China Electronic Information Industry Market Quality Credit Rating in 2018 (Product and Project with Customer Satisfaction)	China Quality Management Association For Electronics Industry

1.3 Cybersecurity >>>

The connection of massive IoT devices makes cyberspace not only more open but also more complex with increased potential risks. We regard cybersecurity as a core element of R&D, production, delivery, and other links, continuously promote the establishment of a cybersecurity protection system, and actively respond to security threats from different fields.

Constructing the Security Ecosystem

We are deeply aware that the trustworthiness of products and solutions and the resilience and security of networks are important considerations for customers. We endeavor to work with industry partners to create a responsible, transparent, and coordinated security ecosystem by issuing security white papers, enhancing security qualifications, and actively engaging in cooperation and exchanges .

Strong service qualification and support

Be qualified with many security qualifications in the security industry and strong cybersecurity competitiveness

Active exchange and cooperation

Cooperate with professional security organizations and actively participated in forums and conferences on cybersecurity.

Security White Papers

Updated and released the *Hikvision Cybersecurity White Paper*, *Hikvision Product Security White Paper*, and *Hikvision AI Cloud Security White Paper*.

Awards and honors

Received awards and honors at domestic security competitions of different levels, including the first prize at the China Information Security Management Knowledge Competition and first prize of the provincial competition of the China Information Security Management Skills Competition.

Measures to Construct the Security Ecosystem

During the reporting period, we updated and released the *Hikvision Cybersecurity White Paper*[03] to reaffirm our commitment to safeguarding the security and interests of customers and users. The 2019 *Hikvision Cybersecurity White Paper* describes Hikvision's efforts and experience to further improve the cybersecurity protection system. Stricter requirements were proposed for the design phase, development phase, verification phase, and configuration management of R&D. More advanced technical means and tools were introduced to prevent risks to the greatest extent. In terms of construction of security organization, we continued to optimize the operating mechanism, enhance the qualifications of our cybersecurity practitioners, and hold regular internal training to improve the security awareness and ability to address security issues of all employees. In addition, the White Paper emphasizes the issue of supply chain security - as required by the *ISO 28000:2007(Specification for security management systems for the supply chain)* system, effective technical means and management system should be adopted to secure the supply chain, so that the cybersecurity protection system can be extended to cover the upstream to contribute to the security ecosystem together with supply chain partners.

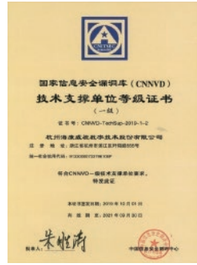
As we continuously optimize the overall cybersecurity protection system, we pay special attention to the security of IoT products and aim to ensure their security, driven by our primary motivation of "using technology for good". During the reporting period, we released the *Hikvision Product Security White Paper*[04] for the first time, which analyzed risk factors affecting the security of IoT devices in detail, and introduced to users the security technology and security mechanism of IoT devices designed and produced by Hikvision.

Information system projects require strong security. We continuously improved our engineering and practices, and obtained a number of high-value security service qualifications during the reporting period.

Cybersecurity Emergency Service Support Unit (industrial control area)
(one of the first 18 organizations in China)

Member of the Technical Support Group of the China National Industrial Cyber Security Vulnerability Database (CICSVD)
(one of the first 10 organizations in China)

Industrial Information Security Emergency Service Support Unit
(one of the first 20 organizations in China)



Level I Technical Support Unit of China National Vulnerability Database of Information Security (CNNVD)
(one of the first 16 organizations in China)

In addition, we fully recognize the importance of cooperating with upstream and downstream partners globally to jointly build a cybersecurity ecosystem. As a member of the China Cyber Threat Governance Alliance (CCTGA) and member of the CVE (Common Vulnerabilities and Exposures, an internationally renowned security vulnerability database) Numbering Authorities (CNA), we take active steps to share security vulnerability information with global security partners and explore the best practice. At the same time, Chuck Davis, Senior Director of Cybersecurity at Hikvision and member of the SIA (Security Industry Association) Cybersecurity Advisory Board, is committed to collaborating with users in Europe and America, industry associations, legislatures, and government agencies. We aim at contributing to industrial cybersecurity and will make every effort to provide customers and users with secure and reliable products and solutions.

Consolidating Security Management

To better handle the cybersecurity challenges brought by digital and intelligent development and fully meet the customers' cybersecurity needs, during the reporting period, we further established and enhanced our information security management system and conducted internal and external audits of the system, in strict accordance with the *ISO 27001 Information Security Management System* and *GB/T22239-2019 Information Security Technology - Baseline for Classified Protection of Cybersecurity*.

[03] See Security Center on the official website of Hikvision for the *Hikvision Cybersecurity White Paper*.
[04] See Security Center on the official website of Hikvision for the *Hikvision Product Security White Paper*.

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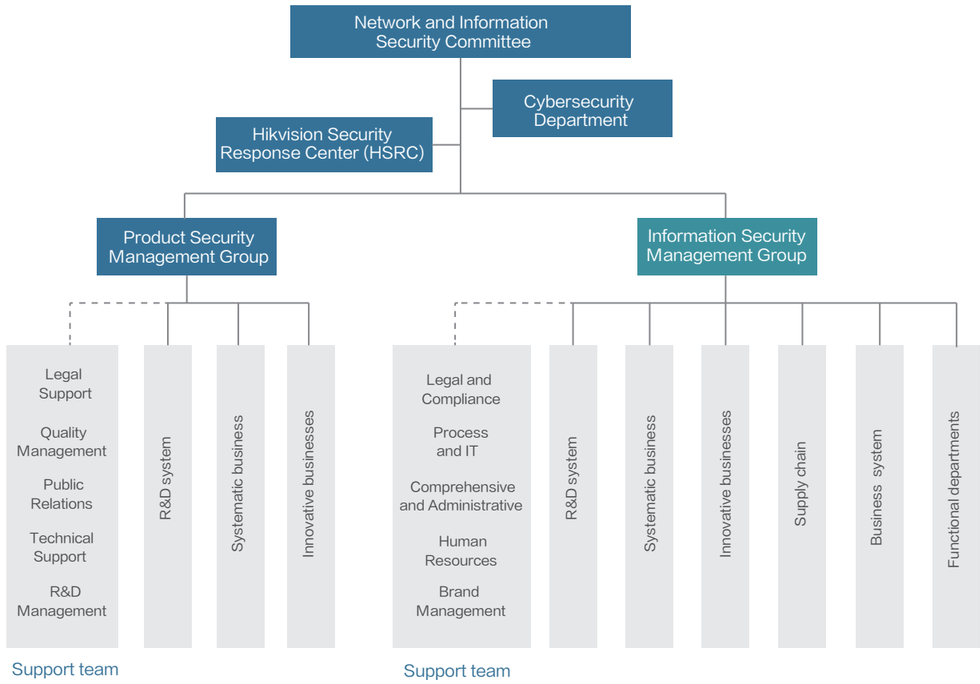
To better handle security threats, we formed a Network and Information Security Committee, established our security management system with the Network and Information Security Committee as the core of strategic planning, and defined the responsibilities of each unit to ensure full life circle product security. During the reporting period, in order to strengthen our internal software security management and product security management capabilities, the Cybersecurity Department which was a permanent organization of the Network and Information Security Committee was upgraded to a first-level department of the Company to offer security and stability support to customers as well as our networks and businesses .

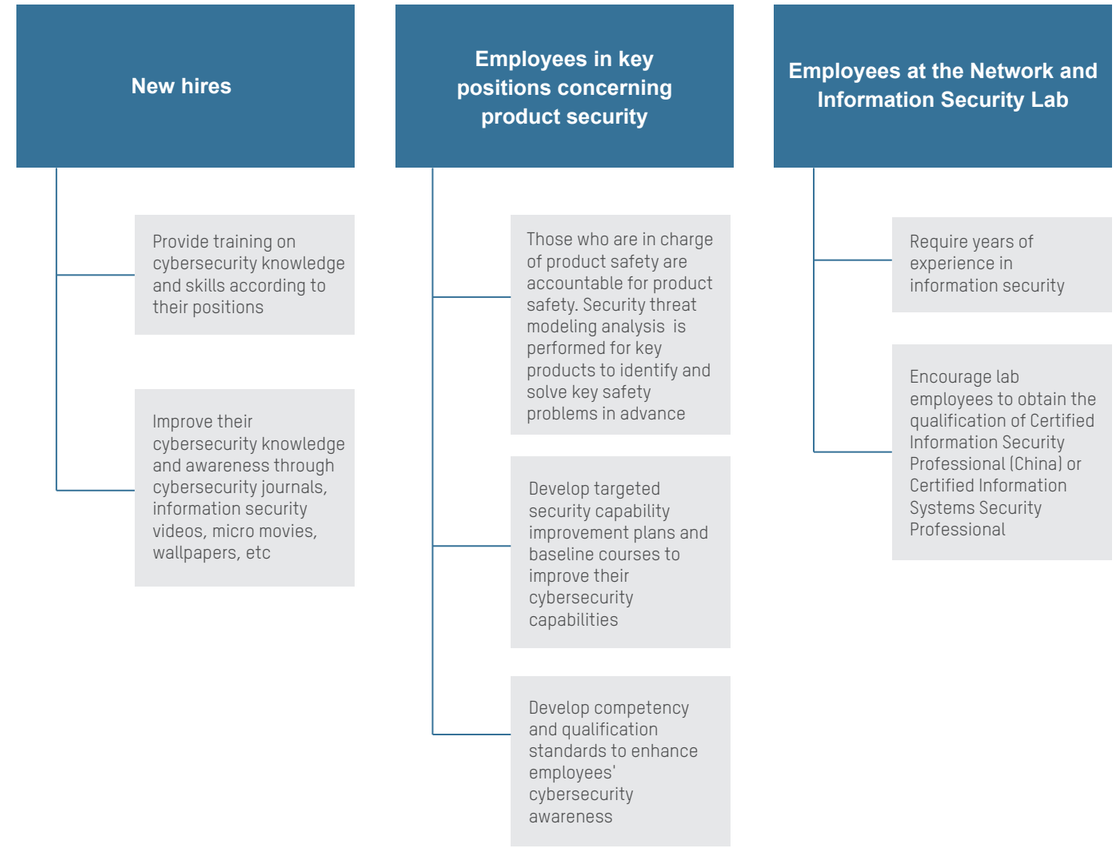


Structure of the Network and Information Security Committee

In terms of product security, during the reporting period, we introduced a threat modeling tool to examine security threats from six dimensions: spoofing, tampering, repudiation, information disclosure, denial of service, and elevation of privilege. This threat modeling tool incorporated measures to identify and eliminate security threats into product R&D, thus greatly lowering later-stage fix costs caused by security risks and improving product competitiveness in terms of security. In addition, to further reduce product security vulnerabilities and security risks, we updated the *General Security Baseline 2.0* to clarify our product security requirements based on current domestic and international laws and regulations, industry standards, and customers' security requirements and closely tracked its implementation.

In terms of software security, during the reporting period, we took the BSIMM (Building Security in Maturity Model) as a benchmark for software security assessment in our security assessment system to advise on our current software security development process in an objective, data-oriented manner. We may develop our own benchmark for product security development based on the BSIMM and use it to continuously improve product quality and security.

To better implement the information security management system, we continued our efforts in the construction of security organizations. We provided targeted cybersecurity training and cybersecurity awareness activities for different employee groups. During the reporting period, we developed more than 20 new information security-related courses and offered more than 20 information security professional training sessions.



Measures to Build Up Security Capabilities

1.4 Service System >>>

Optimizing Service System

Hikvision is a provider of video-centered intelligent IoT solutions and big data services. In order to bring more convenient, timely and high-quality services to customers, we continue to improve the "from problem to solution" service process and optimize service systems and tools such as the CIS (Customer Issue System), DPM (Delivery Project Management), and DOIT tools to promote the digital transformation of services. The technical support service team is established to handle quality issues and respond to customers' service needs. It aims to deal with problems in a rapid manner, providing efficient and considerate services, and ensuring an efficient solution to product problems and timely satisfaction of customers' needs. At the same time, our professional service delivery team continues to improve service solutions, project delivery, spare part dispatch, and product support capabilities, enhance the ability to utilize resources of the service ecosystem, develop a well-established delivery system, contribute to the service ecosystem, and offer customers high-quality, efficient services.

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Comprehensive and unified service resources

We provide comprehensive services to all parts of China and across the world. This is via multiple service channels including a 400-service hotline, service portal, e-mail, WeChat platform and app, and a centralised service desk. By combining human customer service and AI, we offer customers one-stop services and support their businesses in an all-round way.

Professional and efficient service team

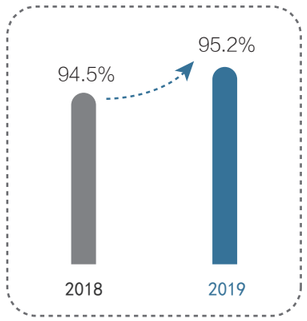
The product categories covered by our services include video products, non-video products, and platform storage products. The content of customer service includes product parameters, procurement channels, operation guidance, troubleshooting, repair application, and complaint/suggestion. Our service team established a quick response mechanism and quality inspection management mechanism to offer efficient services while ensuring service quality.

Trustworthy service support

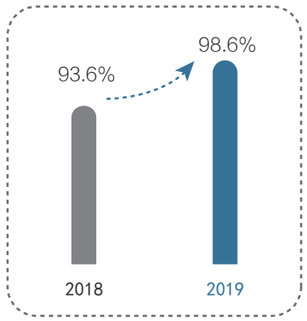
The reliability of our technical service team lies in service channels, service capabilities, service quality, service scope, service efficiency, and intelligent services. We also provide remote technical guidance and remote desktop support. We form issue-specific committees, promote the delivery of complex issues, and provide necessary on-site services based on actual project situations to effectively improve customer service satisfaction.

Three Major Service Advantages

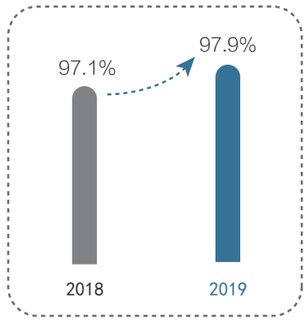
We are committed to providing customers with the best service and view customer satisfaction levels as the standard of measurement. During the reporting period, our main customer service performance indicators all exceeded the goals set for 2019 and demonstrated improvements from 2018.



Problem solved within three days
(the target for 2019 was 90%)



On-time project delivery
(the target for 2019 was 95%)



On-time after-sales repair
(the target for 2019 was 97%)

Standardized pre-sales, sales, and after-sales service processes and prompt problem handling and feedback mechanisms helped our products and services gain greater recognition among customers. During the reporting period, the number of quality-related complaints received by the Company decreased by 35% in 2019 compared to 2018, exceeding the goal of 15%. Moreover, the number of service-related complaints also decreased by 6% in 2019 compared to 2018.

Service Capability Building

As we continue to optimize our customer service system, we pay close attention to building our service capability. During the reporting period, we further improved training for technical support engineers and hotline technical engineers, enabling them to further improve their professional skills.

Technical support engineer

During the reporting period, we included the development of four professional capabilities of technical support engineers into our strategic plan, and started to incorporate such goals in our certification and training system that includes training manuals, training documents, training courseware, and training assessment. The four capabilities are as follows.

- Develop the capability to serve users in terms of the architecture, solution delivery, and operation and maintenance of city-level applications.
- Develop the capability to serve users in terms of the architecture, project management, AI application, business transformation, and operation and maintenance of video-centered IoT applications.
- Develop the capability to serve chain businesses in terms of the implementation of e-delivery management and operation and maintenance.
- Establish a network of internal and external service resources, enable rapid, standardized delivery of products and operation and maintenance, and support the three capabilities above with resources.

Hotline technical engineer

In order to build a professional and efficient hotline service team, during the reporting period, we paid close attention to helping each hotline technical engineer develop communication skills and professional skills.

- We updated the hotline technical engineer training system and added courses on manners, professional skills, communication skills, and emotion management. We established training programs by the level of difficulty, such as onboarding, elementary, lower-intermediate and intermediate.
- We organized training to familiarize engineers with new products when necessary to ensure that customer service hotline operators understand new products, new functions, and new knowledge, and can quickly grasp how to use them. We also placed devices of different product lines on the testing table for them to test and try.
- We offered online courses for engineers to learn on their own as well as offline classes, practice competition, and knowledge exams and contests to examine and improve their skills in serving customers on the phone.
- Engineers completed the goal of 12 training hours per person per quarter.

Building Up Service Capabilities

Enhance Customer Satisfaction

To improve customers' overall satisfaction with the Company, and explore ways to meet customers' needs in a targeted manner, we conducted multi-dimentional satisfaction surveys with stakeholders through multiple channels. During the reporting period, eight departments jointly established a satisfaction survey team to analyze and improve customer satisfaction in a systematic manner. Participating departments include: the Product Research and Development Center, International Business Center, Domestic Busniess Center, Strategic Management Department, Planning Department, Technical Support and Service Department, R&D and Quality Management Department, and Process Management Department .

Rating of online customer service

Rating of customer service hotline

Rating of after-sales repair service

Sept 6, 2019 to Sept 21, 2019

The Technical Support and Service Department was responsible for the planning and implementation of the survey.

The questionnaire link was sent via our WeChat account, at the end of online customer service, and in WeChat group chats.

Dec 25, 2019 to Jan 10, 2020

Eight departments jointly formed a satisfaction survey team that is responsible for the planning and implementation of the survey.

The questionnaire link was sent via email, the Hikvision website, and our WeChat account.

Rating of overall operation

Rating of quality

Rating of service

Overview of the Customer Satisfaction Survey Covering Three Customer Groups, Namely Distributors, Integrators and End-Users

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In September 2019, we organized a return survey for service satisfaction in accordance with the provisions of our *Return Survey Process for the Satisfaction with Hotline Service, Return Survey Process for Satisfaction with After-Sales Repair Services*, and *Service Satisfaction Questionnaire Investigation and Research Process* and other policies. We collected a total of 6,816 questionnaires from distributors, intergators, and end-users. According to the results of the survey, the proportion of "very satisfied" in 2019 increased by 16.02% over 2018.

In addition, during the reporting period, we conducted satisfaction surveys for domestic and international customers. We held discussions based on the results and customers' feedback and suggestions. We developed a satisfaction improvement plan, and sought improvement in the following areas:

Satisfaction improvement measures for international customers	Satisfaction improvement measures for domestic customers
Continue to strengthen the reporting system.	Register and promote public accounts of domestic business.
Respond to the needs of different customer groups and provide more suitable product series.	Gather the true voice of customers, especially by strengthening feedback channels for the client.
Establish a system for sales staff to submit their training needs and sign up for training sessions. Strengthen training, improve training coverage, and expand training channels by combining online and offline means.	Strengthen online and offline training, increase the coverage and frequency of live streaming lectures at the client.
Form a systematic management and control system to improve the ability of sales staff.	

Adjust global resource deployment for improvement of customer satisfaction

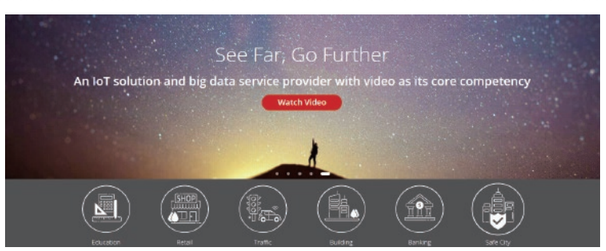
During the reporting period, we built a new factory in India, which created more than 1,000 local jobs, and enhanced our competitiveness in product price, delivery, inventory management. It also improved customer satisfaction and brand recognition.

Brand new website for better customer experience

As the Company explored global markets, we started to improve our official website in March 2019 to reflect our development and brand image. Compared with the previous version, the new website will be significantly improved in the following aspects:

- Introduction about product categories, sub-categories and series were added. More industry solutions and application solutions were added. The search function was improved for easier access to services.
- The News Center was upgraded and a blog section was added to the international site to share our insights and opinions about technology trends, industry development, cybersecurity, social responsibility, etc.
- Videos, pictures, interactive plug-ins, and other forms and means were added to offer audio-visual presentations of content and further improve customer experience.

As of December 31, 2019, we successfully launched the international site, Africa site, Hong Kong site, the Philippines site, Australia site, and UK site. More region-specific sites are coming up.[66]



[66] New official website of Hikvision: https://www.hikvision.com/en/

1.5 Clients' Rights and Interests >>>

Compliance in Marketing

We always adhere to the business concepts of "professionalism, reliability, and integrity," and we work hard to ensure the accuracy and truthfulness of promotional information and maintain market order while protecting users' rights and interests. We developed our information review system in strict accordance with the *Advertising Law of the People's Republic of China, Law of the People's Republic of China on the Protection of the Rights and Interests of Consumers*, and applicable laws and regulations of the jurisdictions where we operate, to ensure that our commercial promotions are compliant with applicable laws and regulations. All information to be officially released to the public is checked in accordance with the *Promotional Information Review and Release Process* developed by the Company for accuracy and truthfulness. During the reporting period, we received no regulatory punishment in relation to marketing violations.

During the reporting period, we also established a product information system to manage basic product information and productrelated materials and docuementation to guarantee timely access to reliable product information for different stakeholders, including regulators and customers.

Protection of Customer Data

Hikvision focuses on protecting customer privacy and data security. We continuously optimize and improve management and control measures to prevent leakage of customer data, and strive to reassure and create value for customers.

During the reporting period, we continued to abide by the reasonable, transparent, controllable, and secure data protection principles, and actively optimized our customer privacy protection system in accordance with laws, regulations, and standards such as the *Cybersecurity Law of the People 's Republic of China, the Information Security Technology - Personal Information Security Specification*, and the EU *General Data Protection Regulation*. During the reporting period, we issued the *Customer Information Protection Specifications, Service Security Specifications*, and *Personal Data Privacy Protection Specifications*, which regulate the collection, transmission, storage, use, and destruction of private data in the customer service process, to minimize the risk of a data breach.

Privacy Data Protection Life Cycle

Collection	Transmission	Retention	Use	Disposal
Informed consent Withdrawal of consent On-demand collection	Encrypted transmission Cross-border transfer	Storage protection On-demand mask Retention period	Access control Data Anonymization Authorized export	Data deletion Device repair Factory reset

We take multiple measures to protect personal data, including request for consent before collecting data, data anonymization, communication and storage encryption, and data security audits. To ensure the security of our products and services, we established a data protection group to incorporate data protection requirements into our business operation.

During the reporting period, we promoted and explained relevant regulations to all employees who work in relevant positions through training, examination, irregular notification, etc. For example, to ensure customer service staff comply with the established rules and regulations to protect user data, we conduct management by walking around, spot checks on recordings, and order analyses. During the reporting period, we received no reports of violations of data protection.

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Join Hands to Make a Difference

Our success is inseparable from the effort and dedication of our employees. To thrive as a business, we protect the rights and interests of employees, create a comfortable and safe workplace, and improve training and development opportunities. Stable and sustainable development relies on every party in the chain. Upgrading our industry entails building a responsible supply chain, and creating mechanisms for communication and cooperation. Social progress requires corporate citizens to fulfil their responsibilities. We use technology to protect nature and give back to society. We are committed to building a smarter, kinder world. We will continue to work with all industry partners to go further together.

Growing Together with Employees

To grow and fulfil our social responsibilities, we need the commitment of our employees. Hikvision employees around the world have shared both tough times and the joy of success. Through their efforts, they have created sophisticated technologies and premium products out of expertise, collaboration and hard work. Hikvision respects and values every employee who shares the company' s vision and dedicates themself to work. The company will spare no effort in providing them with a safe and supportive work environment along with a comprehensive career development and training system. This way, they can realize their full potential and achieve their career goals.

2.1 Employment Overview >>>

Employees are one of Hikvision' s most valuable resources. We respect every employee' s efforts and intelligence, safeguard their rights and interests, help them grow together with the Company in a comfortable and supportive environment, to realize the Company' s vision of empowering vision for the security and growth of the world .

Employees' Rights and Interests

Every employee is valued, cared and treated with respect at Hikvision. The Company makes best efforts in protctecting rights and interests of every employee. We abide by applicable laws and regulations of the jurisdictions in which we operate, including the *Labour Law of the People' s Republic of China,* the *Labour Contract Law of the People' s Republic of China* and the *Trade Union Law of the People's Republic of China*, under which we have developed and implemented standards such as the *Recruitment Management System* and the *Attendance Management Code*. We recruit employees of different races, nationalities, regions, ethnicities and religions equally, and the employment of child labor is expressly prohibited. During the reporting period, we signed the *Collective Contracts* with employee representatives, covering all domestic employees. The *Collective Contracts* covered detailed rules in employees' working time and vacation to control overtime work hours as much as possible. During the reporting period, no forced labor or child labor was found.

The Hikvision Labor Union was established to maintain harmony and stability within the Company and implement employees' rights and interests protection. The Labor Union cares about employees' work and life situations, proactively listens to and collects advice and suggestions, notifies applicable departments of the need for change and protect the legitimate rights and interests of employees. To achieve a work-life balance, the union organizes cultural activities, games, and other technological innovation activities. During the reporting period, the Labor Union covered 76% of the Company' s domestic employees.

Hikvision values all human rights outlined in the *Universal Declaration of Human Rights*, the *International Covenant on Civil and Political Rights*, the *International Covenant on Economic, Social and Cultural Rights*, and *the International Labor Organization' s Declaration on Fundamental Principles and Rights at Work*. We have integrated the *UN Guiding Principles on Business and Human Rights* into our working process and policies to improve our compliance. We agree that everyone shall be entitled to rights and freedom regardless of race, color, gender, language and religion. We endeavour to create a work environment that respects human rights, protects women' s rights and vulnerable groups, such as the disabled.

As of December 31, 2019, the Company had 40,403 employees globally, representing a year-over-year increase of 17.48% comparing to 2018.

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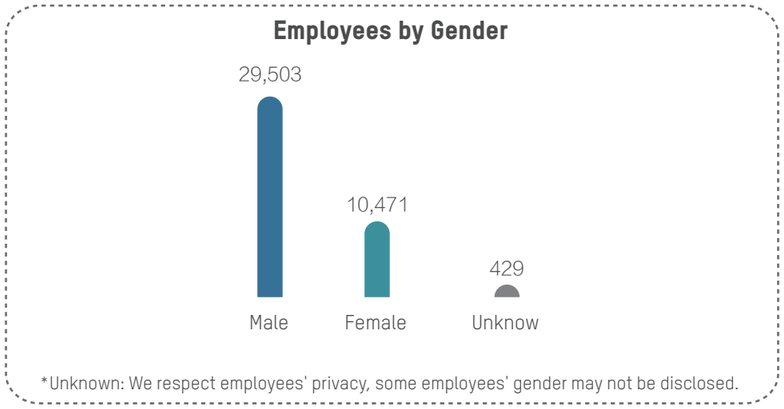

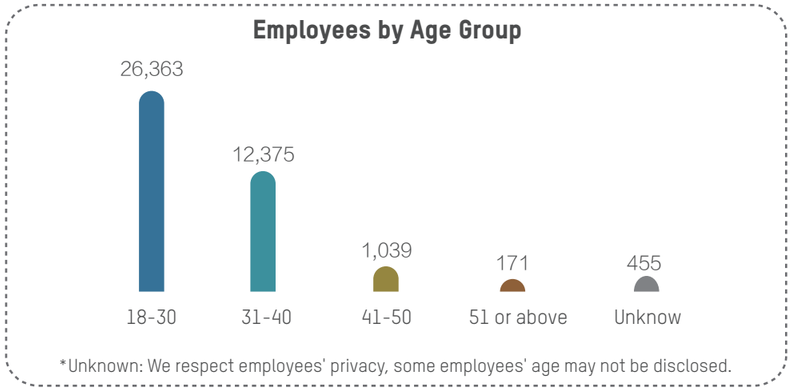

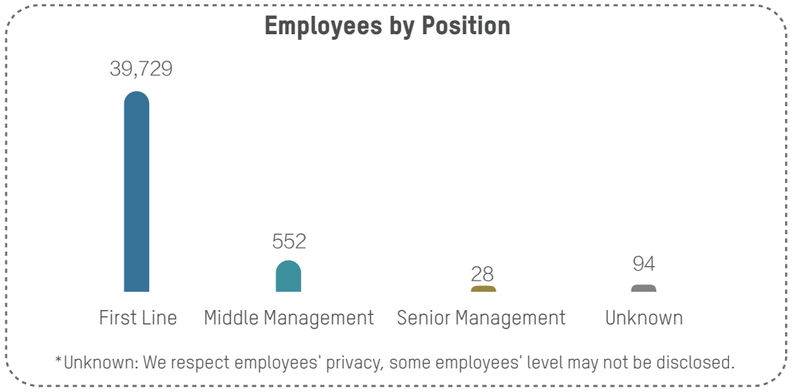

Most recruits had computing or mechanical engineering major degrees, as required by the industry and occupation. There was a wide gender disparity in these majors. Nevertheless, we adhere to the principle of equality and object to any form of gender discrimination in recruitment.

In accordance with the *SA8000:2014 Social Accountability International Standard*, we have formulated the *Social Accountability Management Manual* for internal use. We respect employees' rights of freedom of association and collective bargaining under a national law compliant and volunteer manner. We protect employees' personal information and privacy, and explicitly forbid all kinds of illegal employment practices such as child labor, forced labor and restriction of employees' freedom.

SA8000:2014 Social Accountability Management System Promotion Board

For the better promotion of social accountability management system, board of each production area display our social accountability policies and requirements.These include the prohibition of child labor, forced labor, discrimination and punishment, and other matters concerning health, safety, remuneration and working hours.

During the reporting period, to protect the rights and interests of Hikvision' s global employees, we carried out due-diligence investigations of human resources management in the newly established subsidiaries in 11 countries. The due-diligence investigations covered the policy of establishment and termination of labor relations, remuneration and benefits, collective-bargaining agreements/labor unions, and the corporate social responsibility requirements. The investigations not only ensure the consistency and compliance of our operational strategies, but also protect the legal rights and interests of global employees and engage all employees toward the common goal of the Company.

Talent Recruitment

Hikvision' s sustainable development requires the input of gifted individuals. We work to discover talents who share the Company' s vision and build pipelines to multiple sources based on the principles of best job fit, best job candidate, efficient employee allocation, fair recommendations and necessary withdrawal. During the reporting period, we improved recruitment efforts, with 17.22% of new recruits having advanced degrees.

During the reporting period, we became one of the first committee members of the *Global Introduction of Talents Programme for Well-known Enterprises in Zhejiang* , with which will empower us in global talents introduction. We are committed to maintaining a good relationship with various universities and set up multi-layered campus-recruitment schemes. We have also developed the Online Recruitment programme to strengthen the recruitment and retention of high-quality talents. During the reporting period, the Company newly hired 2,978 fresh graduates.

Building good relationships with universities	With the increasing demand on campus recruitment and the increasing complexity in the variety of recruiting positions, it is more crucial to build and maintain relationships with colleges and universities, and optimize talent recruitment and retention. During the reporting period, we classified 2,649 universities into categories based on external information and our experience. These National College and University Classifications provide data basis to support recruitment. To build an efficient and reliable connection with colleges and universities, we appointed specific person in charge to maintain good relationships with professors and students; we would also coordinate resources from headquarters and regional subsidiaries, if needed.

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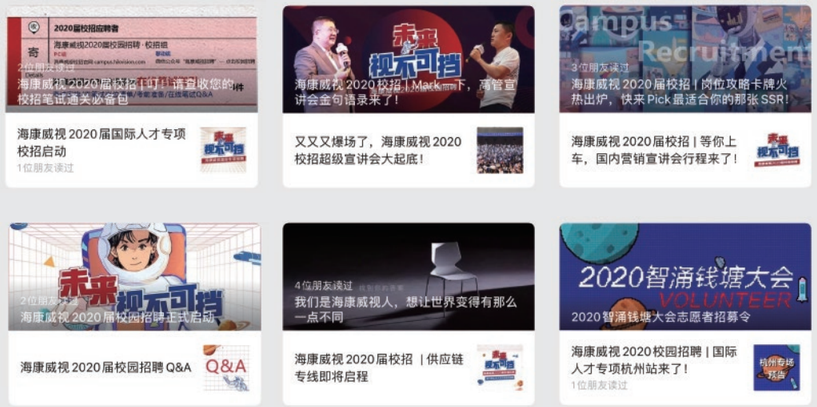
Campus Ambassador Programme and Super-Star Club	We recruited campus ambassadors at selected colleges and universities to run our Campus Ambassador Programme and Super-Star Club initiatives. The Campus Ambassador Programme had 246 members from 134 schools, supporting recruitment promotion and programme implementation. The Super-Star Club has already founded 11 clubs with 122 members to support class of 2019 spring campus-recruitment and class of 2020 autumn campus-recruitment.
School-business internship programmes	We have jointly built the internship base with colleges and universities, such as College of Control Science and Engineering-Zhejiang University, College of Mechanical Engineering-Zhejiang University, Xiamen University, the Guilin University of Electronic Technology, College of Communication Engineering- Hangzhou Electronic Science and Technology University and Chang' an University, etc., to further strenghthen school-enterprise cooperation.
Open days	During the reporting period, we organized more than 100 Open Days activities. Over 200 employees who had graduated from prestigious universities attended the events and helped us establish contacts with 5,000 alumni.
Campus-recruitment presentations	During the Class of 2020 Autumn Recruitment, we held over 150 presentations in more than 20 cities around the world, attracting thousands of graduates. Through these campus presentations, we have promoted the Company' s talent strategy and recruitment information, in order to attract ambitious young people to join hikvision.

New media recruitment	We have created the Online Recruit platform under the Hikvision Recruitment WeChat official account, to realize online and convenient delivery of resumes for both school and social recruitment. The WeChat official account offers daily articles and posts, continuously attracting various potential candidates. Hikvision Recruitment has already accumulated more than 100,000 followers. 

Compensation and Benefits

During the company development, Hikivision goes through up-and-downs and challenges with employees. Meanwhile, we are committed to sharing the joy of success with diligent employees. Hikvision offers rewarding careers, competitive remuneration and benefits. We reward employees based on their contributions. High performers are eligible for stock options and our innovative business co-investment scheme. We pay employees in full and on time, in accordance with national and local laws and regulations. In addition to social-security insurance and a housing fund, we offer supplementary medical insurance, medical subsidies, and allowances for food, transportation and communication. To improve employees' quality of life and to incentive employees, we provide other benefits:

Life Quality	Employee Incentive
The Company endeavours to improve employees' quality of life, providing annual physical examinations, meal allowances, summer allowance and phone allowance. To create a supportive work environment, the Company sets up a team-building allowance, prepares birthday cakes for employees, and builds a psychological assistance platform to provide psychological consulting services for employees. At the headquarters, the Company provides special staff cafeterias, coffee bars, free gyms, a family reception center, physiotherapy rooms, as well as regular free clinic services. At the same time, the Company encourages various club activities to enrich the lives of employees and promote healthy lifestyles outside of work, to maintain the stability and enthusiasm of talents	Innovative Business Co-investment Scheme for core employees Restricted Shares Incentive Scheme Year-end bonus Golden Brick Award

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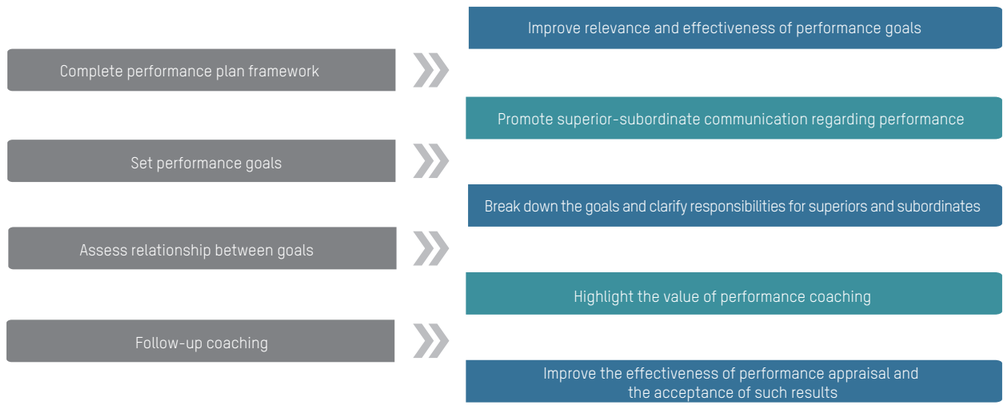
Performance Management

To improve the Company' s competitiveness, we adopted performance assessment system that links employment, promotion, training and development with remuneration, in order to fully mobilize the enthusiasm and creativity of our staffs. During the reporting period, we have carried out iterative optimization of the Company' s performance assessment system, addressed particular issues, and accumulated experience through the pilot projects for some departments, laying a foundation for comprehensive promotion.



Performance System Improvement

In 2019, we received a number of awards for our human resource management performance:

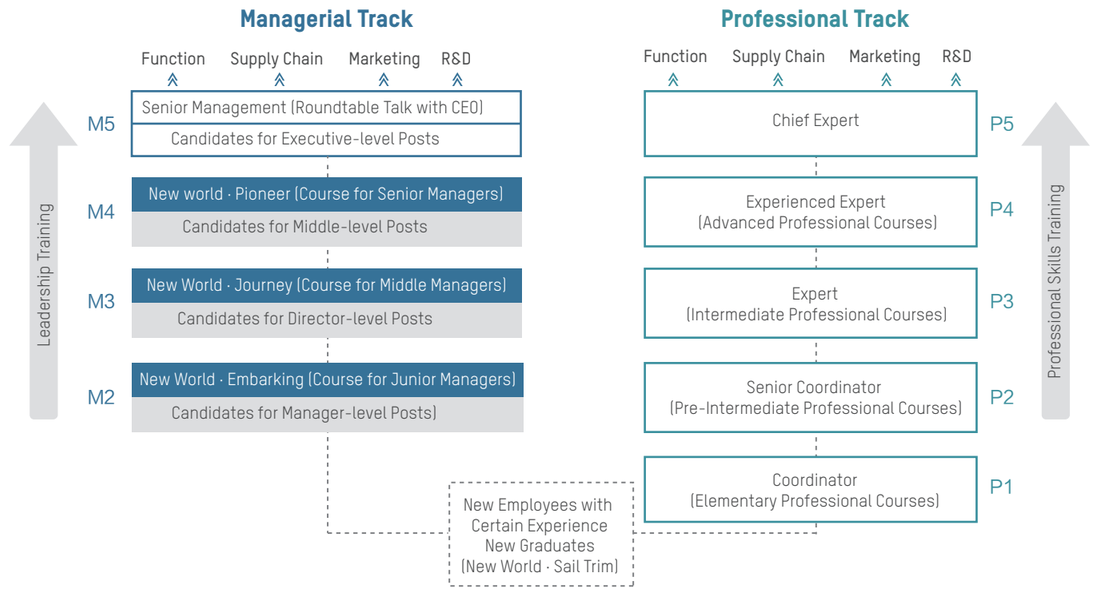
Award	Issued by
2019 Model Employer of China Corporate Social Responsibility Model	51Job
Top 30 Employers in China of 2019	Zhaopin
Best Employer for Corporate Social Responsibility of 2019	Zhaopin
Best Employer of 2019	Boss Zhipin
Extraordinary HR Team of 2019	Liepin
Extraordinary Campus Employer in Zhejiang	Liepin

2.2 Training and Development >>>

Employee development is fundamental to our competitiveness and sustainability. Hikvision continually improves its development and training system to realize potential, enhance abilities and motivate employees toward a common goal and a better future.

Career Development

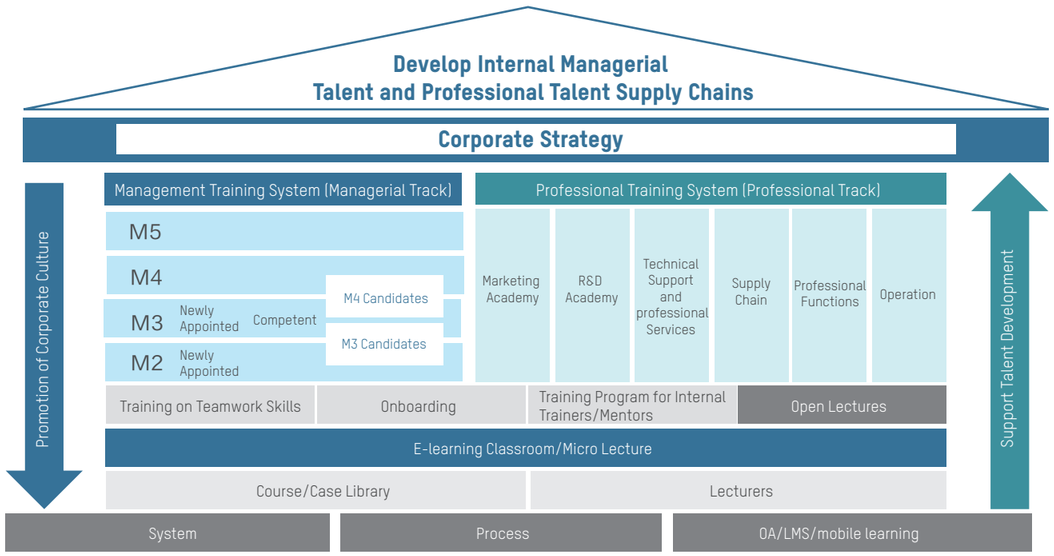
The achievements made by Hikvision are inseparable from all its employees' efforts. We keep improving our employees' career development paths and platforms to help them grow together with the Company and realize their own value. We provide employees with two career development paths, establish different schemes such as internal promotions and job rotations. Under the principle of "fairness and rightness, best job candidate with both ability and integrity, step-by-step promotion and flexible promotion based on qualification" ,we help employees find their ideal career development paths. Each employee can either follow the managers' development path or the professional development path as gateways to promotion.



Career Development Paths

Employee Training

We combine the Company' s business development trend with our employees' demand in development and training, exploring a more appropriate and efficient training mechanism. During the reporting period, we initiated a business-oriented learning and developing strategy. The strategy involves 3 key missions including experience exchange, research and development of learning product and course, and learning resource management, in order to create branded and standardized training products and resources. The strategy was implemented in the Company through a dual line training system of both online and offline training. During the reporting period, we updated our *Learning Management System--Online Courses Operation Management Guidance* to promote the standardization of our online training system, and continuously improve the quality and results of employees' online learning.



Training System

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Through the effective learning methods of online training system, Hikvision resolved the issues of distance, time difference and teacher shortages that occurred when organizing internal training for global employees. The online training offered 2,950 courses in different fields including management, technical (business), functional and general knowledge for new hires. During the reporting period, 27,237 employees received premium training services from the online learning platform, spending 1,651,319 hours on online learning, averagely 40.9 hours/person.

At the same time, the offline training system, which implemented management, technical (business), new hires and general training projects, met the Company' s urgent needs of high-level training under the business expansion, which has provided integrated training experience including learning, discussion and practice to 9,895 employees of the Company. The Company established the "Ferryman" internal teachers' team in 2016, this internal teaches' team has already accumulated 169 certified internal teachers and 170 reserved teachers through standardized certification and development procedures. The team has self-developed 13 onboarding orientation courses for new hires and 11 general courses, and helped various business departments develop 177 technical (business) courses, 13 functional courses and 13 management courses. During the reporting period, the total face-to-face training hours reached 433,655 hours, averagely 10.7 hours/person.

During the reporting period, the Company has invested RMB 16.72 million in total in employee training. The total hours of training[16] was 2,084,974 which covered 27,688 employees, and the hours of training per employee was 51.6.

New World ·Embarking: M2 Junior Managers Pre-job Training

During the reporting period, 701 trainees completed 15 rounds of M2 junior manager pre-job training. The project would guide them in future management.

This training project focuses on the transition from coworker to manager. The course clarifies the junior manager role, transition, and its duties while imparting management knowledge and techniques in order to improve the ability of junior managers.

New World ·Journey: M3 Middle-level Managers Pre-job Training

[New World.Journey] project focuses on new M3s' development of basic leadership. Through three sections of face-to-face teaching – including role transition, team-capacity planning and building, and problem analysis and solving – plus offline follow-ups such as action plans equip newly appointed M3s with the required competence. During the reporting period, 87 trainees from three learning classes completed the New World ·Journey courses and bolstered our mid-level management.

Eagle and Lingxiang: Marketing/R&D M4 Backup

Projects of "Eagle" and "Lingxiang" identify and recruit high potential candidates in marketing/R&D divisions and train them for one year to transform them into M4 candidates.

During the reporting period, we held several "Eagle" classes, where city managers, national managers, and industry directors spent eight months on four modules, namely overall management, business insights, organizational development, and personal growth, as well as individual and team action learning projects. After repeated topic selection, tutoring, discussions, and debates, "Eagle" trainees not only provided the Company with viable action learning projects but also offered experience in team management, industry exploration, and client management. They also worked out team projects that are closely related to our businesses and joint tutorial of internal and external tutors, providing a reference for future leadership development.

[16] "Total hours of training" refers to the hours of training organized by the Learning and Development Office of the Human Resources Department, including onboarding, general skill courses, general management courses, and business training organized by the Learning and Development Office, excluding training organized by business departments.

During the reporting period, the "Lingxiang" project improved the capability of high potential technical managers by offering four modules, namely role transition, strategic insights, organizational development, and overall management, preparing the trainees for product R&D management.

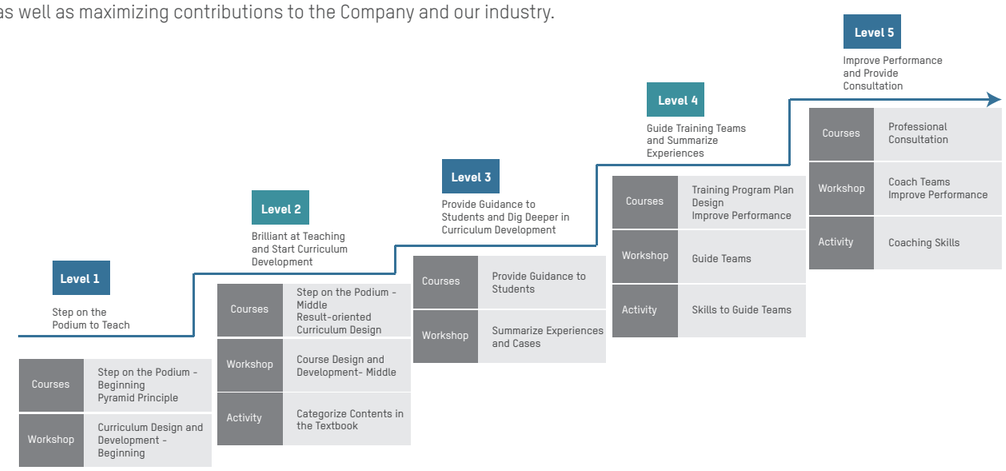
"Ferryman" Internal Trainers

During the reporting period, Hikvision continued to develop its internal trainer system named "Ferryman" in the hope of improving the skills of employees by learning from these "ferrymen" and promoting the development of the Company.

From 2016 till now, our "Ferryman" internal trainers have increased to over 300. We have created more than 20 orientation courses for new hires as well as general competence courses. We have also encouraged and supported business departments in developing more than 200 technical (business) courses, skills courses and management courses.

We have evaluated competence-based qualifications of internal trainers. During the reporting period, we categorized internal trainers into five levels by assessing their competency in terms of "demand analysis, course design, curriculum development, course teaching and course evaluation." By clarifying the standard procedures for competence-based qualifications of internal trainers, we are able to standardize management. Meanwhile, we have adopted an OA (Office Automation) system for internal trainers to finish qualification procedures from registration, eligibility review, selection and certification to importing their information in the database. After that, we provide tailored training for trainers of each level. Such training coaches them how to design and develop courses, teach lessons, guide students, summarize experiences and cases, coach teams, improve performance and coaching skills, etc. By doing so we hope to help them find direction and make progress. Moreover, the "Ferryman" system in various business divisions and business lines has been adopted for internal trainers to summarize experiences and best practices in real time and share them with others instantly. Consequently, we now have a good learning atmosphere and have improved the professional skills of our employees.

We continue to create and optimize better career paths for our employees, with the goal of positive professional development as well as maximizing contributions to the Company and our industry.



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2.3 Care and Support >>>

Hikvision cares about every employee' s physical and mental health. We constantly strive to create a comfortable and supportive working environment for employees and an appropriate balance between work and life. We are conscious of employees' needs and aim to create a healthier, more sustainable way of life.

Employee Communication

Effective employee communication creates cohesion and common development. Our communication system bridges positions, departments and levels, allowing employees to connect throughout the Company. We host monthly dialog sessions. Colleagues can interact with managers and talk to them at events such as Conversation with Managers and Face-to-Face with Executives. They can use the vision, experience and techniques of successful managers to reflect on themselves, their work and their future. In turn, managers can implement employees' ideas and suggestions to improve the Company' s daily operations. This enhances the employees' sense of engagement, recognition and satisfaction.

Communication Activities

During the reporting period, we held the Conversation with Managers programme three times. Each time we picked up several keywords related to employees as topics to discuss and answer questions.

We invited the senior director of the Shareware Development Department for the first programme. She told a story of how she dealt with a career transition and successfully balanced work and life.

In the second programme, the senior human resources director of the International Marketing Center revealed his overseas experience including difficulties and challenges he had in his career.

In the third programme, the industrial marketing director of the Public Service Enterprise Group shared what he had learned from his career.

Additionally, the Face-to-Face with Executives events also invited several senior vice presidents to share their experience and discuss cutting-edge technologies with colleagues.

Physical and Mental Care

We offer free gymnasium access for employees and unique benefits for women employees. We also built a Hikvision Family Reception Center to balance employees' work and life.

Free Gymnasium Access

Employees have free access to our gymnasium located in the park. The gymnasium is fully equipped with professional sports flooring, machines, fitness testing zone, changing rooms, showers, and the physiotherapy room. There are also coaches for instruction as well as multiple fitness courses for an appointment, creating a professional and comfortable fitness environment.

Support for Pregnant and Breastfeeding Employees

To support employees and their family' s wellbeing, we provide mother-and-baby rooms to safeguard the health of employees and their families. Mother-and-baby rooms are fully equipped with refrigerators, shelves, cap racks and sinks. In addition, department budgets include funds reserved to congratulate and send small gifts to new mothers.

Additionally, mothers-to-be enjoy reserved seats in the employee cafeteria to relief the burden of waiting seats for female employees who are in a special period.

Hikvision Family Reception Center

During the reporting period, we established the Hikvision Family Reception Center, providing a comfortable waiting environment for employees' parents, spouses, and children. Designed to make an employee' s family experience the warmth of Hikivision while waiting, the Center has a reading area, kids' playground and a snack bar.

The reading area: A variety of literature, history, business and management, and children's books are in place to satisfy all family members.
Kids' playground: Entertainment facilities such as LEGO walls, role-playing materials and the castle playhouse are available for kids of different ages so they can enjoy their time while waiting for their parents.
The snack bar: A variety of snacks will be served.

Moreover, we opened a parent-child classroom for employees with children. Early childhood teachers and uniquely designed courses help parents to spend quality time with their children, form effective interaction, and strengthen parent-child relationships.

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Free On-site Health Care

During the reporting period, we provided free Chinese on-the-spot medical healthcare twice per week for employees. Doctors with different specialties evaluated employees and provided prescriptions, with no registration or consulting charges to employees. During the reporting period, we offered more than 80 on-the-spot services for employees.

"Dabai" Employee Assistance Program (EAP)

During the reporting period, we continued to develop the "Dabai" EAP to care for employees' mental health in various aspects, help employees to meet the better "me", and have better altitude in work and more warmth in life.

Mental Health Hotline: The employee mental health hotline is available 24/7. Employees can get immediate help and support from professional mental health conselors when facing disturbance from work and life.

Mental Health Tips: Mental health tips are regulalrly sent to employees via email, HIKLINK, BBS, or other methods. During the reporting period, we posted tips 12 times on topics concerning relationships, parent-child education, emotional stress, business interpersonal communication and personal growth.

Seminars and Workshops: Hot topics in psychology are discussed among employees and managers in a seminar or salon format. During the reporting period, we held eight seminars covering topics of self-exploration, parenthood, parent-child relationships, character analysis and career development as well as emotional cognition. Through the understandable case analysis from phycological expert, we help employees to explore a different "me".

Wonderful Life

The company cherishes the idea of working and living happily. To enrich employees' lives, we have clubs such as football, basketball, badminton, swimming, dancing, yoga and photography, and host series of employee care events such as the Happy New Year, Hello, Happiness, and Surprise Night.

Happy New Year Activities

Every year, we pay New Year calls to colleagues, collect lucky cards, host a garden party, prepare bountiful food and hold a senior-manager competition to share the joy of new year to all employees. We also prepare gifts to thank everyone for their hard work throughout the year.

Women's Day Activities

Activities for Women's Day include the Women's Benefits Club, Women's Lecture, Women's Classroom, Women's Movie Clubs and Lucky Women Event. Female employees can learn and socialize in the afternoon tea hour or the pop-science classes.

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Happy Season Activities

The annual Happy Season event contains three themes: Parents, Couples and Babies. Employees' families can familiarize themselves with our work environment and understand employees' working content during the wonderful family game time. There are also parent-child activities, including pottery, programming and studying robots. These activities strengthen the sense of belonging and home-like care for an employee's family.

Recruitment Season Activities

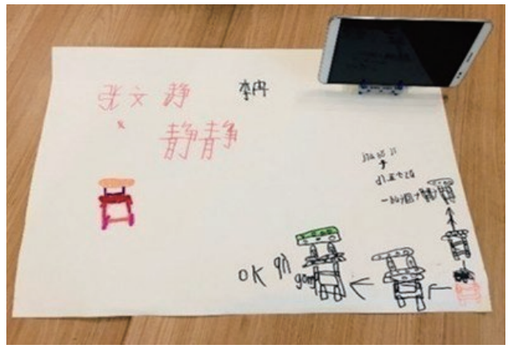
To help new hires quickly adapt to their environment and integrate into their teams, we stage recruitment-season activities every August. During the reporting period, the activities included Dabai Movie Watching, Summer Tour, Conversation with Managers, Cultural Trip, Health Walk and Surprise Night, to facilitate communication among employees and boost morale.

Mid-Autumn Singing Activities

Every year's Mid-Autumn Singing Event progresses from the preliminary and semifinal rounds to the grand finale. Employees from different departments and positions take to the stage. The event enriches employees' after-work time, invites them to showcase their musical talents , and promotes a positive and energetic culture in a relaxing atmosphere.

Thanksgiving Activities

Thanksgiving Day is celebrated in November by organizing parent-child interactions and acknowledging support from parents and colleagues. People are encouraged to express their deep thoughts and gratitude, to spread positive energy.



2.4 Health and Safety >>>

Health and safety are fundamental to employees' passion and productivity. We continually improve our occupational health and safety management system to create a comfortable working environment. The company regards employee health and safety as key factors of sustainable development.

During the reporting period, the company adopted localization and matrix-management methods to improve Environmental Health and Safety (EHS). The company requested that its headquarters and subsidiaries run according to common goals, with standardized operations and business processes. This improves the initiative of each subsidiary and division and inspires EHS management. The Company constructed a top-down prevention and management system to minimize accidents, environmental pollution and occupational diseases.

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Health Protection

We care for employees' health and safety, and comply with applicable national and local laws, such as the *Labour Law of the People's Republic of China,* the *Law of the People's Republic of China on Prevention and Control of Occupational Diseases* and the *Measures for the Administration of Occupational Health Examination.* The Company regularly engages a third party to evaluate occupational hazards and provide employees exposed to such hazards with protection and regular occupational-health examinations. Our occupational health and safety management is *ISO 45001*-certified. We improve production processes and apply intelligent technologies to reduce or prevent employees' exposure to occupational hazards. During the reporting period, the Company had no such case as occupational-disease.

Automated resin-dispensing equipment

During the reporting period, we introduced automated resin-dispensing equipment to free employees from complex and tedious processes, such as resin-casting on front covers, glass and lens installation, glue casting and infrared cover installation. This equipment improved the quality of resin-casting and assembly, greatly reduced the workload and safeguarded the health of employees.

Before the introduction of the automated system

After the introduction of the automated system

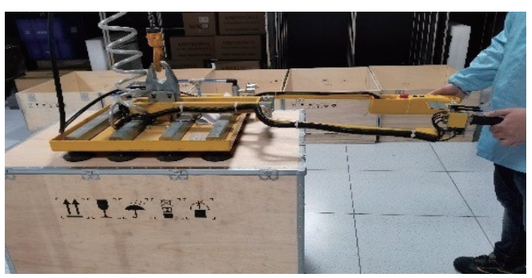
NAS appliance-lifting cranes

During the reporting period, we introduced cranes to lift Network Attached Storage (NAS) appliances to reduce employees' physical work and enhance productivity.

Before: Two people were needed to package the appliance, carry it into the box and stack it on a pallet. The process was inefficient and arduous. The workers could easily suffer a minor scrape in the process.
After: With the three-dimensional dust cover, only one worker is needed to take care of packaging, operate the crane and guide the appliance into the box.

The crane allows a single worker to lift the appliance and stack it on the pallet, which has reduced the health risks present in manual transport.

Before: manual transport



After: lifting-crane transport

Production Safety Management

Strictly abiding by applicable laws and regulations such as the *Law of the People's Republic of China on Work Safety* and the *Regulation on Work Related Injury Insurance*, Hikvision has attached great importance to safety management in the workplace. Following the principle of "safety foremost, prevention first, comprehensive management", the Company meticulously implements the accountability system to detect and remove work hazards. It applies protective technologies to multiple areas, from the production site to R&D, product procurement and product-life-cycle management.

During the reporting period, Hikvision headquarters and each subsidiary/branch carried out comprehensive hazard identification and prepared feasible preventive methods. At the same time, we provided additional education for workers who are exposed to chemicals. We posted occupational-hazards notices in the workplace and put up safety signs to clarify the requirements for work safety and handling emergencies. The employee-safety-education coverage rate, the certified special-operations-forces rate and the occupational-hazards identification rate all reached 100%.

During the reporting period, the Company's system operated smoothly and the safety risks were well controlled. In the event of a work-related injury, we would provide medical care and monetary compensation to the injured employee and their family according to the *Regulation on Work Related Injury Insurance*. At the same time, we would promptly investigate the incident, implementing preventive and corrective methods and strengthening awareness and training in safety. We improved safety awareness among employees by organizing safety drills, including fire evacuation, firefighting, elevator rescue, gas leaks, food poisoning, power outage and water outage. During the reporting period, there were no employee deaths caused by work-related injuries.

Evacuation and firefighting

Elevator rescue drill

Training and Publicity

We strive to improve employees' abilities to protect themselves against safety risks. During the reporting period, we organized 27 training activities for new hires on safety, environmental and occupational health. A total of 7,115 participants were trained in employees' rights and duties, occupational health hazards and precautions, safety hazards and precautions, and environmental awareness. We also provided 2,388 employees with special training in first aid, hazard identification and evaluation, and special operations.

First aid training

Hazard-identification training

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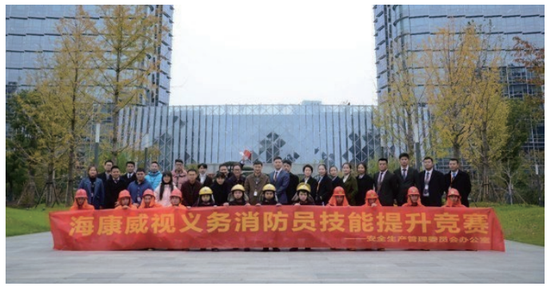
We undertook Safe Production Month, promoting awareness of work safety via online publicity channels such as posters, emails, HIKLINK, *Lifetime* special issues, websites and videos, pushing the publicity of Safe Production Month. We improved employees' safety skills via interactions, the sharing of management experiences, and communication. During the reporting period, we improved volunteer firefighters' abilities in Safe Production Month and Firefighter Month by holding competitions to test their skills in extinguishing fires and evacuating locations.



Skills-enhancement competition for volunteer firefighters

Moving Forward with Industrial Chain Partners

As an important player in the intelligent IoT industry, Hikvision is committed to forging ahead with like-minded people. We integrate the concept of sustainable development into business strategies, build a responsibility-based supply chain, enable the capabilities of industry chains and maintain long-term communication and sustainable cooperation with counterparts in the industry. The result is a collaborative and healthy ecosystem created through pooling ideas.

2.5 Responsible Procurement >>>

Supplier Management

The quality of raw materials and equipment from suppliers and subcontractors is crucial to the results of the subsequent production process. The Company is committed to seeking win-win results with suppliers by continuous improvement of our supplier-management system, involving periodic review and revision of policies and systems, including *Standards of Supplier Development and Selection Management, Procurement Framework Agreement* and *Supplier Corporate Social Responsibility Agreement*, to raise downstream suppliers' awareness of the importance of quality management and social responsibility. This reduces supply chain risks and ensures stable production and operation.

Supplier development and selection

- For supplier development and selection, HSF (Hazardous Substance Free), RoHS2.0 (Restriction of Hazardous Substances) , and REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals), and social responsibility are listed as part of the standard threshold alongside general evaluation indexes such as product quality, technology and service. Suppliers exposed to negative incidents, for example, credit loss and default are disqualified.
- In terms of manufacturing supplier entry, the concern is whether their factory, equipment and capacity meet the requirements of rules and regulations from the Environmental Protection Bureau, whether they are granted pollutants-discharge licenses in sewage, exhaust gas, solid waste and noise. We pay close attention to the checking of environmental regulations violations record, and the compliance of environment, health and safety management with state regulations.
- New suppliers are requested to sign the integrity agreement on anti-corruption, anti-trust and anti-money laundering as well as the non-disclosure agreement in the interest of both parties.

Monitoring suppliers' competence

- The Company develops assessment schemes on qualified suppliers every year while quarterly and annually implementing each scheme. We rate suppliers in strict accordance with our *Supplier Assessment Procedures*. we evaluate, reward or eliminate suppliers based on the assessment results. This way, we can sustain high-quality supplier resources.
- The Procurement Department, Quality Department and R&D Department instruct an on-site audit team to conduct a routine check on suppliers. This way, a professional team can fully understand the operation and the management status of suppliers.

Supplier Management Mechanism

We are committed to developing an international supply chain. During the reporting period, Hikvision introduced 187 new suppliers. As of December 31, 2019, we have built partnerships with 931 suppliers across the world.

Security Management

Apart from improving the quality management of the supply chain, Hikvision actively confers with members of the supply chain on security management to establish a safe and healthy ecosystem. During the reporting period, we built a complete supply chain security management system. As a result, we have earned *ISO 28000:2007* certification. This involved clarifying our operating environment, identifying security threats in each link, and conducting risk assessment and response. We guarantee supply-chain security via effective management and technical methods. This reinforces our overall cybersecurity and builds a secure ecosystem with our partners.

CQC

SECURITY MANAGEMENT SYSTEM FOR THE SUPPLY CHAIN CERTIFICATE

Certificate No.: CQC19SC1004R0L/46500

We hereby certify that

Hangzhou Hikvision Digital Technology Co., Ltd.

Address: No.555 Qianmo Road, Binjiang District, Hangzhou City, Zhejiang Province, China
No.700, Dangliu Road, Binjiang District, Hangzhou City, Zhejiang Province, China
No. 299, Qiuli Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang Province, China

by reason of its

Security Management System for the Supply Chain

has been awarded this certificate for compliance with the standard

ISO28000: 2007

The Security Management System For the Supply Chain Applies in the following area:

The Supply Chain Safety Management For The Design, Production, And Maintenance Service of Digital Audio/Video Compression Card, Network Hard Disk Recorder, Network Video Server, Camera, Laser Camera, Speed Dome, Network Storage, Flash Memory Medium&Storage System, Display Unit, Fiber Optic Video Transmitter / Receiver, Alarm Host, Video Management Platform, Network Keyboard, Intelligent Traffic Products, Wireless Vehicle Device, Wireless Handheld Device, Multi-Screen Controller, Access Control & Intercom System, Monitoring Products, Ethernet Switch , Layer 3 Switch,Video Conference System, Digital Court System, Record/Broadcast System, Protecting Cable of Burie Bell-Service Device, Wireless Bridge And Router, Mobile Phone and Wireless Device(Apply for Security Surveillance), Network and Network Security System, Database System, Security Software.

Certified since: Apr. 8,2019 Valid from: Apr. 8,2019 Valid until: Apr. 7,2022

After a surveillance cycle, the certificate is valid only when used together with an Acceptance Notice of Surveillance Audit issued by CQC. Please access www.cqc.com.cn for checking validity of the certificate.

Signed by: Lu Mei

CHINA QUALITY CERTIFICATION CENTRE

D 0002866

Certification of *ISO 28000:2007 Security Management System for the Supply Chain*

Conflict Minerals Management

In the Democratic Republic of the Congo and other politically unstable areas, minerals are traded to finance armed groups. This can result in forced labor and other human rights violations, giving rise to corruption and money-laundering. Such minerals – including tin, tungsten, tantalum, gold and cobalt – are called conflict minerals. These are widely used in information and electronic technology products. To operate in a socially responsible manner, Hikvision avoids the direct and indirect purchase of conflict minerals from any sources that may finance or benefit armed groups in the Democratic Republic of the Congo and other affected regions.

We established a conflict minerals management and control system for mineral resources and products, including tin, tungsten, tantalum, gold, and cobalt. In accordance with five steps set forth in the Organization for Economic Co-operation and Development's *Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas*, we investigated our supply chain to bolster our control of such minerals.

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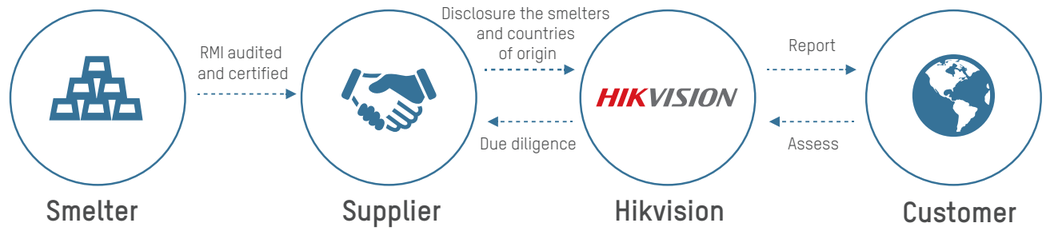
Establish a complete company risk-management system	Establish internal management structure. Hikvision Procurement Management Committee is responsible for risk-monitoring and strategy development. The Procurement Department and relevant functional departments are responsible for development and implementation of policies, and reviewing and revising measures for conflict minerals on a regular basis. Complete procuremeny policies and rules. When onboarding, Hikvision includes conflict-minerals management and control as mandatory measures in the Supplier's On-Site Audit. On-site audit items include, but not limited to the inspection of raw-material purchase contracts and orders, the compliance of purchase channels and the operation of conflict-minerals management and control systems. All suppliers are required to sign and comply with the "commitment to conflict-free minerals" clause in the *Procurement Framework Agreement* and the "responsible mineral procurement" clause in the *Supplier Social Responsibility Agreement*. Enhance collaboration with suppliers. Hikvision-Supplier Relationship Management System assists suppliers in building their conflict minerals management and control capacity. We have established a complaint mechanism and publicize the complaint email address of jubao@hikvision.com as part of the risk warning system.
Identify and assess risks in the supply chain	We perform due diligence on relevant suppliers each year. We issue and collect for verification the Conflict Minerals Reporting Template (CMRT[07]). We verify whether suppliers' operations are compliant with applicable rules and regulations as part of the annual review. When problems are detected, we require suppliers to rectify and correct.
Design and implement a strategy to respond to identified risks	We established an emergency mechanism for conflict minerals to respond to supply-chain-related risks. We make clear provisions on the trigger mechanism and treatment measures for the violation of rules, and improve the emergency-handle ability about conflict minerals.
Carry out independent third-audit of smelter/refiner's due diligence practices	The Responsible Minerals Initiative (RMI) has an independent third-party verification system for smelters/refiners to determine whether they are compliant with standards. We compared the identified smelters/refiners with the list published by the RMI. During the reporting period, the percentage of conflict-free suppliers compliant with RMI standards was 92.3%.
Report annually on supply chain due diligence	We prepared a report on the management of conflict minerals during the reporting period and engaged a third party for verification. We included the information in the ESG report. During the reporting period, we sent the CMRT questionnaire to all suppliers involved with conflict minerals. The response rate was 100%. There was no violation in relation to conflict minerals at Hikvision.

Five Steps of Risk Based Conflict Minerals Due Diligence in Supply Chain

[07] CMRT is a tool for conflict minerals due diligence developed by Reponsible Minerals Initative (RMI).



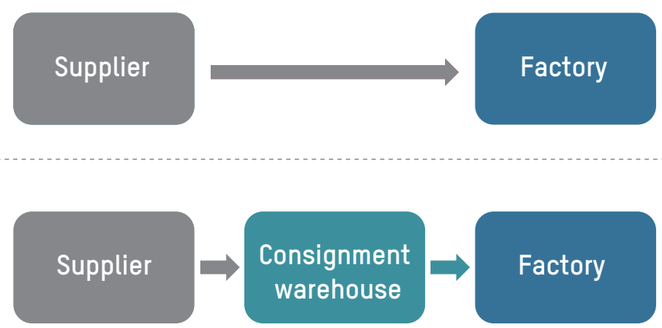
Conflict Minerals Management and Control Mechanism

Emergency Mechanism for Conflict Minerals Management

- In case of any suppliers' violation of regulations due to the use of conflict minerals, we will check and isolate the products involved in the use of materials and submit a screening report to the material team or the procurement management committee for risk assessment and final decision-making
- For suppliers involved in violation of regulations, we will adopt the performance evaluation mechanism and take actions based on their performance results (including but not limited to establishing a special team to guide and improve suppliers, reduce orders, withhold new product launch and even terminate transactions, etc.)
- In case of serious implications for the Company, the Company will reserve the right to further ask suppliers to be held accountable based on the *Procurement Framework Agreement*.

Logistics Management

The fast and dynamic response of the supply chain, backed by a strong logistics management system, is critical to the changing market and customer demand. During the reporting period, Hikvision completed the construction of six regional warehouses in China, effectively reducing the delivery time of logistics by one to two days. Additionally, we have also built a new consignment warehouse, which shortens the inventory turnover period and the delivery time of orders. It greatly improves our response ability to unexpected adverse events, assists with rapid stock accumulation, and reduces the supply risk caused by the impact of issues with logistics.



- Unable to monitor inventory, dependence on supplier feedback
- Inventory is not locked by Hikvision
- Great supply risks and long cycles

- Real-time monitoring of inventory for easy management
- On-demand delivery
- Shorten supply response time and reduce supply risk
- Reduce factory inventory and carrying costs

Advantages of Consignment Warehouse

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2.6 Boost Growth >>>

Suppliers' Growth

Hikvision always maintains open communication channels with its suppliers and builds a cooperative ecosystem of mutual assistance and win-win results through continuous guidance and improvement, offline training, platform-based exchanges and joint development.

Guidance and Improvement

The company guides suppliers and assists their management performance with an on-site audit team.

Offline Training

The company offers on-site guidance on important issues to suppliers, such as system training, online user training for IT systems and compliance-management training (RoHS2.0).

Platform-based Exchanges

Our Supplier Relationship Management (SRM) platform provides a guide for suppliers to comply with our management and control standards and increase their sustainable development capacity.

Joint Development

We build partnerships with thousands of suppliers to cooperate in product and technology R&D, and build an innovative and win-win supply-chain ecosystem.

Supplier Communication and Training Channels

Join hands with supply chain partners to share accelerated growth

As a provider of intelligent IoT solutions and big data services with video as its core competence, Hikvision is dedicated to improving the ecosystem of the industry, and works closely with upstream and downstream partners in the industry supply chain. In recent years, we have supported our suppliers in adjusting their development directions to keep up with market demand. For example, we helped an optical lens manufacturer shift its business focus from small zoom lenses to prime lenses and then to glass-plastic hybrid lenses that meet the latest market demand.

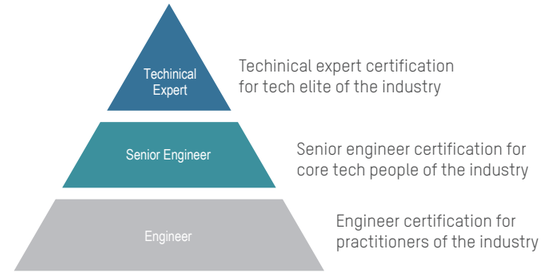
"The industry of optical lenses is technology-intensive. Technological R&D is the top priority. Only by continuously improving our products can we become invincible," said the chairman of the supplier, "Our cooperation with industry leader Hikvision helped us enter a new market."

This supplier has built strategic ties with its customers by constantly upgrading products in response to changing customers' needs. As a result, it has rapidly become the supplier with the largest shipments of security surveillance lenses in the world. Hikvision is always willing to share its experience with partners, to support them and to bring them new insights and opportunities. That is because part of our corporate mission is to seek "insights and cooperation."

During the reporting period, Hikvision launched the Supplier Relationship Management (SRM) platform. Our newest policies and rules are published on it, to familiarize suppliers with our management and control standards. Furthermore, the SRM platform enables the Company to upload training courses with one click. These can be remotely downloaded by suppliers. The training covers systems, IT and compliance management (RoHS2.0). These measures overcome the problem of different global suppliers having inconsistent demands in improving capacity building. It also issues specialized journals for suppliers to spread the best industry practices. Suppliers are encouraged to follow a low cost and high efficiency way to adopt the best industry practices, enhance the capacity building of sustainable development and achieve common progress.

Distributors' Growth

Relying on years of experience in security technical personnel training and deep understanding of industry development, Hikvision has launched a training and certification system covering video surveillance, IT, smart homes and other technical fields for contracted distributors under the guidance of multi-level vocational and technical certification. The system makes the three-level training and certification channels available on Hikvision E-learning where distributors' technicians can apply for certification, borrow learning documents, access the online courses provided by Hikvision professional technical engineers and thus acquire professional know-how to offer better services for downstream customers.

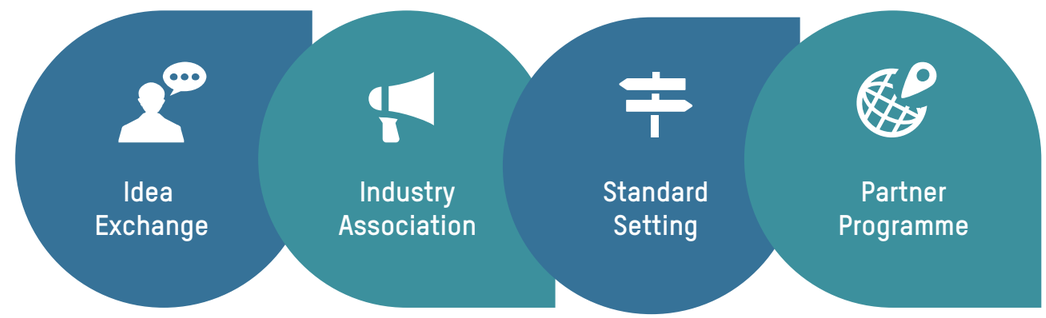


Three-Level Training and Certification Channels for technicians of distributors

Hikvision E-learning Platform

Industry's Growth

By engaging in large-scale exchange activities, giving full play to the role of members of the industry association, undertaking standard setting work and promoting the development of partners, Hikvision gives full play to the company's scientific and technological leadership and lead the industry in common progress.



Approach to Furthering Industry Growth

■ Large-Scale Interchange Events:

Hikvision AI Cloud Summit 2019

In March 2019, Hikvision held the annual AI Cloud Summit themed "Intelligent IoT, Fusion of IoT and Information Networks" in Hangzhou, China when launching the AI Cloud Data Fusion Platform. Various events, both online and offline, extended their presence to hundreds of thousands of target audiences, including government, investors, users and customers.

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The 17th China Public Security Expo (CPSE Expo)

In October 2019, the 17th CPSE Expo was held at the Shenzhen Convention and Exhibition Center where Hikvision introduced "Hikvision AI Cloud: IoT-Information Network Fusion and AI Energize." The Expo witnessed the second anniversary of Hikvision AI Cloud. The Company displayed the latest achievements of AI Cloud in software and hardware products, solutions, application cases and other aspects.

■ Industry Associations:

Industry associations, national or international advocacy organizations engaged by Hikvision:

No.	Name of industry associations, national or international advocacy organizations	Ranks
1	Logistics Robot Working Group, Subcommittee for Robots and Robot Equipment, China National Technical Committee for Automation Systems and Integration Standardization	Secretariat member
2	China Video Industry Association (CVIA)	Vice president member, President of Video Monitoring System Branch
3	China Cloud Computing Application Alliance (CCCPA)	Deputy director member
4	China Security & Protection Industry Association (CSPIA)	Deputy director member
5	China Intelligent Traffic Management Alliance (CTMA)	Initiator member
6	Artificial Intelligence Technology Innovation Strategic Alliance (AITISA)	Council Member
7	New Artificial Intelligence Technology Innovation Strategic Alliance	Council Member
8	China Ultra HD Video Alliance (CUVA)	Initiator member
9	China Intelligent Transportation Systems Association (ITS China)	Director general member
10	China Association of Intelligent Buildings	Vice president member
11	Technical Committee on Intelligent Building and Building Automation of China Electronic and Engineering Association	Vice president member
12	Technical Committee on Intelligent Building and Building Automation of Chinese Association of Automation	Council member
13	Engineering Intelligent Design Branch of China Exploration and Design Association	Standing Council member
14	China Real Estate Technology Alliance	Deputy director member
15	Equipment Committee of China Federation of Logistics & Purchasing	Standing Council member
16	China Mobile Robot and AGV Industry Alliance	Deputy Council member
17	China Smart Home Industry Alliance	Director general member
18	China Association for Quality Inspection	Council Member
19	Automated Imaging Association (AIA)	Supplier member
20	China PROFIBUS & PROFINET Association（PI-China）	General member
21	European Machine Vision Association (EMVA)	General member
22	UK Industrial Vision Association (UKIVA)	Member
23	Open Device Net Vendor Association (ODNVA)	General member

■ Standards Development:

The development of standards can help the Company prevent unfair competition, andimprove the competitiveness of standardized products while boosting the ongoing progress of the industry and industry supply chain. In terms of the formulation of national and industrial standards, Hikvision actively provides opinions and suggestions to promote the orderly development of industrial standards. During the reporting period, we led or participated in the drafting and approval of dozens of national and industrial standards. The published standards are listed as follows:

Standard No. / Plan No.	Name of Standard	Status
T/ZZB 1128—2019	*Warehouse Robot*	Published
GB/T 26766-2019	*Digital Video Record Equipment of Video Surveillance System in Security and Protection Systems*	Published
GB/T 37721-2019	*Intelligent terminals for urban buses and trolley buses*	Published
GB/T 37723-2019	*Information Technology-Functional requirements for big data analytic system*	Published
GB/T 37939-2019	*Information Technology-Information Device Interconnection- General Technical Requirement for Smart Home Electric System Terminal Access Service Platform*	Published
GB/T 37958-2019	*Information Security Technology—Security Techniques Requirement for Network Storage*	Published
GB/T 37742-2019	*Requirements of Optical Radiation Safety for Active Lighting Units of Video Surveillance Systems*	Published
GA/T 1552-2019	*Information Technology - Biometric - General Specification for Fingerprint Recognition Devices*	Published
JT/T 794-2019	*Information Security Technology Security Technical Requirements for Disk Array Safety Storage Products*	Published
QC/T 1128-2019	*GNSS System for Operating Vehicles-Technical Specification for Vehicle Terminals*	Published
DB 4403/T 13-2019	*Automotive camera*	Published
DB43/T 1712-2019	*Requirements for Security and Protection of Intelligent Early Warning System of Banking Financial Institutions*	Published
T/CESA 1035-2019	*Information Technology -Artificial Intelligence - Audio, Video and Image Analysis Algorithm Interface*	Published
T/CESA 1040-2019	*Information Technology-Artificial Intelligence-Guideline of Data Annotation for Machine Learning*	Published
T/CESA 1043-2019	*Server General Specification for Deep Learning*	Published
T/SCJA 2-2019	*Vehicle Whistling Capture System*	Published

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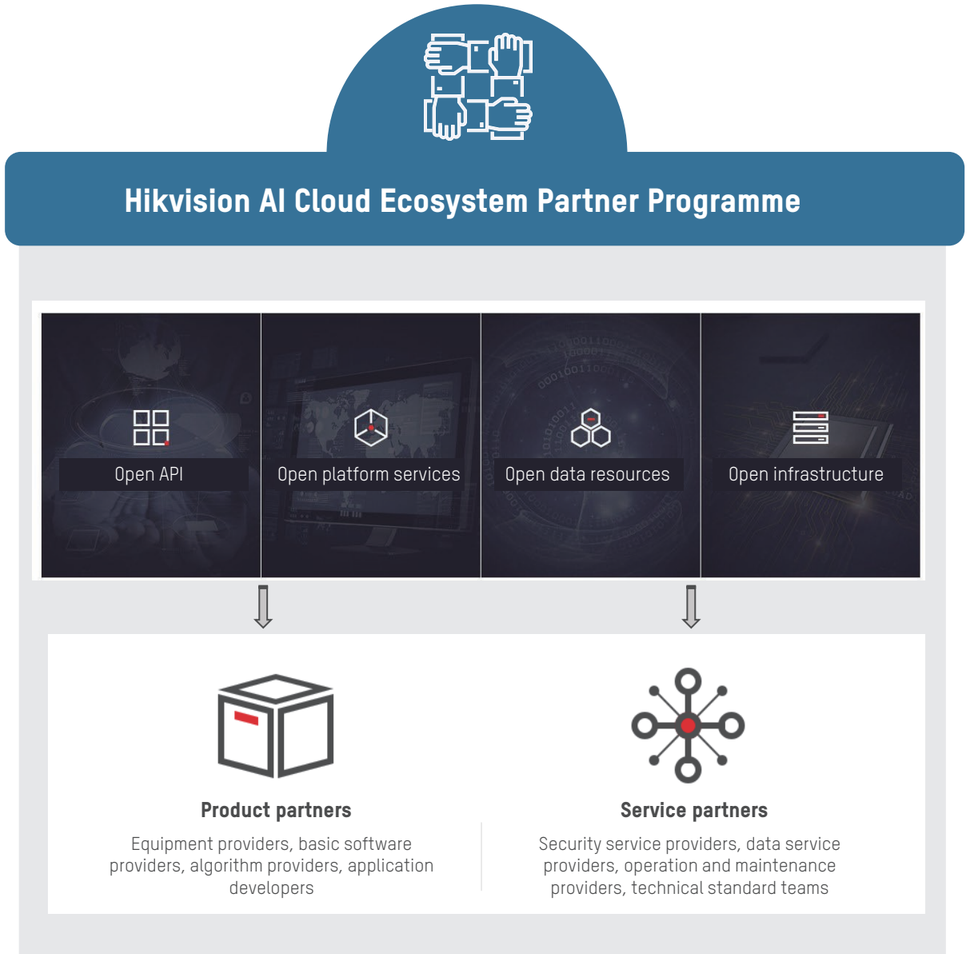
■ Partnership Programme

Hikvision is committed to cooperation and win-win results for its partners and jointly creating a service ecosystem. During the reporting period, Hikvision built and continued to improve the AI open platform. With the principles of "openness, equality, innovation and win-win" in mind, the Company stays completely open in infrastructure, data, platforms and applications on the basis of the AI Cloud framework. Together with partners, Hikvision has built two kinds of ecosystems, products and services, and provided customized solutions for all professions and trades to jointly promote the sustainable development of the industry.



Moving Together with the Society

"Empowering vision for the security and growth of the world" is Hikvision' s aim. We believe that goodwill and good deeds go together. We are committed to supporting research and conservation in biodiversity via innovative products and solutions, to shape a more harmonious and sustainable ecological environment in which humans protect and benefit nature. We embrace our responsibility to move forward with society.

2.7 Protecting the Nature >>>

Humans have a stake in wildlife. It is necessary for our survival, due to its impact on the air we breathe, the energy we use and our physical health. Hikvision makes great efforts to protect nature and biodiversity, continuously takes actions,and is committed to taking care of more partners of human being. We invested more than RMB 2.52 million in charitable programmes for ecological restoration – an increase of 147.18% from 2018.

Bar-headed Goose	The source of the Yangtze River is one of the most important breeding sites of bar-headed goose. However, each year, nearly 2,000 eggs get stolen by man. The population of wild bar-headed goose is only 70,000.

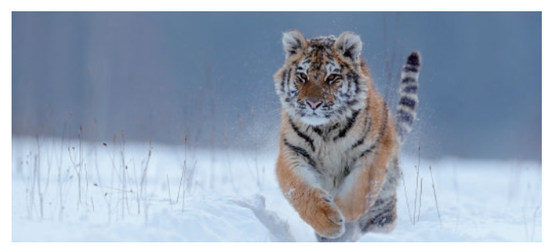
Hikvision participated in the bar-headed goose conservation programme initiated by the Greenriver Environmental Protection Association of Sichuan Province. We helped to establish dozens of birdwatching stations and enabled 24/7 monitoring with video technology. As a result, we provided important video materials and data to protect birds, avoided the difficulty and blind spots of manual patrol, and minimized the impact of human activities on bird habitats.

Panda	Pandas have been living on this planet for at least 8 million years, and are known as a "living fossil" and the "national treasure of China". Panda is a flagship species for global biodiversity protection.

In 2016, Hikvision and Seagate assisted the WWF in launching a charitable programme for the protection of pandas in Yele Conservation Area, Sichuan Province.

In 2019, Hikvision and the Sichuan Forestry and Grassland Bureau signed a strategic cooperation agreement to comprehensively promote the ecological civilization construction of the panda national park.

Hikvision also partnered with the Moscow Zoo to observe and study pandas and provided live streaming.



Siberian Tiger	Due to human activities, the tiger population and their habits, including that of the wild Siberian tiger, have been shrinking.

To protect wildlife in China, Hikvision has combined cutting-edge computing and cloud technology to provide intelligent solutions to identifying Siberian tigers. In the future, we will be able to upload detailed pictures captured by smart cameras, as well as gathering and processing data automatically and efficiently at front-end and back-end. This will give us the ability to discover the tracks and behaviour patterns of animals through data mining. Digital technology and artificial intelligence are key in helping to protect wildlife, thereby promoting the harmonious development of humans and nature.

Yangtze Finless Porpoise	According to statistics, there are only just over one thousand Yangtze finless porpoises in the Yangtze River basin. It is listed in the IUCN Red List of Threatened Species as a "critically endangered" species.

We built a finless porpoise behavior pattern patrol system, an aquatic environment patrol system and an intelligent drone patrol system, and collected environmental data that affect the behavior patterns and habitats of finless porpoises. Therefore, we can provide useful visual data for the Yangtze Finless Porpoise Conservation Area, especially data on the habits of finless porpoises in natural waters, so that we can better protect finless porpoises, contribute to the biodiversity of the Yangtze River ecosystem, and promote the sustainability of the Yangtze River.

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■ The advanced technology Hikvision uses to protect nature:

Intelligent wildlife monitoring

The Hikvision intelligent wildlife-monitoring system is able to observe large and medium-sized mammals and birds from a great distance via cloud-connected devices. This automatically identifies, classifies, counts and provides snapshots via the animal-detection algorithm. Infrared wildlife-protection cameras captures images, sends them back in real time and identifies specific species. This reduces the cost of human observation in nature reserves and improves the efficiency and intelligence of processes.

Effective control of human disturbances

Hikvision established a three-dimensional protection system to monitor and restrict disturbances to wildlife caused by human activity. Through checkpoint monitoring, peripheral protection, drone patrol and area guarding, the system can provide real-time warnings of invasive events and offer remote enforcement to safeguard key areas such as migration routes, feeding areas and habitats.

Eco Live

Eco Live promotes scientific knowledge, educates people on nature and engages them in the subject of wildlife protection. The 24/7 live stream also helps identify plant-growth cycles, monitors pests and diseases, provides intelligent safeguarding and takes care of rare plants.

AR-enabled biodiversity monitoring

The AR (augmented reality) enabled real-time biodiversity monitoring system performs 180 / 360 degree panoramic observation and is therefore suitable for broad scopes such as sample plots, animal-activity areas and key wildlife habitats. The system can overlay information such as the ecological indicators of nature reserves, signs of wildlife and patrol statistics. These help users grasp the status and changes in nature reserves in real time.

2.8 Public Welfare >>>

Hikvision believes that goodwill inspires us to work toward just causes rather than solely emphasizing profits. While protecting nature, we always bear in mind the responsibility to solve practical problems for society through innovation and cooperation. At the beginning of 2020, COVID-19 epidemic outbroke, the Company took the initiative to take action timely, and schedule global resources, to support the epidemic prevention and control. Besides, during the reporting period, we have also benefited society in many other ways, including poverty-alleviation campaigns, employee-volunteer activities and charitable donations.

Fighting COVID-19 Epidemic: Donation of medical materials for epidemic prevention and control

Help China Fight the COVID-19

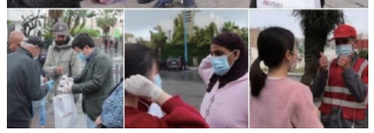
Faced with the severity of the COVID-19 outbreak in China at the beginning of 2020, our overseas employees tried their best to help. Despite the difficulty in purchasing medical materials, massive cancellation of flights, and blocked logistics channels, they did their utmost to look for suppliers online and offline, purchase goods, and send them to China as soon as possible. At the same time, the Company's employees around the world have made voluntary donations to help China fight COVID-19 in various ways.

The medical materials shipped from all over the world arrived in China one after another. On January 31, we donated 300,000 medical face masks and 5,000 N95 respirators to support the fight against COVID-19. On February 16, we donated another 10,000 sets of protective suits to hospitals in Hubei to support medical professionals fighting in the forefront.

Support the Worldwide Fight Against the COVID-19

In early March 2020, the COVID-19 spread worldwide. The Company quickly organized manpower, mobilized resources, and extended a helping hand to partners and public service departments in need around the world to help fight the COVID-19 overseas. As of mid-April, Hikvision has donated various personal protective equipment to overseas hospitals and related institutions, of which nearly 300,000 masks were donated. We hope to do our part to support the worldwide fight against the COVID-19.

In Europe, we donated approximately 11,000 copies of personal protective equipment, including medical masks, to nearly 30 hospitals to help and protect white angels who were fighting viruses and saving lives on the front lines of the outbreak. Only by guaranteeing their lives can more people be saved. Hikvision' s subsidiary in Moroccan urgently purchased 10,000 masks to support local hospitals, charities, and vulnerable groups. Our employees even took the initiative to distribute masks to passersby in need.



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In the United States, Hikvision' s U.S. subsidiary actively participated in the security industry' s COVID-19 rescue plan. Through the public welfare cooperation projects of Mission 500[98] and Feeding America[99], we supported families and children in the local community to address food shortages caused by the epidemic. At the same time, our headquarters also provided assistance to many hospitals and public institutions in New York, Louisiana, Utah and other places, donating nearly a hundred thousand masks. In a demonstration of solidarity in overcoming COVID-19, each package included a message of heartfelt support toward American medical staff, specifically: "In support of your health and your brave service to your community."

No one is exempt from the outbreak. We do good as long as we bear kindness in mind. Everyone is doing his/her part to help fight the disease and fully support the medical staff and other public service personnel who are still struggling on the "front line" all over the world. A friend in need is a friend in deed. It doesn't really matter how and how much one contributes. The world is becoming a better place as we show our kindness.

Poverty-alleviation research in Cotton Village, Pu'an County

Hikvision is a member of the poverty-alleviation team of the China Intelligent Traffic Management Alliance. During the reporting period, we went to Cotton Village, Gaomian Town, Pu'an County, Guizhou Province. After visiting the village with field study, the team discussed how to tackle its problem. The team also visited impoverished undergraduates, and investigated the progress of the donated breeding centre for angora rabbits, planting centre of sugar orange and "Renovation of kitchen, toilet and livestock house" as well as surveying streetlight construction.

With international public welfare in mind, we have carried out overseas corporate social voluteering activities and shouldered the responsibility as global corporate citizens.

Public welfare in education – donation to primary schools in Cambodia

During the reporting period, Hikvision provided primary schools in underdeveloped mountain areas of Cambodia with video devices and educational supplies, so that children in these poor areas could enjoy equal access to education. We helped to promote the overall development and healthy growth of local students through improving their learning environment and material condition.

Charitable donations in Thailand

During the reporting period, Hikvision learned that because many local public schools in Thailand lacked security and prevention systems, they were nearly closed by the government. We cooperated with local distributors in Thailand to carry out a plan called the Secure School Project of Hikvision. Forty technicians were sent to local schools to install security and surveillance systems free of charge, thus ensuring the safety of students.

Environmental protection – planting trees in Vietnam

During the reporting period, we held the Make Life More Colorful Activity at the Can Gio Forest, near Ho Chi Minh City, Vietnam. By inviting customers to participate in tree-planting activities, we raised public awareness of the power of nature and the importance of green development. Besides, we have endeavoured to draw public attention to the environmental problems in Amazon rainforest, to make efforts in environmental protection together and help to allieviate global warming.

[98] Mission 500 is a non-profit organization that works closely with the security industry to serve children and communities in crisis.

[99] Feeding America is a non-profit organization established in the United States to help solve the hunger problem through a nationwide network of 200 food banks.

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Dedication to Green Operation

Hikvision respects life and contributes to the nature. We uphold sustainable development and strive to strike a balance between our own operational growth and ecosystem protection through ongoing innovation and upgraded business operation modes. We constantly enhance our skills in environmental management to help construct sustainable ecosystems.

3.1 Green Operation >>>

Hikvision keeps up with domestic and international environmental policies and trends. We strictly abide by national, local and industrial environmental laws, regulations and standards, including the *Environmental Protection Law of the People's Republic of China, Energy Conservation Law of the People's Republic of China, Water Pollution Prevention and Control Law of the People's Republic of China, Air Pollution Prevention and Control Law of the People's Republic of China,* and *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution*, and, according to our own conditions, developed various internal regulations, including *Waste Management Procedure, Hazardous Waste Management Regulations*, and *Simultaneous Management Regulations for the Newly Built, Rebuilt and Expanded Construction*. We have obtained the *ISO 14001 Environmental Management System Certification, ISO 50001 Energy Management System Certification* and a five-star assessment for our green supply chain, all enhancing our internal management for the sustainable operation of enterprises.

ISO 14001 Environmental Management System Certification

ISO 50001 Energy Management System Certification

Certificate of *Five-Star Assessment for our Green Supply Chain*

Besides our strict compliance with various management systems, we also encourage subsidiaries to carry out energy-saving projects to reduce consumption in energy, water uses and other resources by means of process optimization and control from the source and to control the waste discharges during the production process to relieve the impacts on the environment. To ensure the effective implementation of environmental protection projects and continuous promotion of sustainable development, we have developed the responsibility objective assessment system stating the responsibilities of executing and supervising personnel regarding environmental management, as well as motivating employees to continuously improve the environmental protection.

3.2 Energy Saving and Consumption Reduction >>>

Hikvision actively responds to climate change to protect our beautiful planet. We have established an energy management system in pursuit of a flat and precise energy management. We formulated the *Energy Saving and Consumption Reduction Control Procedure* to control energy savings during main, auxiliary and ancillary production that utilizes electricity, natural gas, and other energy sources. Covering both macro and micro dimensions, the Company has achieved comprehensive improvement in energy efficiency as well as a reduction in energy consumption throughout production and operation.

During the reporting period, we actively reduce cost and improve efficiency. We grouped and optimized more professional capacity on the basis in 2018 and set up an energy-saving and consumption reduction team consisting of energy management engineers, electrical engineers, HVAC engineers and operations and maintenance teams. We promoted and optimized special energy-saving projects in our industrial bases that focused on lighting systems and air conditioning systems, and have achieved remarkable results: from August to December 2019, the monthly per-capita power consumption decreased by about 9.58% compared with the same period from the previous year.

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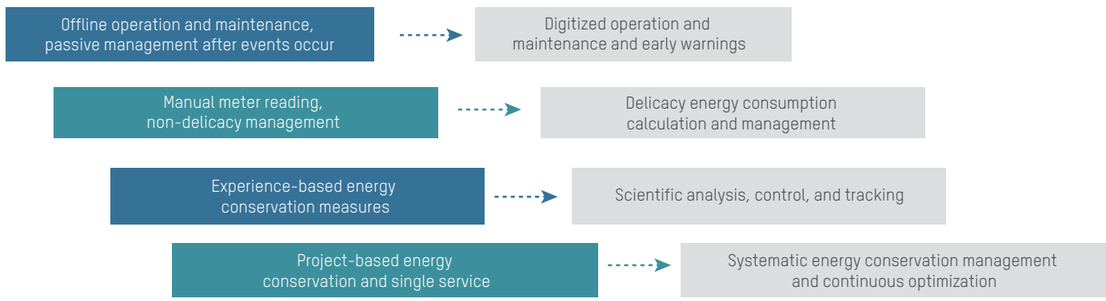
- Adjusting the opening hours of canteens and office areas, turning off unnecessary lighting equipments in public areas, meeting rooms and garages;
- Replacing fluorescent lamps with energy-saving lamps to reduce lighting energy consumption;
- Adjusting the power on and off time of the air conditioning terminal and the fresh air unit, and adjusting the temperature of outlet water in the main unit to run the air conditioning system more economically;
- Clarifying duties of each region and conducting regular supervision and inspection by the energy-saving and consumption reduction team to reduce the waste of energy.

Meanwhile, we have implemented the intelligent park management platforms in some industrial bases. The new platform of the intelligent park achieves more information-based and convenient online operation and maintenance functions as well as more systematic online energy consumption management and analysis, providing a scientific management scheme for energy conservation and consumption reduction.



Intelligent Park Management Platform

The photovoltaic system of industrial base in Tonglu

The total installed capacity of the photovoltaic power station in the Tonglu Industrial Base Phase I is 5.5 MWp. The power generated by the Base at the voltage level of 10kV supplied for the Base itself while the unused power was connected to the State Grid with the 35kV transformer in the plant. During the reporting period, the output of the photovoltaic power station of the Tonglu Industrial Base Phase I reached 5,770,840 kwh.

The total installed capacity of the photovoltaic power station in the Tonglu Industrial Base Phase II is 3.578 MWp. In October 2019, the power generated by the Base at the voltage level of 10kV began to supply for the Base itself while the unused power was connected to the State Grid. During the reporting period, the output of the photovoltaic power station of the Tonglu Industrial Base Phase II reached 633,720 kWh.

In 2018-2019, energy consumption of Hikvision is as below:

Energy types	Unit	2018	2019
Unleaded gasoline	Ton	617.3	469.0
Diesel	Ton	52.8	45.7
Natural gas	10,000 cubic meters	143.5	225.8
Electricity	MWh	105,643.3	173,318.8

Energy consumption	Unit	2018	2019
Direct energy consumption	Ton of standard coal	2,728.7	3,500.6
Indirect energy consumption	Ton of standard coal	12,983.6	21,300.9
Total energy consumption	Ton of standard coal	15,712.3	24,801.5[10]
Energy consumption intensity	Ton of standard coal per million revenue (RMB)	0.32	0.43

Greenhouse gas emissions	Unit	2018	2019
Scope 1	Ton of CO_2	5,045.4	6,347.3
Scope 2	Ton of CO_2	72,602.6	117,891.6
Total (scope 1 and scope 2 only)	Ton of CO_2	77,648.0	124,238.9
Emission intensity	Ton of CO_2 per million revenue (RMB)	1.56	2.15

3.3 Resource Management >>>

While continuously saving energy and reducing consumption, Hikvision also pays close attention to the rational utilization of various natural resources, optimization of the use of water resources and packaging materials, standardizaztion of the use of chemicals to improve the level of resource use and management, and fulfills the green commitment of building a healthy ecological environment.

Water Resource Management

Hikvision has established a strict water resource management system in accordance with the production level and relevant local laws, regulations and standards. By choosing water-saving equipment and appliances as well as installing water-saving and anti-overflow devices, we strive to reduce water consumption and to increase the reuse rate of water resources. During the reporting period, we conducted an environmental protection campaign called "world water day - saving and loving the water every day" to raise employee awareness about freshwater resources which is closely related to human beings , and to encourage employees to conserve water resources.

Types of water resources	Unit	Total usage in 2018	Total usage in 2019
Municipal water	Ton	895,000.9	1,181,680.4
Underground water (overseas operations only)	Ton	1,014.7	5,196.1
Surface water (overseas operations only)	Ton	/	5.7
Total	Ton	896,015.6	1,186,882.2[11]
Intensity	Ton per million revenue (RMB)	17.98	20.55

[10] During the reporting period, Tonglu Industrial Base Phase II began production and Chongqing Industrial Base and India Industrial Base increased their capacity. At the same time, office area in some subsidiaries and after-sale service stations have increased, so the total energy consumption increased compared to 2018.

[11] During the reporting period, Tonglu Industrial Base Phase II began production and Chongqing Industrial Base and India Industrial Base increased their capcity, resulting in a higher water consumption comparing to 2018.

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Packaging Material Management

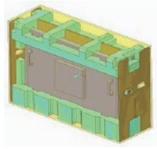
The packaging materials used by Hikvision are mainly paper, plastic, wood and metal. During the reporting period, we continued recycling and reducing packaging, and established a special improvement team to take effective measures towards improving the utilization efficiency of packaging materials.

LCD (Liquid Crystal Displays) splicing screen product packaging optimization project

Our LCD (Liquid Crystal Displays) splicing screen products have always been delivered using a combination of cartons and wooden frames. To further reduce the damage rate of delivered products while also using packaging with renewable materials and features of recyclability and reduction, we set up a special improvement team to optimize the packaging design of our LCD splicing screen products.

The optimized packaging adopted Expanded Polypropylene (EPP) full packaging structure instead of the original Expandable Polyethylene (EPE) half packaging structure as the buffer part to resist compression during transportation and eliminate the need for the wooden frame that the EPE structure requires. This optimization reduced packaging components from 6 to 3 and also overall transportation volume by 40%, loading more products in each delivery and reducing delivery hours and subsequent carbon emissions. In addition, removing the wooden frame can save about 500 tons of wood every year, equalling to a reduction of 5,000 trees being logged.

Before packaging optimization



After packaging optimization

Packaging materials	Unit	Usage in 2018 [12]	Usage in 2019
Plastic	Ton	5,281.9	5,869.7
Carton	Ton	27,327.4	34,601.6
Wood	Ton	1,200.9	1,628.8
Metal box	Ton	64.0	64.8
Total	Ton	33,874.2	42,164.9 [13]
Intensity	Ton per million revenue (RMB)	0.68	0.73

Chemical Management

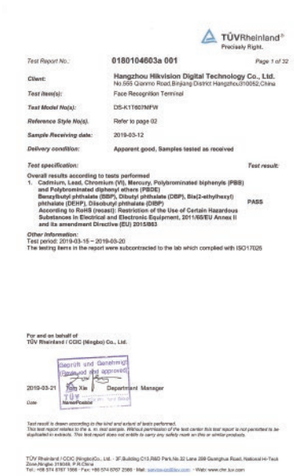
Hikvision is acutely aware of the physical and chemical risks, health risks and environmental risks of chemicals during R&D and production; improper use or management may lead to fire, explosion, and health damage as well as environmental pollution. In order to minimize the impact of the use of chemicals on personal safety, health and the ecological environment from its source, the selection and introduction of chemicals have been strictly standardized. During the reporting period, Hikvision established the *Regulations on the Management of Supply Chain Chemicals* to gradually eliminate the use of seriously hazardous and polluting chemicals.

[12] The consumption of packaging materials in 2018 was revised due to master data maintenance error in the system. During the reporting period, we took data maintenance and review measures to ensure the accuracy of data.

[13] During the reporting period, Tonglu Industrial Base Phase II began production while Chongqing Industrial Base and India Industrial Base increased their capacity, resulting in a higher packaging material consumption compared to 2018.

We have qualified for the *QC080000:2017 Hazardous Substances Process Management System Certification*. This certification marks that the quality management system is more systematic, standardized, transparent and complete in special management of green product environmental protection and end-to-end use of HSF. We have established HSF reviewing mechanism for suppliers and built a product compliance management system Windchill Product Analytics (WPA) for products, as required by RoHS and REACH and other environmental protection laws and regulations, thereby forming a mechanism to control hazardous substances from the source.

During the reporting period, the year-on-year proportion of RoHS certification has decreased, signaling the initial result of our hazardous substances controlling measures from the source. About 7,500 materials of the Company have obtained RoHS certification and about 3,000 materials have been granted REACH SVHC certification.



TÜVRheinland
Precisely Right.

Test Report No.: 0180104603a 001 Page 1 of 32

Client: Hangzhou Hikvision Digital Technology Co., Ltd.
No.555 Qianmo Road,Binjiang District Hangzhou,Zh0052,China

Test item(s): Face Recognition Terminal

Test Model No(s): DS-K1T601MFW

Reference Style No(s): Refer to page 02

Sample Receiving date: 2019-03-12

Delivery condition: Apparent good. Samples tested as received

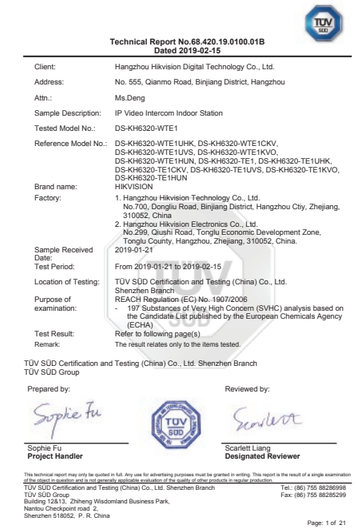
Test specification: Test result:

Overall results according to tests performed
1. Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE) Benzylbutyl phthalate (BBP), Dibutyl phthalate (DBP), Bis(2-ethylhexyl) phthalate (DEHP), Diisobutyl phthalate (DIBP) According to RoHS (recast): Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, 2011/65/EU Annex II and its amendment Directive (EU) 2015/863 PASS

Other information:
Test period: 2019-03-15 ~ 2019-03-20
The testing items in the report were subcontracted to the lab which complied with ISO17025

For and on behalf of
TÜV Rheinland / CCIC (Ningbo) Co., Ltd.

2019-03-21 Tony Xie Department Manager
Date Name/Position



Technical Report No.68.420.19.0100.01B
Dated 2019-02-15

Client:	Hangzhou Hikvision Digital Technology Co., Ltd.
Address:	No. 555, Qianmo Road, Binjiang District, Hangzhou
Attn.:	Ms.Deng
Sample Description:	IP Video Intercom Indoor Station
Tested Model No.:	DS-KH6320-WTE1
Reference Model No.:	DS-KH6320-WTE1UHK, DS-KH6320-WTE1CKV, DS-KH6320-WTE1UVS, DS-KH6320-WTE1KVO, DS-KH6320-WTE1HUN, DS-KH6320-TE1, DS-KH6320-TE1UHK, DS-KH6320-TE1CKV, DS-KH6320-TE1UVS, DS-KH6320-TE1KVO, DS-KH6320-TE1HUN
Brand name:	HIKVISION
Factory:	1. Hangzhou Hikvision Technology Co., Ltd. No.700, Dongliu Road, Binjiang District, Hangzhou City, Zhejiang, 310052, China 2. Hangzhou Hikvision Electronics Co., Ltd. No.299, Qiushi Road, Tonglu Economic Development Zone, Tonglu County, Hangzhou, Zhejiang, 310052, China.
Sample Received Date:	2019-01-21
Test Period:	From 2019-01-21 to 2019-02-15
Location of Testing:	TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
Purpose of examination:	REACH Regulation (EC) No. 1907/2006 - 197 Substances of Very High Concern (SVHC) analysis based on the Candidate List published by the European Chemicals Agency (ECHA)
Test Result:	Refer to following page(s)
Remark:	The result relates only to the items tested.

TÜV SÜD Certification and Testing (China) Co., Ltd. Shenzhen Branch
TÜV SÜD Group

Prepared by: Reviewed by:

Sophie Fu
Project Handler

Scarlett Liang
Designated Reviewer

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TÜV SÜD Group
Building 12&13, Zhiheng Wisdomland Business Park,
Nantou Checkpoint road 2,
Shenzhen 518052, P. R. China

Tel.: (86) 755 88286998
Fax: (86) 755 88285299

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Example: RoHS Certification

Example: REACH Certification

During the reporting period, we developed relevant control standards and measures in strict accordance with the requirements of *QC080000:2017 Hazardous Substances Process Management* System to ensure that the Company reduces the risk of environmental violations:

- Regularly collect and identify requirements of customers and laws and regulations to incorporate them into the Company's hazardous substances control standards. We also inform suppliers of our hazardous substances control standards, require them to present environmental compliance certifications (including environmental protection test report and environmental protection agreement), implement strict control and regular monitoring management when introducing supplier to ensure the compliant procurement of raw and auxiliary materials, and require suppliers to label HSF marks on the material package;
- Develop relevant monitoring and acceptance management system and introduce XRF (X Ray Fluorescence) and PY-GCMS (pyrolyze-gas chromatography-mass spectrometry) test devices and reconfirm the environmental compliance of materials before warehousing. For semi-finished products and finished products, regular tests are conducted to confirm they are environmentally friendly;
- Conduct production with environmentally friendly materials, equipment, tooling and fixtures, identify the environmental protection risks during production every year and develop control measures to eliminate and reduce medium and high environmental protection risks;
- Strictly monitor the change management and reconfirm the environmental protection of the changed materials afterwards;
- Develop a management system for unqualified products, review and label the HSF unqualified products to prevent environmentally friendly materials from being polluted.

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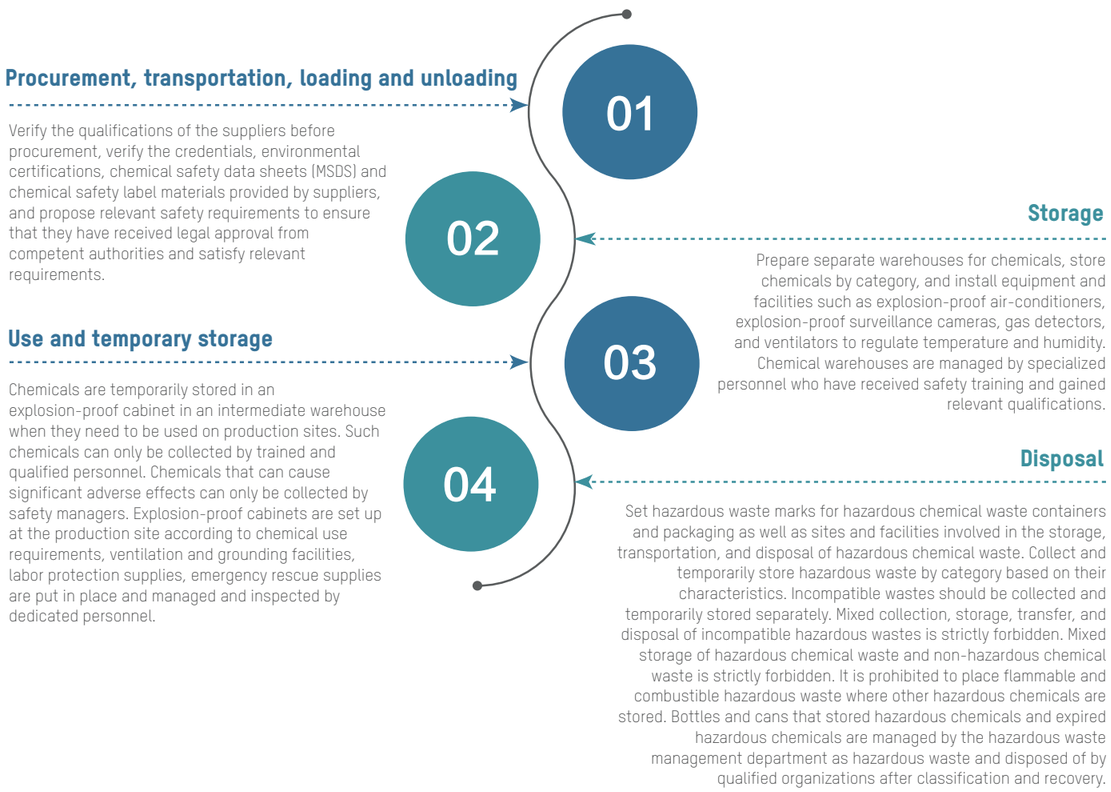
IEC QUALITY ASSESSMENT SYSTEM (IECQ)
covering Electronic Components, Assemblies, Related Materials and Processes

IECQ Certificate of Conformity
Hazardous Substance Process Management

Certificate of *QC080000 Hazardous Substances Process Management System*

In addition, the Company also developed the *Regulations on the Management of Supply Chain Chemicals, Regulations on the Management of the Chemicals Warehouse* and *Regulations on the Management of the Supply Chain Waste Disposal Implementation* to standardize the procurement, transportation, loading and unloading, storage, use and disposal of chemicals. During the reporting period, we have optimized the management and control process in the storage and use of chemicals.



Chemicals Management and Control Process

3.4 Reasonable Emissions and Discharges >>>

As a socially responsible company, Hikvision continues to strengthen the control of pollutants, reduce their emissions, and minimize, to the largest extend possible, the pressure on the environment from production and operation activites. With its commitment in environmental protection, Hikvision strives to carry out the obligations of environmental compliance and actively promotes the improvement of the ecological environment.

Solid Waste Management

Hikvision has established *Waste Management Procedure* in accordance with the *Environmental Protection Law of People' s Republic of China* and *Law of the People's Republic of China on the Prevention and Control of Solid Waste Pollution* as well as other laws and regulations to reasonably classify and dispose wastes generated in the production and operation process. We classify waste into recyclable waste, non-recyclable waste and hazardous waste. We also continuously adopted more optimized measures to fully recycle recyclable waste and to dispose non-recyclable waste in accordance with the regulations. For hazardous wastes, we strictly store them at a fixed location and carry out a regular inspection before delivering it to the third-party organization with hazardous waste disposal qualification for centralized disposal.

Recyclable waste	Unit	Total amount of 2018	Total amount of 2019
Plastic	Ton	1,126.8	2,884.7
Wood	Ton	546.3	986.7
Paper	Ton	4,767.6	7,600.8
Metal	Ton	1,034.6	1,302.1
Others (cable harness, oil paper, etc.)	Ton	653.7	128.9
Total	Ton	8,129.0	12,903.2[14]
Intensity	Ton per million revenue (RMB)	0.16	0.22

Non-recyclable waste	Unit	Total amount of 2018	Total amount of 2019
Kitchen waste	Ton	2,281.1	1,759.3
Office garbage	Ton	5,929.3	1,722.3
General industrial waste	Ton	1,387.7	1,922.7
Total	Ton	9,598.1	5,404.3
Intensity	Ton per million revenue (RMB)	0.19	0.09

Hazardous waste	Unit	Total amount of 2018	Total amount of 2019
Total hazardous waste	Ton	121.6	502.1[15]
Hazardous waste intensity	Ton per million revenue (RMB)	0.002	0.009

[14] During the reporting period, Tonglu Industrial Base Phase II began production and Chongqing Industrial Base and India Industrial Base increased their capacity, resulting in a higher total amount of recyclable waste comparing to 2018.

[15] During the reporting period, Tonglu Industrial Base Phase II began production and Chongqing Industrial Base and India Industrial Base increased their capacity. At the same time, hazardous wastes produced in the late 2018 were handled during the reporting period, resulting in a higher total amount of hazardos waste disposal compared to 2018.

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During the reporting period, we also strengthened our efforts in the compliance of product end recycling as we applied and qualified for the WEEE (Waste Electrical & Electronic Equipment, EU *Waste Electrical and Electronic Equipment Directive*) Certification for over 6,000 models of products.

Recycling Plan for Electrical & Electronic Equipment Waste

The Company developed a Recycling Plan for waste electrical & electronic equipment caused by poor quality and expired products, reduced the generation of waste electronic equipment and lowered operational costs. The Company also standardized the whole recycling process, covering materials returning, materials acceptance, handling and assessment, disposal implementation and obsolescence management, achieving full-scale management on the recycling process.

01 Return of materials

Responsible departments return materials according to the recycling plan and ensure that such materials are safely delivered to receiving departments.

02 Acceptance of returned materials

Receiving departments check, count and put in storage the materials according to the return application process.

03 Handling and assessment

Organize competent employees to handle and assess the returned materials in a professional manner in terms of needs, product quality, and product life cycle according to the Reverse Business Management Manual and develop a recycling plan.

04 Disposal

Dispose the materials according to the recycling plan formulated after assessment.

05 Obsolescence management

Engage suppliers with relevant qualifications and organize relevant employees to dispose the materials in accordance with the Norms for Supply Chain Condemned Materials Disposal and Management and Norms for Hazardous Waste Management as well as the disposal plan.

3.5 Environmental Action >>>

We continue to improve the green operation model within our production and operating processes. Uphold the belief of green operation, we advocate more people to participate in environmental protection. During the reporting period, we organized a series of events and activities on energy conservation, emission reduction, and water conservation. As we improve employees' environmental awareness, we appeal to the entire society to do their part for environmental protection.

Waste sorting volunteers
On World Environment Day, we carried out a cleanup and waste sorting activity themed on "Beautiful China: Hikvision in Action". More than 30 volunteers participated in the cleanup by the picturesque Xiang Lake. We hope that more people can go into action to protect the blue sky and our environment.

Efficient meeting
In June 2019, our General Administration Department and Human Resources Department launched the Efficient Meeting programme together with the cost control and expenditure reduction group. The programme reduced inefficient meetings and improved meeting efficiency through promotion and training.

Zero Waste Programme
At the end of October, 2019, we launched the "Zero Waste Infinite Happiness" programme to advocate low-carbon lifestyles and thereby reduce resource/energy consumption and waste.

Publicize the harm of hazardous waste
We carried out promotion about hazardous waste to publicize the definition, harm, ways in which harm is caused, and management requirement of hazardous waste.

Raise water conservation awareness
To improve the public's awareness of water conservation, we launched a water conservation awareness campaign on World Water Day, aiming to raise the water-saving awareness of employees and the general public in order to protect water resources.

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