# ZTE Corporation 2018 Sustainability Report

To Enable Connectivity and Trust Everywhere

A	oout th	is report	1
Z	ГЕ's 20	018	2
A	Messa	ge from the President	4
A	Messa	ge from the Executive Representative for Sustainability	6
1	Sus	tainability Management Approach	7
	1.1	Corporate governance	7
	1.2	Sustainability management	8
	1.3	Recognition and awards	13
2	Stre	engthening Compliance Management	15
	2.1	Compliance management system	15
	2.2	Promoting compliance culture	16
	2.3	Anti-bribery and Anti-corruption	18
	2.4	Intellectual property management	20
3	Con	nnecting the Future	21
	3.1	Our achievements in 2018	21
	3.2	5G strategy and innovation	21
	3.2	Cybersecurity and privacy protection	26
	3.3	Reliable products and services	27
4	Prot	tecting the Environment	30
	4.1	Our achievements in 2018	30
	4.2	Environmentally friendly design and product	30
	4.3	Managing the environmental impact	34
5	Mal	king a Better Working Place	39
	5.1	Our achievements in 2018	39
	5.2	Equality and inclusion	39
	5.3	Training and development	43
	5.4	Safety and caring	46
6	Bui	lding Responsible Supply Chain	51
	6.1	Our achievements in 2018	51
	6.2	Cooperating in supply chain	51
	6.3	Enhancing conflict minerals management	54
	6.4	Collaborating for a win-win future	55
7	Mal	king Change in Communities	58
	7.1	Our achievements in 2018	58
	7.2	Education	58

7.3	Health care	60
7.4	Caring for veterans	62
7.5	Global caring	63
Appendix	x I: Sustainability Performance and Reporting	65
Policy	List	65
KPIs I	.ist	69
Reporting	g Standard Index	72
ESG re	eporting Guidelines Index of Hong Kong Stock Exchange	72
GRI S	tandards Index	77
Appendix	x II: Assurance Report	90
Appendix	x III: Readers' Feedback Form	92

# About this report

• Overview

The sustainability report is issued annually by ZTE Corporation. It adheres to the principles of "Materiality, Quantitative, Balance and Consistency", discloses the principles, important progress, achievements and future plans of ZTE Corporation and its subsidiaries in terms of environmental, social and governance, with a time span from January 1, 2018 to December 31, 2018.

Since 2009, ZTE has annually released sustainability reports/corporate social responsibility reports for 11 consecutive years.

• Preparation basis

This report is prepared in accordance with *Appendix 27 Environmental, Social and Governance Reporting Guide* (ESG Guide) in the *Main Board Listing Rules* issued by Hong Kong Stock Exchange. It also takes reference to the core option of the Global Reporting Initiative (GRI) Standards, the UN Global Compact, and ISO 26000: Guidance on Social Responsibility.

This report is finally formed by identifying important stakeholders, analyzing and rating sustainability material issues, making decisions on report scope, as well as collecting, summarizing, organizing and reviewing relevant data and materials in the preparation process.

• Scope and boundaries of this report

Unless otherwise specified in the individual data, the policies, statements and materials in this report cover the actual business scope of ZTE Corporation and its subsidiaries, which is consistent with that of the annual report issued by ZTE Corporation.

Unless otherwise specified, CNY is the currency unit of this report.

• Explanation for appellations

For the convenience of expression and reading, "ZTE Corporation", "ZTE", "this Company", "the Company" and "We" in this report refer to ZTE Corporation and its subsidiaries.

Unless otherwise specified, the terms used in this report have the same meanings as those defined in the Company's Annual Report 2018.

• Data source and reliability statement

The data used in the report comes from ZTE Corporation and its subsidiaries. The board of directors are responsible for the truthfulness, accuracy and completeness of this report.

This report is both issued in Chinese and English. In presence of any conflict or ambiguity between the two versions, the Chinese report shall prevail.

• Confirmation and approval

This report has been confirmed by the board of directors for release.

Access and response to this report

You can access to the electronic version of this report through the following website: https://www.zte.com.cn.

# ZTE's 2018

- Economy
- Operating revenue RMB85,513.2 million; net profit attributable to holders of ordinary shares of the listed company RMB-6,983.7 million.
- Won METIS Award -- "Artificial Intelligence Innovation Award", "Industrial Application Innovation Award", "Intelligent Terminal Chip Innovation Award", and "Annual Industry Terminal Award".
- Disclosed the first batch of over 1200 families of 3GPP 5G SEP (standard-essential patents) to the European Telecommunications Standards Institute (ETSI).
- United with China Telecom to open the world's 3.5GHz First Call based on 3GPP R15 standard.
- United with China Unicom to complete the world's first end-to-end communication between 5G terminal and system network in 3.5GHz NSA networking mode.
- United with China Mobile and Qualcomm to complete the world's first new 5G air-interface data connection on 2.6 GHz band, which complies with 3GPP independent networking specifications.
- Environment
- Won the Green Energy Conservation Award of Asian Data Center.
- Completed the design of energy management center system and started construction.
- Improved committee-office-platform three-level energy management framework for the promotion group of energy conservation and emission reduction.
- Human resources
- The total number of global staffs was 68,240, 38% of which were R&D employees and 32% of which were employees have master's degrees or above.
- Online Learning Platform In terms of PC terminal, 789 new courses were offered, total courses reached 12,515, and total learning person-times reached 447,334. In terms of mobile APP terminal, 298 new courses were offered, total courses reached 1,275, and total learning person-times reached 290,469.
- Introduced the "Leading Plan" for new employees recruited from schools.
- According to the survey results of the third-party, the employees' work engagement was 80%, in the zone of high-performance employers.
- Public welfare
- ZTE Foundation donated a total of CNY 6,038,142.50, implemented 8 projects, organized 97 activities, and provided 1,971 hours of voluntary services.

- ZTE Foundation was recognized as a "charity organization" by the Ministry of Civil Affairs of the People's Republic of China, and obtained a highest score of China Foundation Transparency Index (FTI).
- Management and control
- Focus on three main compliance aspects "Export Control, Anti-bribery, Data Protection" through business and management "double cycles" enhancement and implementation.
- Updated and issued guidance documents on conflict minerals, to upgraded the management system for conflict minerals in an all-round way
- ZTE's performance of sustainable development has been affirmed by the capital market. ZTE has become one of the constituents of FTSE4Good index.

# A Message from the President

In 2018, the independent networking standards of the world's fifth-generation mobile communication technology (5G) were officially frozen; frequency spectrum distribution was accelerated in various countries; product commercial test was accelerated; and commercial terminals were gradually launched. The government, operators, and equipment manufacturers worked together to accelerate the commercial process of 5G. The ever-changing network application emerged in an endless stream, bringing about a huge opportunity and brand-new space for development of various industries, resulting in revolutionary changes in human production and lifestyle.

As a global leader in telecommunications and information technology, ZTE Corporation is dedicated to using innovative technologies to accelerate the development of information technology in the world, promoting the sustainable development of human society and the continuous progress of human civilization.

We adhered to the "5G Pioneer" strategy, focused on 5G end-to-end solutions, and invested in standard formulation, technology innovation, R&D, and commercial validation in an all-round way, in order to explore customers' needs and application model, and lead the innovation and development of the entire industry. In 2018, based on the 5G end-to-end commercial products series in accordance with the latest international standards, ZTE Corporation, together with operators and peers in the industry, extensively conducted external field test and verification, for the full support and preparation for the year 2019, the first commercial year of 5G products.

We continued to build new industrial ecosystem of connectivity driven by technology via industrial upgrading of the enabling industry, explored and developed new businesses and models that can better meet the actual needs. We worked with operators and partners to carry out research, demonstration and incubation of enabling 5G+ industry in AR/VR big video, Internet of Vehicles, industrial Internet, smart grid and other vertical industries, improved operation efficiency in the industry, and promoted the upgrading of interaction mode again. Meanwhile, based on our own technology accumulation, we provided the best solutions for the digital transformation for our customers.

We insisted on the environmental-friendly development as a core concept of development, and continuously designed, produced and delivered environmental-friendly products to provide environmental-friendly and efficient solutions and services for our customers. While eliminating the digital gap and promoting economic prosperity in the region where we operated, we constantly made positive contributions to the sustainable ecological development and the well-being of mankind.

We strove for building an open and win-win ecosphere for sound growth, and worked together with global partners to jointly promote research and application for the standards, technologies and patents of 5G key materials and the application exploration and practice of the vertical industry, etc. through joint laboratories and innovations; at the same time, we carried out industrial cooperation with a more open attitude to build a cooperative and win-win industrial ecological chain, and helped industrial upgrading; we worked with partners to actively participate in the cooperation and practice of information industry concerning sustainable development. We worked together in product security, energy saving, emission reduction, and sustainable supply chain to actively contribute to social value while achieving business value.

We upheld talent, compliance and internal control as the strategic cornerstone of enterprise development. We adhered to the philosophy of "Talent is the first productivity", so we continuously improved the experience of employees, and realized the common growth of every individual and the Company; we strengthened compliance culture, improved compliance system, enhanced compliance management level, and remained committed to becoming a role model of compliance in the industry; and we continued to

improve the internal control system, improved the operational mechanisms and procedures for internal control, strengthened enabling internal control, improved internal control accountability, and ensured sound operation of the Company.

Looking ahead, we firmly believe that an intelligent society with all things connected is around the corner. With a deep understanding of future development of the information and communication industry, we are more than happy to work with all sectors of the community to promote industrial transformation and growth and jointly build an intelligent habitat for humankind.

To connect the world with continuous innovation for a better future, ZTE Corporation has been acting and working for a better world.

# A Message from the Executive Representative for Sustainability

In 2018, ZTE updated and determined its corporate vision "to enable connectivity and trust everywhere" and its corporate mission "to connect the world with continuous innovation for a better future".

"To enable connectivity and trust everywhere" expresses the great aspirations for realizing human mutual trust and harmonious society at the social level by building the information communication channels among "individuals, families, enterprises and society". This is ZTE's mission and aspirations as a global leader in ICT industry. "To connect the world with continuous innovation for a better future" expresses ZTE's setup and ambition of going global. ZTE is committed to building global information network infrastructure and making continuous innovations and breakthroughs. This is the direction ZTE has been striving for and the embodiment of corporate value.

#### Made progress with stakeholders

In 2018, we noticed the cohesion and action of all employees, which is the foundation of sustainable development of the Company. We noticed the support for ZTE from all sectors of society, including customers, suppliers and partners, which is the key to the survival and development of the Company. The affirmation, support and trust of internal and external stakeholders in ZTE have enabled us to inherit and strengthen the core values and cultural spirit that have supported the Company's development for more than 30 years. Thus, we can unwaveringly take responsibility for society and environment.

#### Continued to optimize corporate governance and management

In 2018, ZTE stayed on the main course of 5G industry, seized the opportunity for 5G layout, ensured sound operation. Meanwhile, we put technology first, enhanced the layout and capacity of technology research and development, strengthened the core competitiveness of products and industrial chain coordination and protection, and leveraged the 5G time window.

In terms of management, we have defined the red line of compliance, incorporated compliance into the business process, strengthened compliance inspection, realized closed-loop management and control, built a first-class compliance management system, and created value for the Company.We have strengthened internal control, optimize governance structure, guarded against enterprise risks, strictly investigated illegal acts, built a systematic audit and supervision system, purified the operating environment, and protected the Company's value.

#### Courageously assumed environmental and social responsibilities

In 2018, we fully identified environmental and social risk factors, established effective policies and control measures within the company, and comprehensively strengthened cooperation with the supply chain.We have improved the Company's energy-saving and emission reduction committee, adopted a number of measures to reduce the impact of the Company's operations and products on the environment; focusing on the Company's main business, we have built a talent highland, constructed, trained, motivated and activated a talent team that can support the Company's future development; we have developed the vision for health and safety work, adjusted the organizational structure of health and safety, appointed the Company's chief health and safety officer; and we carried out philanthropic activities in three major areas including alleviating poverty by promoting education and medical services and providing help for the vulnerable, and contributed to public welfare around the world.

In the future, ZTE will unswervingly stay on the path of sustainable development and work with partners to create a harmonious society through continuous innovations.

# **1** Sustainability Management Approach

#### **1.1 Corporate governance**

In compliance with the basic principles of the Company Law, Securities Law, Code of Corporate Governance for Listed Companies in China, and other relevant laws and regulations of the CSRC, ZTE continues to improve its corporate governance mechanism, regulate corporate operation, and optimize its internal control system

#### 1.1.1 Shareholders and general meetings

The Company has established a corporate governance structure to ensure that all shareholders can fully exercise their rights and, with regard to the minority shareholders in particular, enjoy equal status. Sufficient time is provided at general meetings of shareholders for the discussion of each proposal, insofar as they are convened and held in a legal and valid manner, to provide a good opportunity for communications between the Board of Directors and the shareholders. In accordance with the revised Rules for General Meetings of Listed Companies, the Company has introduced a combination of on-site and online voting to afford convenience to shareholders participating in its general meetings, as well as the practice of separately disclosing the votes of minority shareholders in announcements of resolutions of general meetings to give an adequate account of the views of minority shareholders. In addition, shareholders may contact the Company through its designated e-mail address and the investors' relations interactive platform of the Shenzhen Stock Exchange.

#### 1.1.2 Controlling shareholder and the listed company

The Company's controlling shareholder is Zhongxingxin Telecom Company Limited. The controlling shareholder exercises its rights as an investor in strict compliance with the law, without compromising the lawful rights and interests of the Company and other shareholders. Candidates for election as Directors and Supervisors are nominated in strict compliance with laws and regulations and the terms and procedures as set out in the Articles of Association. The staffing, assets, financial affairs, business and organisation of the controlling shareholder of the Company are independent from those of the listed company, with the controlling shareholder and listed company each carrying out independent auditing and assuming its own responsibilities and risks. The controlling shareholder of the Company was not engaged in any direct or indirect interference with the decision-making and business activities of the Company in circumvention of the general meeting.

#### 1.1.3 Directors and the Board

The Company appoints directors in strict compliance with the criteria and procedures set out its Articles of Association, ensuring that the directors are appointed in an open, fair, just and independent manner. In order to fully reflect the opinions of minority shareholders, a cumulative voting scheme is adopted for the appointment of directors. The Company has formulated the Rules of Procedure of the Board Meetings, and board meetings are convened and held in strict compliance with the Articles of Association and Rules of Procedure of the Board Meetings. To optimize the corporate governance structure, four specialised committees - the Nomination Committee, Audit Committee, Remuneration and Evaluation Committee and Export Compliance Management Committee - have been established by the Board of Directors. The majority of members and the respective convenors of these committees are Independent Non-executive

Directors, providing scientific and professional opinions for reference by the Board of Directors in its decision-making.

#### 1.1.4 Supervisors and the Supervisory Committee

The Supervisors offer expertise and work experience in management, finance and other areas and shareholders' representative Supervisors are elected by way of cumulative voting. They monitor the financial affairs of the Company and inspect and supervise legal compliance in the performance of duties by the Company's Directors, the Chief Executive Officer and other members of the senior management to safeguard the legal rights and interests of the Company and shareholders. The Company has formulated the Rules of Procedure for Supervisory Committee Meetings. Meetings of the Supervisory Committee are convened and held in strict compliance with the Articles of Association and the Rules of Procedure for Supervisory.

#### 1.1.5 Performance appraisal and incentive mechanism

During the year, the Remuneration and Evaluation Committee of the Board of Directors linked the salaries of the senior management with the results of the Company and personal performance in accordance with the Scheme for the Administration of Senior Management's Performance. Senior management personnel are recruited and appointed in strict compliance with relevant rules, regulations and the Articles of Association. We have established a long-term incentive mechanism closely linked with the Company's business performance and long-term strategy and optimized the overall remuneration structure to create a competitive advantage in human resources that will contribute to the long-term, sustainable growth of the Company's business results.

#### **1.1.6 Internal Control**

In accordance with provisions of the Company Law, the Securities Law, Corporate Governance Standards for Listed Companies, Basic Rules for Corporate Internal Control and Supplementary Guidelines for Corporate Internal Control and other pertinent laws, regulations and regulatory documents, the Company has established a reasonable and effectively operating internal control regime to enhance internal control, improve the Company's operational management standard and risk aversion ability and ensure security, compliance and effective operation of the Company's assets. The Company has established an all-encompassing and multi-level structure for internal control development comprising mainly the Board of Directors, the Audit Committee, the Internal Control Committee, the internal control and audit department and the internal control teams of various business units of the Company. Based on the work of identifying significant deficiencies in the Company's internal control in relation to financial reporting and non-financial reporting, as at the record date for the internal control assessment report, there was no significant deficiency in internal control in relation to non-financial reporting.

#### **1.2** Sustainability management

In 2018, ZTE was risk-oriented, comprehensively sorted out various issues of environmental, social and governance, and formulated a vision and plan for sustainable development. It provided guarantee for the ultimate goal of the organization from the aspects of organizational structure and resource allocation.

#### **1.2.1 Sustainable management structure**

The company's Sustainability Management Committee is the highest unit of corporate sustainability management and is responsible for identifying and assessing the company's environmental, social and governance risks and opportunities, and ensuring that the company establishes and operates effective environmental, social and governance risk management and internal control system, providing strategic guidance for the company's sustainable development management and reporting to the directors on the progress of sustainable development on time.

level	Composition and Function	Specific responsibility
Leadership	The company's Sustainability Management Committee, composed of all senior leaders of the company, is the highest decision-making body of the company's sustainability management, and plays a leading role in environmental, social and governance and other sustainability related matters.	<ol> <li>Discuss sustainability issues on a regular basis</li> <li>Identify sustainability-related risks and opportunities</li> <li>Develop a sustainability strategy</li> <li>Assess the effectiveness of sustainability work</li> <li>Discuss and approve the annual sustainability report</li> </ol>
Coordination	The main coordination work is undertaken by the Human Resources Department. The middle management personnel of each business module are responsible for communication environmental, social and governance matters of Sustainability Management Committee, providing the information needed for decision-making and providing work guidance for each business module, and supporting the implementation of sustainability strategy and decisions.	<ol> <li>Study specific work on basis of overall sustainability strategy and direction</li> <li>Implementation of supervision work</li> <li>Report on the implementation of the work to the Sustainability Management Committee</li> <li>Coordinating the preparation of the annual sustainability report</li> </ol>
Implementation	Colleagues from Each business module forms a specific work implementation layer, implements the company's instructions on environmental, social and governance matters, and implements the sustainability concept and strategy into specific work.	<ol> <li>1.Information collection and reporting</li> <li>2.Implement specific tasks</li> <li>3.Timely feedback</li> </ol>

The roles and responsibilities of sustainable development work are as follows:

#### 1.2.2 Stakeholder engagement

ZTE Corporation actively communicates with various stakeholders and listens to the opinions and demands of all parties. ZTE Corporation's stakeholders include shareholders and investors, regulators, employees, customers, suppliers, industry associations, local communities and the media, etc.For different stakeholders,

ZTE Corporation has developed targeted communication channels and methods to effectively respond to the reasonable expectations and interests of all stakeholders.

• Shareholders and investors:

ZTE Corporation's existing shareholders and potential investors

- As a listed company, ZTE Corporation is obliged to understand the expectations of shareholders and investors for its own development and to create sustainable economic returns for shareholders.
- Their concerns: stock price, dividends, financial situation, business prospects, future development plans, corporate governance, corporate internal controls, risk bias, management selection and hiring, etc.
- Our daily communication: financial information disclosure, shareholder meetings, investor meetings and roadshows, investor hotlines/mailboxes, etc.
  - Regulatory Authority:

Local government and various regulatory agencies for location of registration, listing and operation of ZTE Corporation

- ZTE Corporation actively responds to the requirements of major regulators for our operations. Their
  affirmation and support for ZTE Corporation is a prerequisite for us to generate a wider range of
  economic and social positive impacts.
- Their focus: comply with local laws and regulations, pay taxes according to law, promote local economic growth, promote local employment and generate positive social benefits.
- Our daily communication: regular visits and policy communication, etc.
  - Staff:

68,240 employees employed by ZTE Corporation

- Excellent staff team is the foundation and important driving force for ZTE Corporation to achieve sustainable development. As a responsible employer, it is our duty to provide employees with a healthy and safe working environment and a broad development platform.
- Their concerns: wages and compensation, working environment, ability improvement, development space, employee benefits, promotion policies, training systems, corporate reputation, work intensity and internal communication channels, etc.
- Our daily communication: direct communication, employee mailbox/hotline, online communication platform, training programs, etc.
  - Customer:

Customers and users who purchase and use ZTE Corporation's products:

- Providing customers with safe and reliable products is the vitality of all enterprises. As a global leader in telecommunications and information technology, that ZTE Corporation's equipment is stable,

reliable and efficient is our focus. We also need to provide customers with the high-quality and caring service.

- Their focus: product features, performance, product safety, customer information security, product stability, product environmental features, product competitiveness, and reliable customer service, etc.
- Our daily communication: pre-sales communication, after-sales service, customer service platform, official WeChat/weibo platform
  - Supplier:

Suppliers of various raw materials, equipment and services required for daily operations for ZTE Corporation

- Suppliers provide ZTE Corporation with superior raw materials, equipment and services, and work together with ZTE Corporation. They also need to comply with ZTE Corporation's supplier management system to jointly exert positive social and environmental effects.
- Their focus: procurement policies, supplier management systems, fair trade, timely payments and good partnerships, etc.
- Our daily communication: supplier assessment and audit, regular visits, supplier conferences and supplier training, etc.
  - Local community:

Local community where ZTE Corporation operates

- As a globally operating company, we need to respect local customs and practices, grow together with our communities and local residents, and contribute to community building.
- Their focus: the impact of local business activities on local communities and residents, etc.
- Our daily communication: face-to-face communication, public welfare activities and complaints hotline, etc.
  - Media:

Media concerned about the development of ZTE Corporation and the performance of its operations

- Media reports will enable the community to better understand ZTE Corporation's situation and urge ZTE Corporation to enhance its transparency
- Their focus: business and product conditions, financial performance, future direction and corporate social responsibility, etc.
- Our daily communication: press conferences, interview invitations and regular meetings, etc.

#### **1.2.3 Materiality Analysis**

ZTE Corporation has conducted extensive communication with various stakeholder groups to gain an indepth understanding of ZTE Corporation's evaluation and expectations on sustainability and updated material issue of sustainability, as a guide to determine the framework of this report and respond to the stakeholders. **ZTE Sustainaiblity Materiality Matrix** 



Importance of issue	Issues	Category	Disclosure location
Highly Material	Information security	Governance	3.3 Product security and privacy protection
Issues	Compliance	Governance	2.Strengthening compliance management
	Product security	Governance	3.3 Product security and privacy protection
	Corporate governance	Governance	1.1 Responsible corporate governance
	Legal recruitment and employment	Social	5.2 Equality and Inclusion
	Environmental impact on product life cycle	Environmental	4.2 Environmentally friendly design and product
	Workplace safety and health	Social	5.4 Safety and Caring
	Business ethics	Governance	2. Strengthening compliance management
	Staff development and training	Social	5.3 Training and Development

Importance of issue	Issues	Category	Disclosure location	
	Employee compensation and benefits	Social	5.2 Equality and Inclusion	
Moderately Material	Intellectual property protection	Governance	2.4 Intellectual property management	
Issues	Guidelines for Suppliers CSR	Governance	6.2 Cooperating in supply chain	
	Promote social progress	Social	<ul><li>3.2 5G strategy and innovation</li><li>6.4 Collaborating for a win-win future</li></ul>	
	Expression of employees' suggestions	Social	5.3 Training and Development	
	Emission management	Environmental	4.3 Managing the environmental impact	
	Energy management	Environmental	4.3 Managing the environmental impact	
	Carbon footprint	Environmental	4.2 Environmentally friendly design and product	
	Conflict resources	Environmental	6.3 Enhancing conflict sourcing management	
	Circular economy	Environmental	4.2 Environmentally friendly design and product	
	Community involvement	Social	7. Making change in communities	
	Inclusiveness and diversity	Social	5.2 Equality and Inclusion	

# **1.3 Recognition and awards**

#### 1.3.1 Technology

- At the SDN/NFV Global Conference in 2018, ZTE Corporation's communication products and solutions won six awards such as "Best New Cloud Native VNF", "Best New Automation Management" and "Best New Cloud Infrastructure", etc.
- At the GTI (World's Largest TD-LTE Industry Alliance) annual awards ceremony held in Barcelona in 2019, ZTE Corporation won the "Innovative Breakthrough in Mobile Technology Award 2018" for its 5G SA (standalone independent networking) end-to-end product solution";
- At the MWC exhibition in Barcelona in 2019, ZTE Corporation won the "Global 5G Infrastructure Technology Leadership Award 2018" from Frost Sullivan, a world-renowned consulting firm, for its outstanding achievements in 4G, Pre5G and 5G infrastructure.
- At the 2018 Mobile World Congress (MWC), ZTE Corporation's NB-IoT innovative application smart parking solution won the GLOMO "Best Mobile Service for the Connected Life"; and won the "Best Technology Innovation for 5G" of Informa with its 5G end-to-end technology innovation strength;

- ZTE Corporation's "Multimode digital IF chip" won the "Integrated Circuit Industry Alliance Innovation Award – Achievement Industrialization Award" for its outstanding performance in innovative technology and industrialization of scientific and technological achievements;
- At the 20th China Hi-Tech Fair, ZTE Corporation and its partner cities won over 10 awards in the "Asia- Pacific Leading Smart Cities Vendor 2018" of the High-Tech Fair;
- At the award ceremony of 2018 Telecom Asia "Reader's Choice and Innovation Award", ZTE Corporation's Elastic SD-WAN solution won the "SDN Innovation Award", and at the same time, ZTE Corporation's Big Video innovation business platform Premium Video Platform won the "Video Platform Innovation Award"
- At the 2018 Global Cloud Computing and Open Source Industry Conference, ZTE Corporation won the "OSCAR Open Source Enterprise Award";
- At the award ceremony of "METIS" at 2018 Mobile Smart Terminal Summit and Intelligent Hardware Ecology Conference, ZTE Corporation won the "Artificial Intelligence Innovation Award", "Industrial Industry Application Innovation Award" and "Annual Industry Terminal Award", etc.;
- At the 2018 GNTC Global Network Technology Conference, ZTE Corporation's 5G Flexhaul won the "GNTC Innovation Award".

#### 1.3.2 Social responsibility

• In 2018, ZTE Corporation obtained a major recognition of its sustainable development from the capital market and was included into the indexes of FTSE4Good, acting as a component stock of the FTSE4Good.



- According to the "Blue Book of Corporate Social Responsibility (2018)" issued by the Chinese Academy of Social Sciences, ZTE Corporation ranks the top 100 of social responsibility development indexes of the top 300 Chinese enterprises;
- ZTE Corporation won the Corporate Social Responsibility-"Green Development Award" from People's Network;
- ZTE Foundation was recognized as a "Public Welfare Organization" by the Ministry of Civil Affairs of the People's Republic of China and obtained a full score of the China Foundation Transparency Index (FTI).

# 2 Strengthening Compliance Management

"Compliance" is one of the three strategic cornerstones of ZTE Corporation. ZTE Corporation always attaches great importance to integrity and compliance, adheres to the correct values and business ethics standards, and strengthens the compliance with the laws and regulations of the countries in which it operates and lays a solid foundation for corporate sustainability.

## 2.1 Compliance management system

The compliance management structure is the foundation of compliance work and is a guarantee for ultimate compliance performance. In the second half of 2018, through further consideration of our business, we further improved and upgraded the compliance structure, laying a solid foundation for overall compliance management.

#### 2.1.1 Organizational structure and responsibilities

The Compliance Management Committee is the highest decision-making body for corporate compliance matters. The company's senior vice president and above are members of the Compliance Committee. In the second half of 2018, a total of four meetings of the Compliance Management Committee were held.

Under the leadership of the Compliance Committee, the overall compliance work focuses on three areas of compliance: "export control, anti-bribery and data protection". For these three major fields, the company has established the corresponding Center of Expertise (COE) department to be responsible for the formulation of compliance rules in the corresponding fields. In 2018, the company established the Compliance Audit Department, which is independent of other legal compliance COE departments to ensure the professionalism, independence and effectiveness of compliance audit.

At the same time, the company formed a full-time compliance team that connected COE and BU (business unit) and appointed a POC (point of contact) for subsidiaries and ZTE business units to establish a compliance team covering all business scopes of the company, realizing the penetrating management to the front line of the business and effectively promoting the compliance and compliance process of all units.Currently, the Legal Compliance Department has more than 400 full-time staffs.

Through the above organizational structure adjustment, ZTE Corporation realized the PDCA (Plan-Do-Check-Act) cycle of compliance management.



#### 2.1.2 Business carding and rules

In 2018, ZTE Corporation deeply considered its own business and external situation and established eight elements of compliance – "leadership, compliance organization, compliance resources, risk assessment, compliance policy, process control, training & communication and monitoring & review". The division and application of the eight elements will effectively refine the rules and regulations of the three major compliance areas of "export control, anti-bribery and data protection" into a work guide that can be implemented to realize the closed-loop development of compliance business.



# 2.2 Promoting compliance culture

The construction of a compliance culture is a very important part of the entire compliance work. In 2018, ZTE Corporation invested a lot of resources in compliance training, and established a cultural foundation for internal corporate compliance of knowing, understanding, and implementation of compliance behaviors through serious commitment and in-depth training.

#### 2.2.1 Compliance commitment

ZTE Corporation communicates compliance requirements to employees within the company through various forms such as through top management's commitments, compliance learning day and promotional materials, etc.

On July 26, 2018, the Chairman and President signed the "2018 Export Control Compliance Management Commitment Statement"<sup>1</sup> to clarify the attitude and determination of the company's management in export control compliance.

<sup>&</sup>lt;sup>1</sup>Official website link for this statement: https://www.zte.com.cn/china/about/citizenship/Legal-and-Compliance/Export-Control-Compliance/ECC-Statement

On August 10, 2018, the Chairman and President signed the "Open Letter and Notice to Directors, Officers, Employees, Contractors, Suppliers, and Business Partners Regarding Prohibited Transfers of Items Subject to the EAR to Restricted Regions".<sup>2</sup>

In October 2018, the President released a video of export control compliance commitments through the company's internal global live broadcast platform.

From November 2018 to February 2019, all the company's level 2 leaders have completed the signing of Letter of Compliance Responsibility.

In addition to senior leaders' commitments, new employees are required to sign a paper-based compliance commitment when they enter the job. At the same time, employees are required to sign a compliance commitment on the "HR Online" system.

### **2.2.2 Compliance training**

In 2018, ZTE Corporation fully integrated the company's training resources and established a full staff compliance training system, covering the entire process of compliance training planning, compliance training material development, training organization landing and implementation, training platform support, training effectiveness verification and training information submission.

In 2018, ZTE Corporation achieved the following results on compliance training:

- **Training Material development:** 10 export control compliance courses, 5 data protection courses, 6 anti-bribery courses, 4 issues of compliance knowledge booklets and the ECC compliance manual;
- **Full coverage:** Organize training for export control compliance ECP<sup>3</sup>/ECCN<sup>4</sup>/SPL<sup>5</sup>/GTS<sup>6</sup> for all employees of ZTE and related subsidiaries;
- Key coverage: Conduct special training for groups of key risk, such as new employees and new management cadres, etc. Meanwhile, compliance functional training is combined with actual business in various fields to guide compliance business operations. Develop functional courses of export control, anti-bribery, and data protection, and develop functional operational guidelines in various areas;
- **Multi-channel publicity:** Issue compliance knowledge and institutions through the ZTE Corporation Legal and Compliance Management system(LCM) and the compliance public mailboxes, conduct online and offline training and publicity, create the Compliance Class in the online learning platform for PC and APP and launch compliance courses and micro-courses.

#### 2.2.3 Reporting channel

ZTE Corporation provides a variety of reporting channels. If there are reasonable reasons to suspect that there are or will be violations, all employees and partners of the company can report through various channels, including:

- Public mailbox (complianceaudit@zte.com.cn)
- Reporting hotline (400-830-8330 / +86 0755 26771706)

<sup>&</sup>lt;sup>2</sup>Official website link for this statement: https://www.zte.com.cn/china/about/citizenship/Legal-and-Compliance/Export-Control-Compliance/201808160000

<sup>&</sup>lt;sup>3</sup> ECP: Export Compliance Program

<sup>&</sup>lt;sup>4</sup> ECCN: Export Control Classification Number

<sup>&</sup>lt;sup>5</sup> SPL: Sanctioned Parties List

<sup>&</sup>lt;sup>6</sup> GTS: Global Trade Services

- Official website supervision reporting platform
- Corporate legal and compliance management system (currently limited to internal staff)

Meanwhile, the above channels also receive reasonable suggestions on compliance, and extensively collect opinions to improve the company's compliance management system.

The protection and encouragement for whistle-blowers is the basis for the effective implementation of the entire reporting channel.In order to protect the legitimate rights and interests of whistle-blowers and encourage individuals and organizations to report suspected violations of compliance regulations, ZTE Corporation has formulated the "Regulations of Protecting and Rewarding Real-Name Compliance Whistleblowers". Reports of individuals or companies shall be rewarded according to the administrative measures after verification.At the same time, we take strict confidentiality measures on the information of the whistle-blowers; and it is strictly forbidden to retaliate against the whistle-blowers; otherwise, the offenders will be severely punished.

## 2.3 Anti-bribery and Anti-corruption

The company adopts a "Zero Tolerance" attitude towards any form of corruption and bribery. Among all global business activities, ZTE Corporation firmly adheres to the applicable anti-bribery laws and regulations to prevent any unfair competition or activities. Based on the latest international standard "ISO 37001 Anti-Bribery Management System", the company has comprehensively updated its anti-bribery management system with extensive and in-depth compliance exchanges with external key partners and research and evaluation of its own business. ZTE Corporation requires all employees, business representatives and any partners of ZTE Corporation's business to clearly understand and strictly abide by the applicable laws and regulations and the company's anti-bribery compliance policy and compliance obligations required by the policy.

#### 2.3.1 Clear compliance red line

ZTE Corporation has clarified the compliance "red line" of anti-bribery as a guide to the overall anti-bribery work:

- Prohibit the legitimate duties or actions to directly or indirectly offer, promise, authorize or give any valuable item or other benefit (such as gifts, hospitality, external travel expenses, sponsorship, donations, job opportunities, facilitation fees, commercial contracts, etc.) to any person in the public sector or private enterprise for the purpose of acquiring or maintaining business or for seeking an unfair competitive advantage to unduly affect the recipient;
- Prohibit the provision of false information or materials, concealing the true source or application of relevant funds, resulting in inaccurate accounting;
- Prohibit evading compliance management by fabricating/concealing facts, falsified materials or other fraudulent practices, resulting in the failure of the compliance management system;
- Prohibit to conduct business with a prohibited compliance risk signal or to conduct a business with a strict compliance risk signal without implementing an effective compliance control program.

#### 2.3.2 Improve management system

ZTE Corporation's anti-bribery management system and overall compliance system are in the same line. Undertaking the eight elements of the compliance work system, we combine the actual businesses and embody them in anti-bribery work.

- Leadership: ZTE Corporation clearly defines the anti-bribery compliance "red line", and embeds compliance into business process, achieves penetration management, effectively publicizes, strengthens compliance audits, implements closed-loop management and builds an effective compliance management system in compliance with corporate business practices.
- **Compliance organization:** Under the leadership of the Compliance Committee, the Anti-commercial Bribery Compliance Dept is responsible for the establishment and improvement of the anti-bribery compliance management system; the Business Unit Compliance Team is responsible for coordinating the landing of anti-bribery management system in each of the second-level units; the Compliance Audit Department is responsible for regularly auditing, investigation and related violations handling.
- Compliance resources: Finance: ZTE Corporation provides full and sustained financial support for anti-bribery compliance; Manpower: ZTE Corporation's Anti-bribery and Compliance Department and BU Compliance Team have more than 100 compliance directors or managers, and are still continuing introducing high-end compliance talents to fully support the company's anti-bribery compliance control; External resources: ZTE Corporation works closely with external professional organizations to introduce Wolters Kluwer, TRACE International database, etc., to absorb external advanced compliance practices and achieve the continuous optimization of the anti-bribery compliance system and continuous improvement of compliance talents' capabilities; IT tools: ZTE Corporation continues to optimize process design and continuously strengthen IT tool system construction and connectivity, and has introduced systems such as Legal and Compliance Management (LCM) and Business Partner Scanning (BPS) to support compliance review and due diligence.
- **Risk assessment:** ZTE Corporation regularly conducts anti-bribery risk assessment annually, continuously improves the existing risk assessment mechanism, refines the risk assessment scenarios, and ensures timely, comprehensive and accurate identification, assessment and control of bribery risks.
- **Compliance policy:** Under two programmatic policies, ZTE Code of Conduct, Anti-bribery and Corruption Policy and Compliance Guidance of ZTE Corporation, we updated and released antibribery compliance management practices in specific areas, such as business associates, procurement transactions, gifts & hospitality, external travel expenses, commercial sponsorship, charitable donations, mergers and acquisitions, joint ventures, employment and customer training, etc. A total 33 documents of policies, regulations and guidance in the field of anti-bribery were issued, forming a "2+N" anti-bribery compliance policy system.
- **Process control:** The company resolutely enforces the effective rules through process control. Currently, anti-bribery rules have been embedded in 5 major processes, 30 sub-processes and 68 key nodes. All process controls are implemented through IT systems such as legal and compliance management system, supply chain management system, personnel system, and financial system, etc.
- **Compliance training and communication:** In order to improve employees' anti-bribery compliance awareness, ZTE Corporation has developed an online anti-bribery compliance training course for all employees as well as courses for key positions, and conducted multi-channel training and publicity via various forms, outputted documents such as process standards, work instructions and case interpretations to help employees keep track of the company's compliance requirement and process.In addition, ZTE Corporation maintains close compliance communication with customers and business

associates, and actively adopts valuable opinions and suggestions from all parties to continuously improve and optimize the anti-bribery compliance management system.

• **Monitoring and review:** ZTE Corporation conducts regular audits and inspections of the anti-bribery compliance management system annually to monitor and evaluate the implementation of anti-bribery related policies.

# 2.4 Intellectual property management

ZTE Corporation is committed to technological innovation and intellectual property protection, and has established sound intellectual property management rules and system structure. The company's Intellectual Property Strategy Committee is responsible for the company's decision-making on global intellectual property strategy; and the Intellectual Property Department is responsible for intellectual property reserves, operations, competition and risk control and other related work. We have complied with laws and regulations related to intellectual property at home and abroad, and formulated internal systems such as the "Regulations for Administration Rules for Patent Applications", "Administration Rules for the Evaluation of Patent Assets" and "Reward Rules for Intellectual Property".

In 2018, with the adjustment of the overall strategy, ZTE Corporation further clarified the strategic objectives of intellectual property rights to gradually complete the realization of 3 strategic goals of 5G application, patent asset management and patent operation in stages. The company's intellectual property management is divided into modules such as patent reserve, trademark copyright and domain name reserve, risk control and intellectual property operation.

- **Patent reserve:** classify and manage the company's patent assets hierarchically, covering the entire life cycle of patent writing, application, reply, and evaluation, etc. Till December 31<sup>st</sup>, 2018, we had more than 73,000 global patent applications, of which 35,000 were granted patents;
- **Trademark copyright and domain name:** Manage from the application, use and transfer of trademark, trade name, copyright and domain name, and output management methods to strengthen risk management and control;
- **Risk control:** Identify the risk points of intellectual property management, summarize experiences in licensing negotiations, litigation and other cases, and form standardized guidelines to guide the development of related businesses;
- **Intellectual property management:** Promote the company's patent operations, including intellectual property transfer and licensing, and standardize the management of the corresponding mechanisms and processes.

# **3** Connecting the Future

Adhering to the vision of "enabling communication and trust everywhere", ZTE Corporation insists on the innovation-driven concept, actively explores new technologies, carries out the mission of "to connect the world with continuous innovation for a better future", and continuously invests in R&D in the core areas such as 5G wireless, core network, load, access and chip.

In 2018, ZTE Corporation persisted in "5G pioneer" strategy, seized the 5G business opportunities, and achieved a series of significant scientific and technological achievements in the field of technology development by virtue of independent development subjects, the well-arranged scientific and standardized innovation system and sustained R&D investment. At the same time, ZTE Corporation works with partners to realize technology in specific scenarios and create greater value for the society.

The UN Sustainable Development Goals involved in this chapter:



# 3.1 Our achievements in 2018

- Applied for over 2,000 5G patents and about 20,000 terminal patents;
- ZTE Corporation won the "Best Technology Innovation for 5G" of Informa at 2018 Mobile World Congress (MWC) by virtue of its 5G end-to-end technological innovation strength;
- United with China Telecom to open the world's 3.5GHz First Call based on 3GPP R15 standard;
- Disclosed over 1,200 sets of the first batch of 3GPP 5G SEP (Standard-essential Patents) to ETSI (European Telecommunications Standards Institute);
- United with China Unicom to complete the first end-to-end communication between 5G terminal and system network with 3.5GHz NSA networking mode in the world;
- United with China Mobile and Qualcomm to complete the first new 5G NR data connection on
   2.6 GHz band in the world, which complies with 3GPP independent networking specifications

# 3.2 5G strategy and innovation

The development and application of 5G technology is a subversive revolution in the information society. With the coming of 5G, the unprecedented opportunities for innovation are emerged, a communication bridge is set up for smart connectivity, and everything can be connected in the world.

#### 3.1.1 5G end-to-end solution

In 2018, ZTE Corporation focused on the 5G end-to-end solution capacity, which has complete product layout, diversified solutions and rich business ecosystem in five key areas such as 5G terminal, wireless, load, core network and vertical application, and is the core supplier providing 5G end-to-end solutions in the industry.

- 5G Devices: ZTE Corporation is actively researching and developing various commercial 5G devices, including 5G Smartphone, 5G Tablet, 5G Indoor CPE, 5G Outdoor CPE, 5G Mobile Wi-Fi Router, 5G Ethernet Box and more, to meet consumers' diverse demands for intelligent 5G application scenarios;
- 5G wireless access: ZTE Corporation always plays a leading role in the Massive MIMO technical field in 5G wireless access side with its commercial deployment lasted for more than four years, with a cumulative shipment of 10,000 sets, which can meet the coverage requirements of wireless side network on different frequency channels and in different scenarios;
- 5G transmission load: ZTE Corporation firstly proposed the unified carrying scheme of 5G forward/intermediate/return transmission, leading in the industry in the aspects of FMC (fixed mobile convergence), ultra-wide pipeline, elastic slice, minimum delay, ultra-high reliability, high precision clock synchronization, etc.
- 5G core network: Based on the 3GPP R15 standard protocol, ZTE Corporation takes the lead in introducing network solution of Common Core in the world, which has realized multiple access convergence, reduced operating costs, improved users' experience, enhanced system resource utilization, and applied the characteristics of 5G core network to the existing network;
- 5Gvertical application: ZTE Corporation unites with operators and partners to carry out the research, demonstration and incubation, etc. endowed in "5G+" industry in the vertical industries such as AR/VR, Internet of Vehicles, Industrial Internet, Smart Grid and so on.

#### 5G core technology of ZTE Corporation obtains international recognition.

At the SDN NFV World Congress held in Hague, Netherlands in October 2018, Common Core, Cloud Studio and other 5G-oriented products and solutions of ZTE Corporation won six prizes including "Best New Cloud Native VNF", "Best New Automation & Management", "Best Open Source Products", "Best New Cloud Infrastructure", "Best Network Edge" and "Best Edge and Access Solution", covering all dimensions of 5G network from APP to Transactions on Embedded Computing Systems (TECS), ServiceFlows, and Open Source, and reflecting the advanced concepts and deep accumulation of ZTE Corporation in the core technology of 5G network architecture.



#### **3.1.2 Explore 5G applications together**

The maturity of 5G technology brings us a better imagination of the future society. Through the core technologies, such as cloud network convergence, mobile edge computing and end-to-end network slice, ZTE Corporation builds the flexible, extremely fast, agile and efficient 5G network, and works hand in hand with all walks of life to create more values for clients and partners in 5G era.

• AR /VR

Augment Reality (AR) and Virtual Reality (VR) have a very broad application value in the fields of entertainment, recreation and sports, education, medical treatment and so on, and are regarded as the important interaction modes for the next generation. However, due to the limitation of current technology, AR/VR also brings a series of discomforts such as vertigo in practical use, which limits the further application of technology. To solve these problems, breakthroughs in key technologies such as latency, screen resolution and screen refresh rate are necessary. Aiming at these problems, ZTE Corporation has achieved 5G cooperation with many partners to commonly promote the typical 5G application scenarios for could VR and cloud AR based on 5G MEC.

#### Create VR live broadcast of "watching Xiongan via 5G far away"

At the 2018 World Conference on VR Industry, China Telecom and ZTE Corporation connected 5G wireless terminal through VR high-definition cameras, and transmitted the live video back to 5G network in real time based on the 5G pilot network of Xiongan, China Telecom built by ZTE Corporation, breaking through the geographical restrictions.



ZTE Corporation has been making continuous efforts to explore and study more application technology schemes of AR and VR in the 5G era:

- **8K cloud VR live broadcasting:** Based on the multi-view 8K VR live broadcasting, transmission rate over 100Mbps upstream image can be realized.
- Cloud VR games: Cloud VR games can accept real-time media processing and GPU image rendering, etc. based on MEC, thus users do not need to configure the VR game host, and VR can show the units.
- Cloud VR/AR education: Based on MEC, it can realize low-latency coding, GPU image rendering and recognition analysis functions to meet the interactive needs of users for receiving VR education program and AR virtual model.
- AR remote expert guidance: The on-site operators wearing AR glasses can achieve two-way communication of high-definition video with remote experts through 5R, and get AR remote expert guidance.
- **SLAM-based AR remote demonstration:** It can be applied to telemedicine and other specific services.
- Smart grid

Smart grid is an area of competitive development in various countries. At present, in the field of urban power grid, the development trend of smart grid deeply integrates with information and communication to realize the intellectualization of distribution network. While the development of 5G technology is an important opportunity to realize this strategy. The integration of 5G, Internet and other information and communication technologies with power grid can effectively solve the problems of large number of distributed and decentralized user terminals, lack of connection and low quality of wireless communication. ZTE Corporation is now uniting with many companies to study the application of 5G network slicing technology in smart grid field, and to verify technology in a variety of application scenarios:

- Intelligent power distribution : 5G network provides communication services with end-to-end delay less than 10ms, and its precision is 10us when realizing high-precision time service based on 5G NR so as to meet the high-performance communication requirements of differential protection, synchronous phasor measurement, feeder automation and other services of distribution automation.
- Power slice : 5G provides the customized end-to-end network slicing services to better meet the security isolation requirements of "private industry network"
- Power inspection: By virtue of the enhanced substation inspection robot and transmission line inspection UAV of 5G high bandwidth and low latency communication, the on-line monitoring, on-line inspection and ultra-high definition video monitoring of distribution room can be realized.
- Interactive power consumption: The low-latency communication connection service provided by 5G helps the power grid to achieve side rapid response to demand of power load, to achieve accurate load control of power load, and to meet the demand of distributed charging service.
- Industrial Internet

With the development of intelligent manufacturing, 5G will be widely used in industry. With the more and more blurred boundaries between the inside and outside factory, the factory is no longer an independent closed entity, but a part of the huge value chain and ecosystem, then the ubiquitous wireless communication will be the most convenient access mode for industrial interconnection. Wireless connections will be more used among factories, enterprises, and between enterprises and users and products, which will effectively enhance the networked collaborative manufacturing and management level, promote quality and efficiency of the factory workshop, and make it possible for opening up new business models in the manufacturing industry.



ZTE Corporation and its industry partners focus on 5G application research and practice in the following areas:

- Building 5G-based industrial AR applications

Different from 4G network with unclear feedback of video and image due to the lack of bandwidth in the industrial remote maintenance, 5G technology has the characteristics of large bandwidth in the industrial scene, which makes it possible to realize product design, remote training, remote inspection and other links

in the industrial scene through AR, thereby improving the work efficiency and experience of product design, training, operation and maintenance, and reducing the trial and error cost.

- Developing 5G-based real-time industrial control

In the industrial control, both data collection and instruction sending require strong real-time, so the low latency characteristic of 5G is suitable for some industrial control scenarios, which has a far-reaching impact on the construction of 5G-based real-time industrial control and the deepening transformation of industrial control field.

- Building 5G-based cloud AGV

AGV, which is based on vision or laser navigation, needs a large number of sensors and powerful computing units, but it is too expensive and is unable to form cooperative scheduling. In the production scenario of intelligent manufacturing, utilizing the characteristics of 5G, such as low latency, large bandwidth and wide connection, and taking advantage of MEC, the resources required by AGV can be deployed in a cloud environment, which can significantly reduce the cost of AGV and achieve the goal of cooperative scheduling.

- Promoting 5G-based remote control and unmanned driving

In view of the problems of high personnel cost and high risk when the construction machinery operates in remote, toxic and harmful scenarios (such as natural disasters), the remote driving and control functions of construction machinery can be realized by utilizing the characteristics of 5G network, such as high reliability, low latency and wide bandwidth.

– 5G high precision positioning

Wireless positioning is widely used in the industrial field, which takes advantage of 5G network high-precision time service, studies the application scenarios based on 5G wireless high-precision positioning, especially the positioning of indoor equipment, goods and personnel.

# 5G Intelligent Water Treatment Comprehensive Solution wins the "Innovation Award of Application in Industrial Industry".

When being applied in the intelligent hardware industry 5G Intelligent Water Treatment Comprehensive Solution of ZTE Corporation wins the "Innovation Award of Application in Industrial Industry Application". This solution, by virtue of 5G AR intelligent patrol inspection, 5G UAV video patrol inspection and other technical means, combines multi-dimensional capabilities with big data, artificial intelligence and Internet of Things, which realizes three-dimensional monitoring, intelligent analysis and full linkage governance, and upgrades the traditional water control to a higher level.



• Auto-driving

Auto-driving is the main trend of automobile development. 5G communication achieves auto-driving networking, collaborative control, and high-definition map download and so on, providing a solid foundation of communication terminal for auto-driving implementation.

Intelligent Connected Vehicle is the development direction of automatic driving and intelligent transportation. The cooperative perception, collaborative analysis and decision-making of people, vehicles and roads based on C-V2X communication technology make driving safer and more efficient.

- ZTE Corporation worked with Baidu to study the major national project of 5G automatic driving. In May 2018, the real road tests were carried out in Xiongan New District for several days, and realized the auto-driving on real roads under the real 5G network environment.
- ZTE Corporation and Guangdong Mobile cooperated with GAC R&D Center to complete the remote driving verification based on 5G communication under complex road conditions, which marks that the three parties' automatic driving verification under 5G network has entered a substantive stage.

# **3.2** Cybersecurity and privacy protection

ZTE Corporation deeply understands the concerns of customers and other stakeholders about cybersecurity and data security, and promises to provide customers with end-to-end secure and trustworthy products and services.

### 3.2.1 Cybersecurity Governance

ZTE Corporation integrates security policies and security controls into every stage of product life cycle by building the three lines of defense governance structure to achieve the secure delivery of products and services:

- **The First Line**: The business units act as the first line of defense to achieve cybersecurity selfmanagement and control.
- **The Second Line**: Product Security Department and Security Lab function as the second line of defense to implement independent security verification and supervision.
- **The Third Line**: The external professional institutions and customers act as the third line of defense, auditing the effectiveness of the first and second lines of defense.

The "Product Security Red Line Management Regulations" issued by ZTE Corporation is the most basic security requirement for the products and services provided by the company, and also the standard that each business unit must meet, including:

- Backdoor is forbidden in product;
- High-risk security vulnerabilities are prohibited in product to be delivered;
- It is forbidden to handle personal data in violation of applicable laws and regulations;
- Unauthorized access to the customer's network and data is prohibited;
- Concealment, delay or neglect of security incidents is prohibited.

Security assessment is a necessary means to verify security. At present, ZTE has security experts with qualifications such as CISSP<sup>7</sup>, CISA<sup>8</sup>, CISAW<sup>9</sup>, CCSK<sup>10</sup> to enable adequate security verification including source code review, vulnerability scanning, fuzzing test, penetration test and other multi-dimensional security assessment practices. With the world class security inspection tools, ZTE has carried out security verification on nearly one thousand product versions, so as to identify and repair security defects in products for ensuring the security of deliverables.

ZTE Corporation respects the legitimate rights and interests of customers and users, and abides by relevant laws and regulations. ZTE has issued the "ZTE Cybersecurity Statement"<sup>11</sup> and will continuously improve management and technical practices to protect the security of customers' networks, assets and privacy.

#### 3.2.2 Data security assurance

ZTE Corporation strictly abides by the "The Cyber Security Law of the People's Republic of China " and the EU "General Data Protection Regulation" to protect customers' information and ensure its security. To ensure the effective implementation of the data protection regulations, ZTE Corporation has set up three lines of control and defense: Compliance/Legal Manager, Business Unit Compliance Director/Product Security Director, Data Protection Compliance Department and other supervisory departments, and established Data Protection Compliance Department in July 2018.

ZTE Corporation adopts the data protection method approved by the industry to help business departments better identify and respond to data protection risks in business activities. ZTE Corporation continues to implement the information security management system including ISO 27001. At the same time, it focuses on promoting the system construction of personal data processing and cross-border data transfer, formulates the management system, including "ZTE Personal Data Retention and Destruction Management Standard", "Data Subject Request Procedure", "Personal Data Breach Response System" and so on, which regulates and guides the data processing behavior. Meanwhile, ZTE Corporation provides regular and continuous data protection compliance training for employees, develops corresponding data protection courses for key work posts, ensures each involved employee to accurately understand the principle of data protection based on his/her specific work and function needs, and strictly enforces its regulations.

ZTE Corporation has also been recognized by the international community due to its huge investment in cybersecurity. ZTE has passed ISO 27001 certification for information security management systems in 2005 and updated its certificate every year. In 2017, ZTE passed the ISO 28000 (Specification for security management systems for the supply chain) certification. Since 2011 up to now, multiple ZTE products have obtained the  $CC^{12}$  certification. In the future, ZTE Corporation will continue to increase its investment in cybersecurity to provide customers with a secure and trustworthy network environment.

# **3.3** Reliable products and services

<sup>&</sup>lt;sup>7</sup> Certified Information System Security Professional

<sup>&</sup>lt;sup>8</sup> Certified Information Security Auditor

<sup>&</sup>lt;sup>9</sup> Certified Information Security Assurance Worker

<sup>&</sup>lt;sup>10</sup> Certificate of Cloud Security Knowledge

<sup>&</sup>lt;sup>11</sup> Official website link for this statement: https://www.zte.com.cn/global/about/press-center/news/2019/201901/201901111654

<sup>&</sup>lt;sup>12</sup> CC: The Common Criteria for Information Technology Security Evaluation (referred to as Common Criteria or CC) is an international standard (ISO/IEC 15408) for computer security certification.

ZTE Corporation attaches great importance to product quality, pays attention to customers' opinions and feedback, and strives to provide reliable products and technical services for customers.

#### **3.3.1** Strengthening quality management

ZTE Corporation took the lead in passing the certification of ISO 9001 Quality Management System in domestic telecommunications industry in 1995; and became one of "10 domestic pilot enterprises of ISO 9001:2000 edition", passed the certification in the first batch in 1999. Since 2005 up to now, ZTE Corporation has established and passed the certification standard of TL9000 quality management system in telecommunication industry, and implemented the concept of risk thinking and active error prevention in the whole product life cycle and end-to-end business process, formulated the end-to-end quality management system in the whole process of market, design, R&D, supply chain and engineering service, and continuously optimized the end-to-end quality management process of the life cycle of products and services. The coming of 5G network era puts forward higher standards and requirements for quality management because of its high speed, ubiquitous network, low power consumption, low latency, high network security requirements and other characteristics.

In 2018, ZTE Corporation updated and promulgated the quality policy centered "customer-concerned, prevention first, continuous improvement and coordinated development", adhered to the idea of "customer-oriented", insisted on "compliance-based, prevention first" and persisted in "doing a good job for the first time", comprehensively guarded against product quality risks, continuously improved the quality management level, enhanced the quality concept and awareness of employees and improved their abilities through taking various quality measures and holding cultural publicity activities.

ZTE Corporation has established strict product inspection standards and product compliance certification process to ensure its products to pass inspection and compliance certification before delivery, and has carried out regular product type tests and conformity checks to ensure the products it provided are qualified and safe.

In order to solve the problems in time and rapidly without avoiding and hiding, ZTE Corporation has established and continuously optimized the ITR process, product replacement mechanism and customer support organization based on the end-to-end problem management, so as to respond to and deal with customers' problems quickly, and maintain a high level of delivery capacity of product and service . ZTE Corporation has also established a quality backtracking management process to analyze the root causes of quality problems and take corrective and preventive measures to prevent problems from recurring.

ZTE Corporation carries out a comprehensive internal audit of quality management system, finds out the weaknesses of quality management in the whole life cycle of products, identifies potential product quality and compliance risks through reviewing and sorting out the operation of quality management in various business processes, then prevents systemic risks and major quality accidents by formulating and implementing effective corrective measures so as to promote the healthy running of quality management system.

In order to further strengthen the company's business continuity management capability, in 2018, ZTE Corporation optimized and adjusted the organization and operation mechanism of business continuity management (BCM), established and implemented the BCM system based on ISO22301 standard, and enhanced its ability to deal with crisis and continuously provide products and services.

In October 2018, ZTE Corporation won the "Outstanding Contribution Award" issued by Shenzhen Association for Quality. In December 2018, ZTE actively participated in the evaluation of the standard

"Quality Management System Requirements for Information and Communication Industry, Production and Service Organizations" which is formulated under leading of Ministry of Information Industry, and a number of opinions and suggestions it proposed have been adopted.

### **3.3.2** Pay attention to users' suggestions

ZTE Corporation attaches great importance to users' suggestions and feedback, takes responsibility to collect customers' feedback and deal with customers' demands, which is also an important way to constantly improve and upgrade its products.

ZTE Corporation Global Customer Support Center receives customers' feedback 24 hours a day (including holidays) and 7 days a week.<sup>13</sup> Customers can give feedback through ZTE Corporation's support website. After receiving feedback, relevant personnel must transfer customer's suggestions to the Global Customer Support Center within 24 hours. For critical feedback, the Global Customer Support Center needs to confirm and verify within 30 minutes after receiving, ensures the managers of relevant business units who are in charge of customer problems to receive such notification within 4 hours, starts investigations within 24 hours, and records investigation reports within 2 days. In the whole process of dealing with customers' suggestions, all departments involved must abide by the principle of "equality, objectivity and fairness".

In 2018, ZTE Corporation Global Customer Support Center received more than 50,000 comments and feedback from domestic and foreign users, and the proportion of timely solution in accordance with the relevant management regulations was over 97.7%. In response to these feedbacks, we timely visited customers to understand their satisfaction in order to improve our customer services.

	Domestic users	International users
Quantity of feedback received	32,980	17,928
Rate of timely solution	97.8%	97.7%
Consumers' satisfaction about after-sale services	99.51%	97.93%

<sup>13</sup> http://support.zte.com.cn

# **4 Protecting the Environment**

Becoming a responsible "environmental-friendly" corporation is one of ZTE Corporation's core development concepts. As an enterprise actively practicing environmental protection, ZTE Corporation designs and produces environment-friendly products, provides customers with low-energy service solutions, strictly controls the environmental impacts of its operation, strives to spread the green environmental protection concept, and works with all sectors of society to protect our mountains and waters.

The UN Sustainable Development Goals involved in this chapter:



## 4.1 Our achievements in 2018

- Won the Asian IDC's Green Power Award
- Completed the design of the Energy Management Center System and started the construction process
- Perfected the three-level energy management framework by introducing the task force consisting of the Energy-Saving and Emission-reducing Committee, the Office and the Platform

## 4.2 Environmentally friendly design and product

ZTE Corporation attaches great importance to environmental responsibilities in the product life cycle, by integrating advanced management processes and quality standards with the company's internal specifications, taking full consideration of environmental factors at the product design and operation stages, constantly improving the energy efficiency of its products, reducing carbon emissions, and providing customers with environmentally friendly products and holistic energy-saving and environment-friendly solutions to minimize the impacts on the environment.

#### 4.2.1 Life-cycle management

ZTE designs and develops its products in strict accordance with ISO 14040 Life Cycle Assessment (LCA) - Principles and Guidelines, identities, in the demand analysis phase, laws and regulations, industry standards and customer requirements on environmental protection applicable to the places where products are manufactured and distributed, including but not limited to those concerning hazardous substances (e.g., RoHS<sup>14</sup> directive, REACH<sup>15</sup>, battery directive<sup>16</sup>), product recycling (e.g., WEEE<sup>17</sup> directive), energy

<sup>&</sup>lt;sup>14</sup>RoHS (Restriction of Hazardous Substances) is an abbreviation of the EU mandatory standard - Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment, which was officially implemented on 1 July 2006 and is mainly applied to regulate the material and process standards for electronic and electrical products.

<sup>&</sup>lt;sup>15</sup>REACH is an abbreviation of the EU regulations - Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals and is a supervision system concerning chemicals that came into effect on June 1, 2007.

<sup>&</sup>lt;sup>16</sup>Battery directive: the EU promulgated directive 91/157/EEC in 1991 on Batteries and Accumulators Containing Certain Dangerous Substances which was revised to and replaced by Directive 2006/66/EC in 2006. The new version of the battery directive was implemented as of September 26, 2008

<sup>&</sup>lt;sup>17</sup>WEEE is an abbreviation of the EU directive - Waste Electrical and Electronic Equipment Directive which was issued in 2003 and revised in 2012.

efficiency (e.g., DOE<sup>18</sup>, ERP<sup>19</sup>) and packaging (e.g., packing directive<sup>20</sup>), etc., and then selects environmentfriendly materials and designs environment-friendly process, production, testing and verification according to the results of such demand analysis. For hazardous substances, ZTE has established a sophisticated system and passed the certification in accordance with QC080000 Hazardous Substances Process Management for all terminal products.

	IECQ Certifica				
Hazard	ous Substance	Proce	ss Ma	nager	nent
IECO Certificate No.: Supersedes: CB Reference No.:	IECO-H TUVRTW 10.0007 ECO-H TUVRTW 10.0007 Imme 5 01 HSPM 1632466	Issue No.: Issue Date: Expiration:	6 2019/01/11 2021/12/12	Status: Org leave:	Current 2010/12/13
Applicable to:					
European Directive	2011/65/EU ("RoHS - Restriction	of the use Of or	rtain Hazardo	xe Subelance	ni Ce
	onic equipment. Including all publ	ished amendme	tte		
<ul> <li>Customer specified</li> </ul>	requirements				
	TE Plaza, Keji Road South, Hi-Te Shenzhen City, Guan	pdong Province hina	518057,		
related processes wh HSPM organization a IECQ 03-5 "IECQ Ha	orvecoped and implemented haz- ich have been assessed and fou pproval which is in accordance zardous Substances Process M s (ECQ), and with respect to the	nd to comply w with the Basic anegement" of	In the application of the IECO	ible requirem 1 and Rules	ents for IECI of Procedur
IECQ QC 080000:2	17 - Hazardous Substance Proc	ess Managemer	System Reg	ultements	
This Confide	ate is applicable to all electronic o	omonente est	ambias mini	and materials	here
	processes for the follo Manufacturing of Weeless	wing acope of a	stration:		
	Manufacturing of Virginia	Communication	Terminan		
	seved by the Certification Body:	TOV Rheinlar	d Taiwan L	ld.	
11F., No.758, Sec. 4. Scnoshen Dist., Taipe		110			
Taiwah	1 can	111	AT	<b>UVRhei</b>	nland*
Authorized person:	1 pm	m		cisely Right	
Jason J. S. Wu	-				
	THE REPORT OF LAND AND A DESCRIPTION	and a feel room	WARMAN IN	_	
and and all strength					
	1803 OB mich This (antibusto of Ostformig, may les aug Rube, of Provedure of Bar K		others with the		

ZTE Corporation's environmental protection concept runs through the whole life cycle of products: customer demand - product design/R&D - raw material verification - product fabrication - product distribution - product recycling and disposal.

- Customer demand: define the environment-friendly properties of products on the basis of meeting the environmental regulations applicable to respective regions, if the customer has specific requirements on environmental protection;
- Product design/R&D: give priority to the use of durable materials to reduce the material consumption, such as utilizing the advanced storage and transmission technology to minimize the use of conventional CDs;
- Raw material verification: introduce the material evaluation system, and where practical, use raw materials of complete unit that have passed the environmental verification, or disassemble or test the complete unit if no certification is made for the complete unit, in order to ensure its raw materials are in compliance with applicable environmental regulation;
- Product fabrication: develop strict environment-friendly production specifications, and review the implementation of those specifications in the production process by a professional team on a regular basis;
- **Product distribution:** provide information on recycling channels of waste and used products;
- Product recycling and disposal: establish a product recycling network and build the integrated processing capacity for recycling purpose, including collection, storage, disassembly, testing, maintenance and disposal of waste.

<sup>&</sup>lt;sup>18</sup>DOE (Department Of Energy) refers to a certification implemented by the United States Department Of Energy in accordance with applicable energy efficiency regulations in the United States.

<sup>&</sup>lt;sup>19</sup>ERP (Energy-related Products) is an EU directive, which stipulates the CE mark requirements.

<sup>&</sup>lt;sup>20</sup>Packaging directive: refers to the European Parliament and Council Directive on Packaging and Packaging Waste, which is a systematic directive on packaging management and control, with an aim of emphasizing the safety of life, and reasonable use of energy and resources. This directive has been revised many times since it was promulgated in 1994.

#### 4.2.2 Development of energy-saving products

• Optimization of network planning

Considering the huge energy consumption in the operation stage of the communication network, ZTE Corporation is not only providing a full range of end-to-end communication solutions, but also actively committed to the research and development of more environment-friendly product solutions. We constantly optimize the network planning and improve the coverage efficiency of site as well as coverage capacity of site equipment, to achieve the purpose of energy saving by providing the maximum user/traffic volume with the minimum site service. In addition, we also study the RF module, baseband module and algorithm energy saving, and have achieved productive results.

From February 2017 to December 2018, ZTE Corporation's energy saving solution for mobile products has been used at nearly 40,000 sites in China, saving electricity of nearly 20 million kWh in total each year.

#### Industry-leading efficiency of ZTE Corporation commercial Radio Remote Unit (RRU)

The energy efficiency of ZTE Corporation's new generation RRU series products is further improved, and the floor space, energy consumption and carbon emission of mobile base stations are significantly reduced:

- Independently develop 7nm DPDIC chips to replace conventional FPGA solutions and meet the requirements for the broadband multi-channel processing capacity, while reducing the basic consumption of RF units;
- Introduce Transceiver featuring innovative process, a doubled capacity per piece and outstanding MMIC PA integration technology, to significantly improve the efficiency of amplifier and further reduce the overall energy consumption of RRUs;
- Adopt the natural air-cooled technology to eliminate the need for AC units and reduce the energy consumption of cooling systems.
- Construction of data centers

As the operation and use of data centers are usually accompanied with high energy consumption, ZTE Corporation focuses, at the data center design stage, on how to build data centers with higher energy efficiency to reduce energy consumption and minimize emissions of greenhouse gas. The evaporative refrigeration technology we independently developed can take advantage of the temperature difference between the dry and wet bulbs in the region, take away the heat of the machine through water mist, and replace conventional compressor refrigeration, to save a large amount of energy consumption for users. Furthermore, we are committed to the development of modular data centers and transfer the framework, AC, fire protection, wiring, power distribution, monitoring, lighting and other systems in conventional machine rooms into integrated products, not only significantly simplifying customers' management for project, but also effectively reducing energy consumption.

#### China Unicom Guangdong Cloud Data Center in Shenzhen Pingshan Base

ZTE Corporation works with China Unicom to build the single micro-module data center for Tencent which is the earliest and largest of its kind in Asia as well as the world's first large-scale HVDC data center project. We adopt several energy-saving technologies such as advanced water-cooled inter-row AC, HVDC, and direct supply of municipal power to ensure a constantly stable PUE of approx. 1.4.ZTE

won seven authoritative awards, including Data Center Oscar 2017 and DCD's Data Center Excellent Operation Award, etc., and has been highly recognized by our customers.

#### ZTE Corporation's data center has won numerous awards

In April 2018, ZTE Corporation won the Asian IDC User Satisfied Brand Award and Asia Cloud Infrastructure Provider Excellence Award at The 6th Asian IDC Expo 2018.Meanwhile, the Mobile Data Center Hebei Project constructed by ZTE Corporation won the Asian IDC's Green Power Award and the Asian IDC Annual Innovation Design Award.

In September 2018, ZTE Corporation and China Mobile Hebei were jointly awarded with the Best Design Team of The Year at the Data Center Dynamics (DCD) Asia-Pacific Region Award Ceremony 2018 held in Singapore, for the China Mobile (Hebei) Baoding Data Center Project which has fully verified ZTE's all-round technical strength in the field of data center from the design, deployment to the operation and management.

At the Annual Data Center Engineering Standardization Forum held in Beijing in November 2018, ZTE Corporation's data center indirect evaporative cooling technology stood out by virtue of its energy conservation, flexible integration, extremely simple operation and maintenance, and won the Data Center Science & Technology Achievement Award 2018, leading the revolution of green data centers.

#### 4.2.3 Control of environment-friendly raw materials

ZTE Corporation strictly controls the environmental compliance of raw materials by formulating the management standard, i.e., Requirements of The Banned and Restricted Hazardous Substances and introducing the environmental compliance assessment system Windchill Product Analytics (WPA). Suppliers are required to declare the data of environmental compliance of materials in the system and upload the test reports of hazardous substances. The Company has set up a green laboratory to verify the environmental compliance of supplied materials on a regular basis.

#### ZTE Corporation has passed the certification for protected eco-origin products.

On November 17, 2017, the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China commissioned a team of experts to conduct an on-site certification for protected eco-origin products for ZTE OTN OXCs.

Through an audit of the whole process from product R&D, procurement of raw materials, manufacturing and fabrication, to functional testing, packing and shipping, the evaluation was conducted according to the management requirements for environmental protection, low carbon emission, energy saving, resource conservation and ecological health. On January 9, 2018, ZTE ONT OXCs were successfully approved and awarded with a certificate of protected eco-origin products and became the first company which passed this certification in the communication industry.

#### 4.2.4 Recycling and disposal of Waste Electrical and Electronic Equipment

ZTE Corporation strictly abides by local laws and regulations on electronic waste, and actively promotes the recycling of waste products. The company's Global Logistics Center is responsible for the recycling and disposal of waste equipment, including the assessment of whether product materials meet the requirements of WEEE, recycling and reuse of products, effective disposal of hazardous electronic waste and compliance with information safety requirements. In particular, the company implements strict control over the content of all kinds of heavy metals, toxic and hazardous substances in recycled and reused materials.
ZTE Corporation has joined the recovery systems of Germany, Italy, France, Britain, Slovakia and the Czech republic, Austria, Bulgaria, Romania, Spain, Portugal and other countries and ensures its electrical and electronic equipment meet the minimum recycling targets set in the WEEE Directive, in order to reduce the pollution to the environment and improve the utilization of resources.

#### **Recycling process for ZTE Corporation USA's terminal products**

ZTE Corporation USA has entrusted an e-waste recycling agency to provide customers with services that meet US and customers' requirements for environmental protection. The information on the recycling service is published on the website of ZTE Corporation USA.



# 4.3 Managing the environmental impact

ZTE Corporation takes active measures to implement green production and management practices according to ISO14001 Environmental Management System and ISO50001 Energy Management System, develop a rigid system of energy management, environmental emissions and resource use, attach great attention to energy conservation and emission reduction in the process of operation as well as intensive and renewable resources, and make efforts to minimize environmental impacts from its production activities.

#### 4.3.1 Promoting energy conservation and emission reduction

In 2018, ZTE Corporation has perfected the structure of the Energy-Saving and Emission-reducing Committee, establishing a three-level energy management framework by introducing the task force consisting of the Energy-Saving and Emission-reducing Committee, the Office and the Platform for overall implementation of the Energy Saving Management Measures to strengthen energy management and comprehensively promote energy conservation. During our daily operation, we have implemented energy management practices by taking numerous measures including monthly reports for energy consumption and energy-saving progress, optimization of power consumption structure, renovation of street lamps,

switching on/off AC at the defined time, promoting energy conservation planning at the construction stage of projects, etc., in combination with budget linkage and energy-related information construction. In order to improve employees' awareness of energy conservation, ZTE Corporation has sponsored special campaigns of energy conservation publicity in many places and organized a variety of creative energysaving activities to advocate its employees for full participation in energy conservation.

Energy Type	Unit	Value	Energy Consumption Per Unit of Output (per RMB 10,000 yuan)
Diesel Oil	Liter	1000	0.0001
Natural Gas	10,000 m <sup>3</sup>	74.9	0.000009
Outsourced Electricity	kWh	353,049,442	41.29
Solar Power Generation	kWh	2,792,948	0.37

ZTE Corporation's energy consumption in 2018<sup>21</sup>:

#### **Construction of ZTE Corporation's Energy Management Center**

In 2018, ZTE Corporation commenced the construction of the energy management center system, with an aim of driving its business units to actively save energy by establishing a high-precision energy consumption monitoring system, which is planned to be put into operation in 2019.

- Pre-construction: the Company fails to monitor the energy consumption in real time and accurately locate the point of energy waste in an effective manner due to lack of meters for key energy-using equipment and some distribution cabinets.
- Post-construction: precision electricity consumption measurement is achieved for high-energy consuming equipment, including production, laboratory, IT, etc., and cost allocation and energy-saving and emission-reducing measures are made based on accurate data, so as to drive business units to use electricity reasonably and save energy actively.
- Planning: it is expected to firstly install smart meters at various sites of the energy management and control centers in Shenzhen Science and Technology Park and Xili Industrial Park in 2019, and connect all of those meters to the servers in Shenzhen for unified management and control. Management and control can be realized by area at each site by logging on the system with corresponding access authorization.

#### Optimization of energy saving for high temperature test in Xili Production Base

The high temperature aging test is a reliability test. In ZTE Corporation's Xili Production Base, the high temperature test for RRUs was originally performed by using a static baking machine configured in the burn-in room, and then has been gradually switched to the on-load dynamic high temperature function enabled by a "self-high-temperature aging tool" which was independently developed by the Company and features low cost, low energy consumption and precision control. Now this innovative test method has been widely applied to more than 95% of products for wireless base stations.

The high temperature function of the self-high-temperature aging tool is basically realized by controlling the product temperature through a self-high-temperature monitoring backend based on the principle of

<sup>&</sup>lt;sup>21</sup>Scope of data: The energy statistics cover ZTE Corporation Shenzhen Science and Technology Park, Xili Production Base, Heyuan Production Base and Changsha Production Base.

self-heating property of products, while controlling the fan of the high temperature tool in order to maximize the temperature and power-based stress, to achieve the aging effect of products. Since its deployment, the tool is expected to save 9 million kWh of industrial electricity each year, improve the energy efficiency by more than 23%, and the high-temperature aging process data is visualized and controlled.

#### 4.3.2 Disposal of compliant emissions

• Exhaust gas

ZTE Corporation strictly abides by the Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution and other applicable national and local laws and regulations, and has formulated the Procedures for Control of Atmospheric Pollution to control the discharge of atmospheric pollutants according to the requirements.

ZTE Corporation implements strict control over the process exhaust gas by deploying a semi-closed worktable at the production site where the exhaust gas is collected through the exhaust hood and integrated exhaust pipe into a dedicated exhaust gas treatment tower and then is treated by using the activated carbon adsorption and UV photolysis + spray process according to the emission standard before it is allowed to be discharged into air.

Atmospheric pollutant	Unit	Maximum detected emission concentration of individual exhaust cylinder	Atmospheric Pollutant Emission Limit DB44/27-2001 Phase II Class 2 Maximum Allowable Emission Limit
Lead and its compounds	mg/m <sup>3</sup>	0.004	0.70
Tin and its compounds	mg/m <sup>3</sup>	0.007	0.85
Non-methane Total Hydrocarbon	mg/m <sup>3</sup>	2.47	120

ZTE Corporation's emission of atmospheric pollutants in 2018<sup>22</sup>:

#### • Wastewater

As ZTE Corporation's production process is dominated by product assembly, no release of industrial wastewater is involved, but domestic wastewater is discharged by the office. We strictly abide by the Law of the People's Republic of China on the Prevention and Control of Water Pollution and other applicable national and local laws and regulations, and have formulated the Procedures for Control of Water Pollution to implement rainwater and sewage diversion, and regulate the treatment and discharge of wastewater. The oil-contained wastewater generated from the canteen kitchen flows into a three-stage oil trap for oil separation treatment after solid impurities are filtered through the screen of the cleaning sink, and then is discharged into the municipal sewage pipelines for unified treatment by the municipal sewage treatment plant before it is allowed to be released into the natural water body.

• Solid waste

<sup>&</sup>lt;sup>22</sup>Scope of data: The statistics of atmospheric pollutants cover ZTE Corporation Shenzhen Science and Technology Park and Xili Production Base.

ZTE Corporation has formulated Specifications for Waste Management and other internal management systems in accordance with the Law of the People's Republic of China on Prevention and Control of Environment Pollution Caused by Solid Wastes, the Standard for Pollution Control on Hazardous Waste Storage, the Standard for Pollution Control of General Industrial Solid Waste Storage and Disposal Sites and relevant laws and regulations, in order to minimize the generation and discharge of solid waste and reduce its impacts on the environment.

**Hazardous waste:** mainly refers to waste solder slag generated in the production process, electronic waste, waste batteries, waste organic solvents produced in the process of equipment cleaning. The Company assigns dedicated personnel to collect, register and manage the account of hazardous waste, and submit it to the qualified disposal company approved by the EPD for detoxification treatment.

**Non-hazardous waste:** mainly refers to paper, hardware, wood, office and household garbage, kitchen waste, etc. For recyclable waste such as paper, hardware and wood, the Company takes measures of centralized collection and sheltered stacking, and handles over such waste to professional companies for recycling and reuse. For office and household garbage and kitchen waste, the company has signed annual transport and treatment agreements with the municipal sanitation department, and no data statistics have been conducted yet.

Solid Waste	Unit	Value	
Hazardous Solid Waste	Ton	195.9	
Non-hazardous Solid Waste	Ton	1,979	

ZTE Corporation's disposal of solid waste in 2018<sup>23</sup>:

#### • Noises

The main noises of ZTE Corporation come from operating noises of machinery such as AC units, air compressors, cooling towers, fans, and water pumps.ZTE mainly controls the noise by adopting measures such as utilizing high-quality equipment, installing sound-absorbing ceilings and walls on the top of and around the power zone, strengthening the daily maintenance of equipment and building green belts. The Company has formulated the Procedures for Prevention and Control of Noises and monitor noises on a regular basis to ensure that the noise level complies with the requirements stipulated in the Emission Standard for Industrial Enterprises Noise at Boundary. During the reporting period, according to the results of the noise monitoring at the plant boundary, the noise herein of the plant can meet the standard, with little impact on the surrounding environment.

• Greenhouse gas

As being fully aware of the impact of climate change on natural ecosystems, ZTE Corporation has accepted annual third-party carbon audit since 2013 to continuously monitor and improve the performance of greenhouse gas management, and has been awarded the funds for the "Carbon Quota Surplus Enterprise Project" by Nanshan District Government of Shenzhen for five consecutive years.

The greenhouse gas generated by ZTE Corporation mainly comes from direct emissions from energy consumption, including the use of natural gas, gasoline and diesel as well as indirect emissions from the use of outsourced electricity.

<sup>&</sup>lt;sup>23</sup>Scope of data: The waste statistics cover ZTE Corporation Shenzhen Science and Technology Park, Xili Production Base and Heyuan Production Base.

ZTE Corporation's emission of greenhouse gas in 2018<sup>24</sup>:

Greenhouse Gas	Unit	Value	Emission intensity (ton/ million revenue)
Total Emission Volume	ton CO <sub>2</sub>	175,303.35	2.05
Scope 1: Direct Emission	ton CO <sub>2</sub>	1,931.02	0.02
Scope 2: Indirect Emission	ton CO <sub>2</sub>	173,372.33	2.03

#### 4.3.3 Efficient use of resources

#### • Water utilization

The water resources of ZTE Corporation are all from the municipal water supply system, mainly used for cleaning water in the production site, domestic water in the office, cooking and cleaning water in the canteen. We attach great importance to the efficient use of water resources, and achieve the purpose of water conservation by constantly improving the water-saving management system, publicizing water-saving concepts and optimizing water use methods.

ZTE Corporation's total water consumption in 2018: <sup>25</sup>
--

Total Water Consumption	Unit	Value	Consumption intensity (m <sup>3</sup> / million revenue)
Water	10,000 m3	158.4	18.52

#### • Packaging material management

As for the selection and procurement of packaging materials, ZTE Corporation adheres to promote green packaging schemes such as replacing wood with paper and wood with steel, and is committed to reduce transportation energy consumption and packaging resource consumption by means of reduced weight and compact volume.

In 2018, the consumption of packaging materials purchased by ZTE Corporation is approx. 17,756.13 tons (excluding terminal products).

#### Push suppliers to optimize packaging

In 2018, ZTE Corporation pushed its suppliers to use unpacking-free recyclable packaging materials for outside packaging of RRU products, and required that the conventional disposable cartons be replaced by pulp moulding pallets for delivery. These pulp molding pallets are made from pure paper and can be scraped and smashed into pulp for producing new pallets. This material can be reused, recycled and naturally degraded.

Thanks to this project, ZTE Corporation's Xili Production Base reduced the use of 179,597 disposable cartons in 2018. At the same time, this program also simplifies the suppliers' packaging process, minimizes the Company's manual unpacking and handling efforts and reduces the labor intensity of employees.

<sup>&</sup>lt;sup>24</sup>Scope of data: The data of greenhouse gas emissions is sourced from the Annual Carbon Audit Report and the statistics cover ZTE Corporation Shenzhen Science and Technology Park and Xili Production Base.

<sup>&</sup>lt;sup>25</sup>Scope of data: The statistics of water consumption cover ZTE Corporation Shenzhen Science and Technology Park, Xili Production Base, Heyuan Production Base and Changsha Production Base.

# 5 Making a Better Working Place

Talents are one of the three major cornerstones of ZTE Corporation, so we aim to build a healthy and safe talent supply chain by expanding recruitment channels, optimizing recruiting process, mobilizing full participation of staffs and promptly commending rewards to ensure our constant and steady talent introduction.



# 5.1 Our achievements in 2018

- Launched the "Leading Program" for new recruits from university;
- The results of a third-party survey showed that the employee engagement in ZTE reached 80%, which
  was in the scope of high performance employers.
- ZTE University trained 2,110,478 person-times each year;
- We issue the Vision of Health & Safety and update the Health & Safety Plan; further optimize the structure of Health & Safety Committee; improve the Company's health and safety management system by issuing the ZTE Corporation Health and Safety Policy.

## 5.2 Equality and inclusion

#### 5.2.1 Equal & open access to employment

Committed to cultivating outstanding talents, ZTE Corporation shall strictly abide by the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China and other national laws and regulations as well as overseas applicable laws and regulations and adhere to fair, impartial and open recruitment as well as legal and compliant employment.

The company has established a complete, standardized and effective talent selection & entry management system and formulated a range of internal management systems such as Management Procedures for Social Recruitment, Regulations on Operation Management for China Campus Recruitment and Guidelines of Compliance in Labor Employment, which stipulates that all the laborers, regardless of their race, nationality, country of citizenship, color, gender and religious beliefs, shall be treated equally and their rights to enjoy the equal employment by laws shall be safeguarded completely; any employment of child laborers shall be strictly prohibited by reviewing all the applicants' valid identities in each link including employee recruitment, entry approval and registration. Once any incompliance is found and verified, the recruitment will be terminated immediately; any forced labor shall not be allowed to ensure that each laborer is able to enjoy the rest days in accordance with laws and regulations and international practices. To ensure all business units of the company implement the labor compliance, the company has established a labor compliance risk prevention & control system globally to standardize the operation of labor employment process.

The company, based on its strategic development, has carried out the Blue Sword Program to cultivate its future leaders. The program has been performed since 2014, and each year a number of top graduates from different universities will be offered personalized training, equipped with business and career tutors and

provided with access to communication with experts at home and abroad after the inspection and interview of top experts and executives, with a goal of conveying the future leaders and senior management personnel for the company.

In 2018, to better cope with fiercer competitive commercial environment and meet with internal business demands, the company focused on its primary business and mainstream products and introduced a great number of excellent graduates and first-class talents in the industry to facilitate the implementation of its strategies.Meanwhile, we formed a compliance talent team via our internal and external recruitment channels, and strived to maintain our leading position in compliance culture, compliance training and compliance brand building, so as to further improve our compliance process design and response speed as well as ability to coincide with and guide business, aiming to provide a sound guarantee for the healthy and sustainable development of the company.As of December 31, 2018, ZTE Corporation has a total of 68,240 employees in the world, including 24% female employees, 38% R&D employees and 32% employees with master's degree or above.



In 2018, ZTE Corporation launched its "Leading Program" for new recruits from university. The employees were helped to learn about corporate culture and values prior to entry in order to strengthen their sense of identity and belonging to the company. Moreover, specific tutors were assigned to newly-recruited employees for regular communication and timely and necessary guidance and help. The company's online training courses are also accessible to new employees for accelerating their process of adapting to the job. Besides, the personnel service and care were improved to guarantee better entry experience of new employees.

#### New Employee Tutor System

The new employee tutor system is a significant approach and means to inherit the company's culture and improve new employees' abilities. The tutor system, committed to cultivating new employees, helps new employees adapt to their role changes and career life as soon as possible in terms of cultural inheritance, job instruction and life care, so as to make them qualified employees of ZTE. With the help of tutors, the employees will soon transform their roles and integrate into the company. In addition to improving their professional skills, they deliver the company's core values and grow into a true value contributor. They are colleagues and friends, not only masters and apprentices, but also partners for mutual growth.

"For newcomers in the workplace, the one-on-one tutoring provided by the company is the best way to help us soon adapt to our career life and grasp basic working skills."— ZTE newcomers in 2018

#### 5.2.2 Welfare & Remuneration

ZTE Corporation has been committed to providing favorable working atmosphere and welfare & remuneration for employees to increase their sense of belonging and happiness. The company keeps optimizing its employee welfare & remuneration system, providing all-round care for employees in health insurance, subsidy, work-life balance, learning & growth, life care and vacations to enhance employee satisfaction.



ZTE Corporation cares for female employees and has formulated the Regulations for Prenatal Rest Leave Management, which stipulates that the female employees may apply for "prenatal rest leave" since pregnancy and take continuous leave with maternity leave. In 2018, all female employees on prenatal rest leave were in-service, and the rework rate reached 100%.

For Chinese employees working overseas, the company provides them with a supplementary annual leave of up to 24 days in addition to the legal annual leave, as well as domestic and international round-trip tickets.

To actually meet employees' housing needs and achieve talent retention, the company has collected resources to build talent apartments in Shenzhen, Nanjing and Sanya, which are allocated to employees with excellent performances at a price far below the market rent. Currently, nearly 10,000 employees have been covered.

#### 5.2.3 Multi cultural integration

ZTE Corporation recruits its employees from all countries and regions around the world, so we fully respect the cultural diversity of other countries, encourage employees in different cultural backgrounds to communicate mutually, and take a series of measures to enhance their ability of making inter-cultural collaboration.

- We have optimized the problem feedback mechanism, launched the English version of "rational proposals" and performed problem closed-loop management;
- Our representative offices overseas also hold a range of cross-cultural activities, including culture salon, birthday party, major festivals and religious care.
- A communication system is built for regular communication with local employees;
- In culture learning, we provide overseas employees with cross-cultural training, language training, national customs case sharing and theme activities such as Overseas China Year.
- The company's Intranet Platform offers themed columns and a variety of online interactions such as different culture experience campaign each year.

Overseas China Year: an opportunity for overseas local employees to experience traditional Chinese culture.



China Year-India



China Year- Saudi Arabia

#### 5.2.4 Survey of employee engagement

Engagement generally reflects the degree to which employees contribute or commit to the company emotionally and intellectually. As one of the important channels for internal communication of ZTE Corporation, the company has entrusted Aon Hewitt, a third party professional institution, to independently conduct a survey of employee engagement for all employees since 2015. Through analyzing the employees' opinions, the survey aims to figure out problems and risks existing in the managing factors that affect employee engagement in the company, so that the management can make, improve and optimize related policies in a targeted way.

Based on the report released by Aon Hewitt, the result of ZTE Corporation engagement survey in 2018 showed: the employee engagement reached 80%, demonstrating a steady rising trend compared with previous years, and was in the scope of high performance employers, same as the Best Employer of Aon in China in 2018, and higher than the industry and market average.

# 5.3 Training and development

### 5.3.1 Systematic Training

To achieve a win-win goal between employee value and corporate value, the company has established its own corporate university – ZTE University, which will constantly improve the training system, enrich the learning platform and develop internal management approaches including employee training, teacher cultivation and knowledge management, in hope to provide sustained support for enhancing the ability and quality of employees.

In 2018, we trained talents from the following aspects: Learning Map & Curriculum System, Learning Technology Research & Practice, Lecturer Team Building, Training Management Team Building, Learning Policy Mechanism, Learning Operation, Quality Evaluation and Competence Center Maturity Assessment.ZTE University trained a total of 2,110,478 person-times annually, including 4,358 new trainees, totaling 96 sessions. With 6,940 teaching hours, the satisfaction rate reached 96.7 points.The training for female employees reached 502,508 person-times, accounting for 24%; the training for male employees reached 1,607,970 person-times, accounting for 76%, which corresponded to the ratio of male to female employees in the company.

Taking advantage of ZTE Corporation's technologies in ICT field, we have built a range of online learning platforms, like PC online learning, mobile learning APP and remote interactive smart classroom (live) for global employees. In 2018, there were 789 new courses accessible to PC, totaling 12,515 courses and the

number of students reached 447,334 person-times; there were 298 new courses open to APP, totaling up to 1,275 courses, and the number of students reached 290,469 person-times.

#### **ZTE Forum**

To better interpret the overall concept and key contents of the company's "three-stage" strategic route, we have organized four sessions of ZTE Forums themed "Executives' Talking on Strategies" to help the learning, publicity and implementation of all employees. It was the first time for 6,000+ employees from 112 venues globally to view online simultaneously, and the video course received over 32,000 intranet hits.



Furthermore, ZTE Corporation has extended its effective learning approaches to provide customized training courses for operators and partners, and conduct learning communication in the form of PC, APP and ZTE University online classroom, aiming to build a continuously connected value penetration network.

#### Numerous Awards for ZTE University

In 2018, ZTE University stood out from 200+ enterprises participating in the evaluation and ranked 8th in the "Top 50 Chinese Corporate Universities" sponsored by the Training magazine. The Leadership Program in R&D was awarded the "2018 Best Learning Program for Chinese Enterprises" by Shanghai Jiaotong University.



#### ZTE Corporation Knowledge Spreading

Since 2017, ZTE Corporation has launched a "ZTE Corporation Technologies" program to encourage employees to spread and share their knowledge and experience in the form of books. In 2018, such books as OpenStack CI/CD Principles & Practices by Zhang Jun et al and RADOS Design Principles & Implementation of Ceph by Xie Xingguo et al were published.



#### 5.3.2 Employee motivation & promotion

Since 2017, ZTE Corporation has proposed the cultural value orientation of "value contributor oriented".Every year ZTE Corporation commends the employees with outstanding contributions to motivate their enthusiasm and recognize their hard work.In 2018, a total of 11 employees were awarded with gold medal and 19 employees with silver medal; 124 employees were appraised as the Annual Pioneers of Struggle & Innovation, 32 employees were chosen as Outstanding Graduates and 30 employees were awarded as Gold and Silver Tutors.

ZTE Corporation has established several internal systems including Management Standards on Position Appointment of Employees, Standards on Performance Assessment for Key Technical Personnel Positions, Management Standards on Selection & Appointment of Management Cadres, and Measures for Establishing Management Posts for Management Cadres to specify the evaluation criteria for different promotion approaches and provide fair promotional opportunities for all employees.

ZTE Corporation will furnish employees with a diversified career development pathway, to enable excellent employees to stand out in their appropriate development ways:

- Professional way: dedicated to training technical and business experts, chief experts in specific technical fields or experts in business fields;
- Management way: cultivating team leaders to middle-level management cadres, and eventually to senior executives of the company or competent managers via a perfect cadre selection & training system.
- Project management way: engaged in project management, principally marketing and R&D project management. We also encourage employees to develop in the project which can help them get promotion soon.

#### 5.3.3 Unhindered performance communication

ZTE Corporation has created an all-round performance communication system to promote employees' career development and motivate their working enthusiasm. The company organizes employees to make performance plans every half year, requiring adequate communication between employees and department managers, so as to specify performance objectives and evaluation rules within performance-appraisal cycle. After the performance plan is made, the employees advance the work on a monthly basis and determine the monthly performance evaluation results via sufficient communication with department managers. The department managers shall conduct performance interview with employees every half year, determine employees' comprehensive performance evaluation results within this half-year appraisal period, and make a new performance plan of the next appraisal cycle with employees based on such results, to ensure that all employees have a clear direction of career development and to avoid the impact of inadequate communication on employee career development. All communication records are archived on the company's personnel online system. If there is any disagreement with the results of the monthly or half-year comprehensive performance evaluation, employees may apply for arbitration to the human resources department within the stipulated time.

### 5.4 Safety and caring

#### 5.4.1 Health & safety oriented

Adhering to the "people-oriented" business philosophy and targeting zero accident in health & safety, ZTE Corporation has constantly improved the organizational structure of health & safety management as well as the process and management standards, and strengthened accident warning, evaluation and accountability, to create a safe and healthy culture atmosphere, minimize safety risks and protect employees' health and safety.

• Establishment of future vision

In December 2018, ZTE Corporation released its first health & safety vision and planning, which defined its phased health & safety development planning and goals from 2020 to 2030.

ZTE Corporation Health & Safety Vision: ZTE endeavors to create the health and safety culture with "Love and Responsibility", which is to produce a sustainable health and safety environment through "love ties & mission of responsibility". We cooperate with customer and partner to continuously improve our health and safety concept with level of management, which is to set benchmark and create social value.



• Optimization of organizational structure

To better integrate the health and safety management into the Company's structure, operation and positions, in 2018, ZTE Corporation reappointed the members of Health & Safety Committee on the basis of the original management structure, nominating the Executive Vice President as the Director of the Committee, and the Director of Human Resources Department as the Chief Health & Safety Officer, to fully integrate the health & safety work into each unit and daily routine. Based on the management principle of "person + territory", we will gradually realize the end-to-end and integrated management of health & safety work from HQ to each business unit, so as to systematically strengthen the operation of health & safety management system.

• Improvement of system construction

In 2018, the company updated ZTE Corporation Health & Safety Policy: perfecting the employee health & safety system to establish and maintain healthy and safe working procedures and environment; eliminating the potential safety hazards of products and services by means of safe design, production, delivery and operation & maintenance to guarantee the safety & health of products and services provided to customers; conveying clear requirements on health & safety to our partners and continuously improving their management on health & safety in the process of certification, procurement and execution.By the end of 2018, the company has built a health & safety management system covering all-business process and major global branches, and obtained OHSAS18001 certification in 12 countries throughout the year.

• Strengthening of capacity building

Capacity building is the basis of effectively implementing health & safety management. In 2018, the company invited the Nanshan District Administration of Work Safety in Shenzhen to conduct health & safety training for all senior managers, including the President. All health & safety management personnel in business department were required to attend the training and obtain the health & safety skill certification. Besides, the company prepared and released health & safety training materials and case sets, aiming to guide employees and partners to behave healthily and safely by virtue of vivid cases.

All employees	Professional employees	Management Personnel	Senior Managers
• All employees shall be trained for basic knowledge on health & safety, including Nine absolute rules, ZTE Health & Safety Require- ments and Health & Safety Awareness, and take exams from time to time.	<ul> <li>Personnel in special posts shall obtain professional qualifications or be trained by professional organizations.</li> <li>Relevant personnel of partners shall be employed with certifi- cates.</li> </ul>	<ul> <li>The health &amp; safety training shall be carried out regularly.</li> <li>The health &amp; safety skill certification is required.</li> </ul>	•The health & safety training shall be carried out regularly.

• Implementation of Safety Operation

**Safety Inspection:** according to the Notice of Enhancing Employees' Health and Safety released by the company, the company leaders and management cadres at all levels are required to conduct spot check of health & safety in key areas under their jurisdiction, release inspection reports for continuous improvement and clearly specify the key content of spot check, so as to make the health & safety inspection an important way to find hidden dangers and propose improvement. Through leadership, the company will promote its ability to guarantee the safety production and effectively maintain employees' safety and health.

**Emergency Response:** the company has revised and released the Emergency Preparedness and Response Procedures to clearly clarify the principles and procedures of emergency response, emergency level and responsibilities of departments. Through the renewal of the Emergency Plan for Acute Infectious Diseases, Contingency Plan for Terrorist Attacks and Emergency Plan for Natural Disasters, we aim to improve the company's ability for quick emergency response as well as ability for emergency treatment and coordination by perfecting the emergency plans and strengthening the emergency drilling.

**Monthly Report:** since 2018, the company's Health & Safety Management Committee has been sending the monthly report of health & safety Dashboard based on big data to all the management personnel, making detailed analysis of the types, quantity, distribution and lost working hours of health & safety incidents every month to fully reflect the current situation of health & safety management with data.

**Information Management:** the company has been building a IT platform management system to take the health information system as an important supplementary means for health & safety process control. By doing this, we can provide auxiliary support for our employees, suppliers and partners. It is a full chain health & safety management system, covering health & safety documents and data management, event management, project management and outsourcing business management, aiming to realize the visualization, analyzability, traceability and controllability of health & safety management.

• Raising of awareness

ZTE Corporation has been strengthening its publicity and training on health & safety for all employees, spreading health & safety culture and creating a good health & safety environment. In 2018, in addition to production safety month activity, the company organized a Health & Safety Forum for the first time, conducted Health & Safety Model selection and held the "Health & Safety Cup" contest themed "Life First, Safety Development" in several cities such as Shenzhen, Heyuan and Xi'an, involving a total of 14,167 participants.

#### ZTE held a health & safety forum for the first time

On April 12, 2018, ZTE held the first Health & Safety Forum in Shenzhen themed "Health & Safety, Cooperation & Co-construction". The Nanshan District Administration of Work Safety in Shenzhen, together with 10+ ZTE partners, discussed the topic of corporate health & safety on the forum. ZTE Corporation shared its achievements in health & safety with its partners, in hope to jointly improve the health & safety management in communication and create greater value for society.



#### 5.4.2 Work-life Balance

In addition to creating business value, ZTE Corporation is concerned with whether employees can obtain happiness and satisfaction in their life. The company has carried out a range of activities for enhancing cohesion in various forms and contents, advocating healthy life to enrich their spiritual world, making employees enjoy their work and life better, and enhancing their happiness in an all-round way.

• Exercise is a Health Plus

The company has been creating a health culture, taking "Doing Exercise in ZTE" as the platform to organize various activities regularly every year. In team sports, we can strengthen team cooperation, build and inherit the company culture while building our bodies.

• The Association Makes Great Life

The company has organized several associations, such as Tennis Association, Swimming Association, Singing Association and Yoga Association, to encourage the active participation of employees. Employees are free to join the association they are interested in to build a healthy body and show their own style.

• Care for Mental Health

The company has been providing Employee Assistance Program (EAP) to help employees relieve mental pressure and improve psychological quality. In 2018, the company upgraded its service modes for providing superior psychological counseling and supporting services by combining online and offline ways such as introducing the online reserving platform, organizing online courses and conducting road shows, in hope to offer employees more convenient and better experience, and make EAP accessible to every employee via multiple channels.

#### **Employee Assistance Program (EAP)**

Employee Assistance Program (EAP) is a long-term benefit offered by ZTE Corporation to its employees. In 2008, the company introduced the EAP project in an internal + external operation mode, to provide services including psychological counseling, mental health knowledge popularization, training and crisis intervention for employees and their immediate family members.

# 6 Building Responsible Supply Chain

ZTE Corporation knows very well that the sustainable development of enterprises is inseparable from the support and response of supply chain. In 2018, ZTE further built (safe, precise, intelligent, reliable and efficient) SPIRE supply chain, and fully strengthened cooperation with the value chain in environmental protection, disputed resources, labor protection and other aspects.

The UN Sustainable Development Goals involved in this chapter:



# 6.1 Our achievements in 2018

- In 2018, ZTE Corporation signed 77 new CSR Agreements for Suppliers, and conducted on-thespot audit on 141 risk suppliers confirmed by the company's internal review, and the audit covered 100%.
- In 2018, ZTE Corporation took an active part in revising the CSR International Standard IPC1401—
   Supply Chain Social Responsibility Management System Guide.

# 6.2 Cooperating in supply chain

ZTE Corporation has incorporated the whole supply chain into its own Corporate Social Responsibility management, established the CSR management system for suppliers, set up the CSR management team for suppliers, issued the CSR Management Standard for Suppliers, and carried out strict control in all stages of supplier management.

- In the stage of introduction and certification, CSR has a veto power as a key threshold. In the stage of introduction, the supplier is required to sign the CSR Agreements for Suppliers and Supplier Commitment Letter of Transparent Cooperation and to be implemented CSR certification audit. In 2018, the company signed 77 new CSR Agreements for Suppliers, and 8 suppliers were not introduced for their failure to pass the CSR audit.
- In the stage of process management, the suppliers are conducted CSR training, supervision and verification. In 2018, more than 70 suppliers participated in the training, and 141 suppliers were conducted on-the-spot audit.
- In the stage of disqualification, for suppliers that violate CSR management requirements, the company limits or even cancels their cooperation qualification according to the severity of the problem and their willingness to cooperate for improvement.

In addition, any organization or individual who find that the company's suppliers are suspected of violation can report to the company through internal control audit channel (complaint email: audit@zte.com.cn. and complaint phone: 0755-26771199) or procurement inspection report channel (complaint email: pma@zte.com.cn and complaint phone: 0755-26771520).

#### The Opening of ZTE Global Partners' Day

On December 7, 2018, the company held the annual **Global Partners' Day**, inviting more than 200 strategic and core suppliers from all over the world to conduct in-depth discussions on the development and collaboration of the industrial chain in the 5G era, as well as strategic cooperation, supply security, compliant construction, etc., and the company's top management conveyed CSR requirements to the representatives of suppliers.

At the conference, the company presented six awards, including the "Global Best Partner", "Best Technology Innovation Award", "Best Quality Performance Award", "Best Comprehensive Performance Award", "Best Service Support Award" and "Best Delivery Support Award", to 98 suppliers.



#### Participation in JAC Academy and Improvement of CSR Management Ability of Supply Chain

JAC (Joint Audit Cooperation) is a CSR joint audit organization formed by telecom operators. Currently, its members include Orange, Vodafone, Telenor, AT&T, etc. JAC has developed a complete set of CSR audit standards and methods to share CSR audit results of suppliers within the JAC organization. In order to improve the CSR management and control ability of telecom equipment manufacturers and their subsuppliers, JAC implemented JAC Academy project in a pilot in early 2018.

ZTE Corporation selected two senior CSR experts to participate in the JAC Academy project. After five days of JAC Academy classroom training, the participants organized internal summary and in-depth sharing. JAC Academy textbooks were used to train internal auditors. A total of nearly 30 auditors were trained, 10 of whom received JAC CSR training.

At the 8th JAC Forum held in January 2019, ZTE Corporation's Xili facility and Xi 'an terminal factory, as well as three Tier One and Tier Two suppliers, won the JAC Award.



#### 6.2.1 Focus on Labor's Right

ZTE Corporation attaches great importance to the labor management of suppliers. It clearly stipulates the human rights and labor standards that the suppliers need to comply with according to ZTE Supplier Code of Conduct, and reviews the labor conditions of the suppliers in the regular CSR audit.

#### Labor management standard of the ZTE Supplier Code of Conduct mainly include the following:

- Human rights: Suppliers shall respect the human rights recognized on an international basis, and shall not infringe upon these rights in any form. Suppliers shall respect the personal dignity, privacy, and basic rights of each employee.
- Child labor and juvenile employee: Suppliers shall not employ or use children for work, nor employ any persons below the minimum legal age of employment. Suppliers shall guarantee that juvenile employees below 18 years old will not be involved in hazardous work.
- Forced labor: Suppliers shall not use cruel torture, forced labor, bonded labor, bondage, human trafficking, or sexual violence. Suppliers shall guarantee that employees are employed on the basis of free will.
- Freedom of association: Suppliers shall respect the right of employees to freedom of joining or not joining the trade union or similar organization and to collective bargaining as permitted by applicable laws.
- Discrimination and punishment: Suppliers shall not directly or indirectly be involved in or support discrimination in any form in employment, salaries, training opportunities, promotion, dismissal, retirement, or decision-making on the basis of race, color, age, veteran status, gender, sexual orientation, pregnancy, language, ethnic origin, disability, religion, political status, social group membership, trade union membership, nationality, indigenous origin, medical status, AIDS, social status, property, blood lineage, marital status, and association membership.
- Hours of Work: Suppliers shall ensure that employees do not work for excessively long time, and the hours of work shall at least meet the applicable laws and regulations of the country or area where the suppliers operate. Suppliers shall respect the right of employees to rest.
- Salary and Compensation: Suppliers shall pay a compensation at least satisfying the minimum wage standard stipulated by the applicable laws and regulations of the country or area where the suppliers operate.
- Health and safety: Suppliers shall provide a safe and healthy workplace to their employees, contractors, partners or other persons who may subject to their activities in accordance with international standards and national laws.

#### 6.2.2 Supervision and Environmental Protection Level

ZTE Corporation has formulated internal policies such as Environmental Protection Materials Inspection Instruction, Methods for the Measurement of Concentration of Hazardous Substances Prohibited and Restricted, Environmental Risk Decision Criteria and Recognition Guidance for Incoming Materials and Measures for Risk Assessment and Management of Suppliers' Green Environmental Protection, and fully and effectively supervised the environmental protection level of the suppliers and the environmental protection standard of supply.

• Environmental Protection Commitment and Training

ZTE Corporation requires all suppliers to sign Supply Agreement and Suppliers Green Product (GP) Declaration, comply with environmental protection law and regulation and ZTE's environmental protection

requirements, and bear corresponding violation responsibility.ZTE Corporation continues to train suppliers on environmental protection law and regulation, including regular training and special supplier exchange meetings for suppliers.

• Environmental Risk Control

ZTE Corporation will measure the concentration of hazardous substances for the incoming materials according to the international standard and manage the source well.ZTE uses the method of "material risk grade multiplied by supplier risk grade" to form the risk grade matrix and adopts different detection frequency for the suppliers with different risk grade.

### 6.3 Enhancing conflict minerals management

Conflict minerals<sup>26</sup>include Sn, W, Ta and Au, which are widely used in all kinds of electronic products including communication equipment. ZTE Corporation has a responsibility to ensure that its own metal materials are not sourced from the conflict area.

#### 6.3.1 Upgrade of Management System

In 2018, ZTE Corporation continued to upgrade its conflict minerals management system from three aspects, namely, management structure, management breadth and management depth, and carried out relevant work on conflict minerals according to RMI <sup>27</sup>requirements and met the requirements of green flag.

**Management structure**: ZTE has defined the promotion model of conflict minerals management and the responsibilities of various departments in conflict minerals management through "Standards for the Management of Conflict Minerals", and set up a conflict minerals management organization, with the company's vice president as the conflict mineral management representative to comprehensively manage the conflict minerals management system and supply chain.

**Management breadth**: ZTE Corporation has expanded the scope of conflict minerals management. Up to now, all raw materials of ZTE products have been incorporated into the conflict minerals management system, and the responsibilities have been fully fulfilled.

**Management depth**: In addition to conflict minerals, ZTE Corporation has added management requirements for cobalt (Co) elements to battery suppliers since 2018, signed a Declaration of Metal Conflict-Free (Cobalt included) element into the existing conflict minerals management system.

#### **6.3.2 Strengthening Constraints on Suppliers**

ZTE Corporation has formulated a Conflict-free Mineral Survey Work Instruction, which guides how to track, survey and implement conflict minerals. The company requires all suppliers to sign Declaration of Metal Conflict-Free and to respond to Supplier Communication Letter of .According to the supplier's reply, the company evaluates the conflict minerals management attributes: black, red, yellow and green. New suppliers must meet the green flag requirement. The existing non-green-flag suppliers are constrained by the Production Materials Supplier Sourcing Work Instruction to promote suppliers to improve their own mineral tracking system. The company will impose corresponding punitive measures on the suppliers who

<sup>&</sup>lt;sup>26</sup>As defined by the USA Dodd-Frank Act and European commission, conflict minerals (CM) refer to Sn, W, Ta and Au originating in the Democratic Republic of the Congo and its surrounding countries, and the sale of these minerals could provide financial support for the ongoing armed conflict in those countries.

<sup>&</sup>lt;sup>27</sup> RMI: Responsible Minerals Initiative

refuse to improve or are reluctant to improve, including but not limited to, reducing the share of procurement and disqualification of suppliers.

# 6.4 Collaborating for a win-win future

In 2018, Collaborating for a win-win future actively carried out exchanges and cooperation with the industry and all sectors of society, seized strategic opportunity, explored industry focus such as 5G, Internet of Things, etc., and sought the breakthrough points of industry barrier, so as to create more possibilities for the industry and contribute to the sustainable development of the industry in many ways.

#### 6.4.1 Participation in Standard Setting

In 2018, ZTE Corporation deeply participated in the establishment of relevant industry standards and the discussion and preparation of relevant standards, contributed the company's understanding of the industry and industry practice, and worked with industry colleagues to promote sustainable, efficient and normative development of the industry.

# ZTE Corporation works with Industry Partners to Release the First NB-IoT-based Shared Air Conditioning Standard

In 2018, together with Haier Air-Conditioning, China Standardization Research Institute, China Telecom Shanghai Research Institute, China Recycling Economy Association, China Standard Energy Efficiency Science and Technology (Beijing) Co., Ltd. and other members of ecological alliance for shared home appliances, ZTE Corporation issued the first NB-IoT-based shared air conditioning standard in the era of the Internet of Things in Shanghai.After the implementation of the standard, it will effectively regulate the market development of air equipment such as shared air conditioners and purifiers, ensure users' experience of shared air conditioners, fill in the gaps in the industry, and lay a foundation for large-scale deployment of new business in the field of shared home appliances.



#### ZTE Corporation Promotes the Formulation of 5G Network Security Specification

At the 92nd meeting of 3GPP SA3# in 2018, as the editor of NEF network function specification, ZTE Corporation promoted the research and development of a series of 5G network security assurance specifications together with 3GPP partners. This specification is used to ensure that the product conforms to the security standard defined by 3GPP, and to give test guidance on whether the product launch and operation meets the safety requirement. It is a prerequisite for the product to launch and operate, and it meets the safe operation requirements of 5G network.

ZTE Corporation has always been actively involved in 5G security-related standard work, and will take this as an opportunity to work with the industry to build a reliable and safe 5G network public

infrastructure for global users and to further promote the safe and reliable operation of 5G network products, in order to achieve the goal of building a more secure and reliable 5G new network.

#### ZTE Corporation Helps the Publication of DevOps Standard and Is Awarded Standard Working Group Member

In 2018, at the DevOps international summit (DOIS) in Shenzhen, the DevOps standard working group released Part 9 of the DevOps standard—systems and tools, which is another landmark event after the release of the world's first DevOps "R & D and Operation Integration (DevOps) Capability Maturity Model" standard at the Beijing summit. The summit approved ZTE Corporation as the first member unit of the DevOps standard working group. As a representative of ZTE Corporation, the experts preparing ZTE DevOps standard participated in the awarding ceremony.

As one of the first unit to participate in the DevOps standard, ZTE Corporation's research and development cloud development tool chain product team (CloudStudio Aurora) has been deeply involved in the preparation of this standard. In this standard-setting process, many senior experts from ZTE Corporation participated in the discussion and preparation of core chapters such as agile development, continuous delivery, systems and tools, and served as a team leader of the standard test team in the drafting of Part 9——systems and tools of the DevOps standard, contributed ZTE Corporation's deep understanding, expertise and first-line best practices in the large-scale research and development for DevOps, and worked with other organizations to promote the smooth release of DevOps standard.



#### 6.4.2 Promotion of Exchange and Cooperation

In 2018, ZTE Corporation actively participated in domestic and foreign industry communication, and was active in various industry communication and cooperation with an innovative, responsible and positive corporate image, continued to pay attention to industry trend, actively grasped the opportunities of strategic cooperation, and achieved coordinated development with the industry.

# ZTE Corporation partner conference was held in 2018: creating a win-win situation in the industry by OpenEco

ZTE Corporation partner conference kicked off in Xi 'an on March 28 and 29, 2018. More than 1,000 strategic channel partners and ecosphere partners from all over the country gathered together to share the newest practices of digital transformation of the industry with the "cloud network ecology and digital future" as the theme. At the same time, ZTE Corporation issued CloudLab to further consolidate the open platform and helped partners to realize the transformation of the digital economy.



# 7 Making Change in Communities

ZTE Corporation understands the meaning of "When Drinking Water, Think of Its Source", and has always devoted itself to public welfare, sharing warmth with the community, and sharing development achievement with society.

In 2018, ZTE Foundation continued to improve the system construction of the Foundation and insisted on more standardized, warm, and responsible public welfare. Throughout the year, the company revised 12 business operation and internal management systems of the Foundation, and issued a new "External Donation Management Process" and achieved inter-departmental cooperation of legal affairs, compliance, finance, etc.. The Foundation has been adhering to the basic purpose of "advocating public spirit, fulfilling corporate responsibility and promoting the development of public welfare". In 2018, the Foundation focused on "educational poverty alleviation, poverty relief by medical treatment, aiding the disadvantaged" to carry out public welfare activities, and spread warmth around the world through our operational network.

The UN Sustainable Development Goals involved in this chapter:



# 7.1 Our achievements in 2018

- ZTE Foundation was recognized as a "charitable organization" by the Ministry of Civil Affairs, and won full score of the China Foundation Transparency Index (FTI) (tied for first place in the country). Lianai Project, the funded key project, won "the 4th Pengcheng Charity Award" and the "Silver Award in China Public Charity Project Competition in 2018".
- In 2018, ZTE Foundation spent a total of RMB 6,038,142.50 yuan on public welfare for the whole year, implemented 8 public welfare projects, and organized 97 all kinds of public welfare activities.

Category	Unit	Value
Contribution of funds	Yuan	5,689,740
Value of donated items	Yuan	348,402.5 0
Number of volunteers	Number	507
Voluntary hours	Hour	1,971

#### Data of ZTE Foundation in 2018

## 7.2 Education

Knowledge changes fate. Educational poverty alleviation has long been one of the key work of ZTE Foundation. In 2018, we carried out Xinghua education assistance project, blue reading public education assistance project for rural children, "Love 100" education assistance project in Shanxi, and brought love to poor areas, so that more children in poor areas can read and learn.

#### Xinghua education assistance project

In August 2016, ZTE Foundation and Gansu Xinghua Youth Education Assistance Foundation signed a donation agreement. In the spirit of "cherishing opportunities and sincere cooperation", ZTE Foundation would donate RMB 15 million yuan to Xinghua education assistance, and would donate RMB 3 million yuan every year for five years in a row to help students from poor families better complete their studies.

In 2018, the Foundation donated RMB 3 million yuan to Xinghua education assistance project. In April and October; we went to Gansu and Qinghai with Gansu Xinghua Youth Education Assistance Foundation to carry out activity to assist the impoverished students. In August, we organized staff volunteers to participate in the selection of aided college students. From 2016 to 2018, the Foundation funded1, 852 poor high school students and 156 college students studying in the west.

# The "story of communication" is carried out in the science popularization class by the project for the first time.

In October 2018, the Foundation carried out a Xinghua education assistance visiting activity, and carried out the "story of communication" in the science popularization class for the first time. In the activity, managerial cadre volunteers from Lhasa and Xi 'an reviewed the history of communication, explained the development of communication in a simple, popular and vivid way, and looked forward to the future of the Internet of Everything with students.

Participant's comments:

"It is my honor to share with children in every school the "story of communication" in the science popularization lecture, and tell about the story about the development of communication network and smart phone. Although it is only an hour of sharing and communication, it seems to open the door for high school students to know and love science. The questions they raised are no longer limited to mobile phones or the functions of games and videos, but they are eager to master more scientific principles through further study and effort, so as to lay a solid knowledge foundation for the digital flood era in the future."



ZTE volunteers planned science popularization classes independently

"ZTE Corporation suffered a serious crisis in the first half year, and enterprise production was suspended. In such an extremely difficult period, ZTE Corporation kept promise to overcome difficulties and did its best to help students from poor families. At the beginning of the new school year, ZTE Corporation donated RMB 3 million yuan as planned and adhered to the principle of "cherishing opportunities and sincere cooperation" with its action, which profoundly interpreted the connotation of "Xinghua"."

-Gansu Xinghua Youth Education Assistance Foundation, Mr. Bai

#### **Blue reading project**

From January to April 2018, ZTE Foundation and Fujian Person-in-Charge Action Education Foundation continued to promote the construction of "book corner in each class" in Lingyuan city, Liaoning province, donated a total of 344 book corners to 53 primary schools, and donated 24,080 graded books. The project directly benefited 10,312 students. Taking the construction of Lingyuan book corner as a pilot, we tried to open the cooperation mode of book corner donation and construction, realizing 1:1 capital ratio with the local education bureau, so as to provide reference for the implementation of national projects.

#### "Love 100" public welfare education assistance project in Shanxi

In October 2018, ZTE Foundation donated RMB 100,000 yuan in cash to Shanxi Youth Development Foundation to fund poor students of good character and scholarship who were admitted to universities in 2018, with an average of RMB 5,000 yuan per person.

## 7.3 Health care

Medical treatment and health are important issues for everyone, and ZTE Foundation has been actively involved in the important area.

#### "Lianai Project"------ integrated childhood cancer control project

"Lianai Project" was officially launched in December 2017. ZTE Foundation donated RMB 950,000 yuan to Shenzhen Henghui Children's Charity Foundation for comprehensive control of childhood leukemia in 2018, including "health technology assessment", "excellent medical center", "cancer social work center" and "supplementary fund for charity medical insurance". In November 2018, we donated another RMB 2 million yuan to support the work of the health technology assessment center. In 2018, Lianai Project achieved encouraging results.

- Health technology assessment: In the project, two drugs for childhood leukemia and reimbursement policy of Heyuan charity medical insurance supplementary fund for Lianai Project were evaluated.
- Excellent medical work: With the support of Lianai Project excellent medical center, children's blood group was established by Guangdong Heyuan People's Hospital, which made the treatment of children leukemia in Heyuan possible.During the investigation in Qinghai, the backbone of the children's hematology department who was about to resign was retained in the Lianai Project, and a systematic excellent medical work plan in Qinghai formed gradually during the one-year investigation.
- Tumor social workers: In 2018, RMB 2.37 million yuan for 76 families with leukemia was reimbursed in the Lian Project, which greatly reduced the burden on families with poor children with leukemia. The local tumor social workers in Heyuan and Qinghai came on a visit to the houses of patients and their family members to provide them support services such as medical information consultation, psychological guidance, etc., and saved three children who were about to abandon treatment in the project.

In future, we will further pool resources, expand pilot area and expand to more diseases, so as to explore regular solutions to the social problem of "poverty caused by diseases" through public welfare

experiments.We look forward to "joint love", so that "poverty caused by diseases" disappears from modern China.

Participant's comments:

"From January to June, 2018, funded by "Lianai Project", I went to Sun Yat-Sen Memorial Hospital, Sun Yat-Sen University for specialized study of children's hematologic tumor, systematically and deeply studied the diagnosis and treatment methods of children's hematologic tumor, and realized the importance of standardized pediatric hematology department for improving the cure rate. This study plays an important role in promoting the establishment of children's blood group in our hospital, and fills the gap in the treatment ability of leukemia in children in Heyuan. In future, children patients in Heyuan can be treated in local, which will reduce the economic burden on the families with child patient who seek medical treatment in other places."

----Children's blood group, Heyuan People's Hospital, Doctor Yu

#### Funding project for rare diseases

ZTE Foundation has been actively funding the treatment of rare diseases in poor children since 2013.In 2018, we further expanded the scope of rare disease funding, and changed refractory nephropathy syndrome into refractory nephropathy, so that children with non-nephrotic syndrome can receive timely help. This year, the Foundation totally funded eight poor or orphan children patients, including three children with kidney disease and five children with primary immunodeficiency diseases. At the same time, we also optimized the use efficiency of funds, accelerated the progress of administrative examination and approval, regularly paid a return visit to the aided persons together with the hospital, and actively managed the information files of the aided persons.

#### **ZTE Corporation**·Vcare Space Project

In 2014, "Shenzhen Children's Hospital ·Vcare Public Welfare Space", sponsored by Shenzhen Care Action Organization Committee Office and Shenzhen Children's Hospital and funded by ZTE Foundation, was officially opened. As the country's first commonweal information port and public service experience space of medical assistance for children with the hospital as the carrier, "Shenzhen Children's Hospital ·Vcare Public Welfare Space" will be committed to innovation of modern children's medical service mode, building a public information platform for the help and treatment of poor children patients, providing public benefit activities and services with interactive experience, creating a caring warm atmosphere, spreading a friendly good idea, so that the public welfare space becomes a vivid carrier to carry forward core values.

Since the establishment of Vcare space, ZTE Corporation employees have been actively participating in regular volunteer services in the space. In 2018, ZTE Foundation built the Vcare space into a regular staff volunteer service platform. Every weekend, employees and their families from Shenzhen regularly come to the space to deeply participate in the planning and implementation of public welfare activities, including 42 activities independently planned by employees and 505 hours of volunteer service. In addition, the space is open for 293 days a year, serving more than 6,000 families.



Participant's comments:

"In all the ten spaces, Vcare space has the professional self-planning, the highest frequency of staff volunteer service and the best activity effect."

-----Representative of the activity initiators, Ms. Chen

#### Ward school project

From April 2018, ZTE Foundation has carried out ZTE science popularization class activities in ward schools across the country together with Beijing New Sunshine Charity Foundation.Now it has become an important channel for employees to participate in public welfare activities. At present, employees from Beijing, Shanghai, Shenzhen, Xi 'an, Zhengzhou, Jinan and other places participate in the project, and fixed volunteer service time, place and activity frequency have formed.



Participant's comments:

I've been trying to make a negligible contribution to social and public welfare undertakings, but what worries me is that I am not professional, patient and careful enough.Later, I slowly learn that love and protection do not need process and skill, only need to have a hot heart! This public welfare activity will be the beginning of my participation in public welfare activities in the future.

—Activity volunteer, Ms. Meng

## 7.4 Caring for veterans

ZTE hopes to rely upon its own power to make the vulnerable groups living in this society feel the warmth from us.

#### The project of caring for veterans of the World War II in west Yunnan

The year 2018 is ZTE Corporation's 13th year of caring for veterans of the World War II in west Yunnan.Over the past 13 years, we have visited the living veterans every year as scheduled to pay our respects to the former anti-war heroes. We have donated a total of RMB 5.6 million yuan and visited 1,903 veterans, among which, RMB 2.669 million yuan was voluntarily donated by the staff and nearly 200 volunteers visited in person.From October 13 to October 22, ZTE Foundation organized a team of staff volunteers to Baoshan, Yunnan. Supported and accompanied by the United Front Work Department of the city and county, they went to more than 40 villages and towns in five cities and counties, namely, Longyang, Tengchong, Longling, Shidian and Changning, to visit and comfort 51 veterans, and delivered the goods and consolation money to the veterans with their own hands.Among the 51 veterans, the youngest is 87 years old and the oldest is 102 years old.



Participant's comments:

"They are the history. I do not want the history to disappear, and hope that the old people can take care of themselves and live a healthy life."

——Activity volunteer, Mr. Yang

"ZTE Corporation comes at the appointed time every year, and it is really dearer than a dear for the elderly. Your visit is a visit from relatives! They're so happy!"

-United Front Work Department of Changning County, Ms. Chen

# 7.5 Global caring

Since its establishment, Global caring has been adhering to the concept of "Global Success and Local Wisdom", and established the corporate culture and tradition of fulfilling corporate social responsibility and striving to give back to the community. We carry out localization construction according to the development and cultural environment of different countries where we operate. We are committed to becoming part of our community and being recognized by the local people.



#### ZTE Corporation's global caring

Ethiopia: In August, the fifth tree planting activity was successfully completed in the capital Addis Ababa and a total of 1,000 saplings were planted this time.

Saudi Arabia: In December, we organized a garbage clearing public benefit activity in famous desert safari scenic spot, namely, "Let's all go to the beautiful Saudi Arabia", practiced the concept of "green and environmental protection" in person and made contributions to the beautiful Saudi Arabia.

South Africa:

- We assisted the Women and Children's Center, Cape Town, South Africa in the preparation of the multimedia center, and provided IT hardware equipment such as computers and routers, as well as the interior decoration with clear style.
- Witwatersrand University is one of famous universities in South Africa.In order to encourage the local students to master IT and correspondence skills independently, we provided financial aid to 5 freshmen on campus, covering their tuition fee, books fee, lodging fee, etc., and endowed scholarships to students excellent in character and learning.

Brazil: In June, in order to encourage people to share their idle warm clothes, we held the 2018 winter clothing donation activity to pass warmth to more people.

Uganda: In May, ZTE Corporation and the 18th batch of medical team 5) assisted by China to Uganda held a charity clinic and condolence activity in the poor area of Kabeca, Nakasaiki, central Uganda, to help the local people to solve the difficulty of getting medical service, and donated anti-mosquito products and health care appliance to the local people. On that day, about 500 people received charity clinics.

Indonesia: In September, Indonesia was hit by a 7.5 magnitude earthquake. ZTE Corporation launched the emergency response mechanism after the catastrophe and made every effort to repair communication network without delay. ZTE Corporation made every effort for the earthquake relief, donated disaster relief materials and participated in the donation to help the people in disaster areas overcome difficulties.

Belarus: ZTE Corporation actively supports assistance to children suffering from cancer in SOS Children's Village, BoroFrionni, Belarus. In early March, some staff representatives went to SOS Children's Village to celebrate the traditional Chinese Lantern Festival with local people.



Mexico: From October to November, we visited children in local welfare house during the Three Kings Day and delivered gifts to them.

Japan: In July, affected by plum rain and typhoon, western Japan suffered the worst floods disaster during the Heisei era.ZTE Corporation sent a volunteer team to the disaster area to participate in the relief work.



Spain: In May, ZTE Corporation and ADECCO Foundation jointly held a charity running activity for the disabled, and more than 150 people from all walks of life took part in the long-distance running activity.

# **Appendix I: Sustainability Performance and Reporting**

# **Policy List**

category	Laws and regulations observed <sup>28</sup>	ZTE Corporation internal policies
A1. Emissions	Environmental Protection Law of the People's Republic of China Law of the People's Republic of China on Prevention and Control of Environment Pollution Caused by Solid Wastes Law of the People's Republic of China on the Prevention and Control of Water Pollution Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution Directory of National Hazardous Wastes Air Pollution Emission Limits Discharge Limits of Water Pollutants Standard for Pollution Control of General Industrial Solid Waste Storage and Disposal Sites Standard for Pollution Control on Hazardous Waste Storage Regulations of Guangdong Province on Prevention and Control of Environmental Pollution by Solid Waste	Procedures for Control of Atmospheric Pollution Procedures for Control of Water Pollution Specifications for Waste Management
A2. Use of resources	Energy Conservation Law of the People's Republic of China	Energy Saving Management Measures
A3. Environment and natural resources	Energy Conservation Law of the People's Republic of China Environmental Protection Law of the People's Republic of China Emission Standard for Industrial Enterprises Noise at Boundary	Procedures for Prevention and Control of Noises
B1. Employment	Labor Law of the People's Republic of China Labor Contract 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 Laborers	Management Procedures for Social Recruitment Regulations on Operation Management for China Campus Recruitment Guidelines of Compliance in Labor

<sup>&</sup>lt;sup>28</sup> ZTE Corporation complies with all applicable laws and regulations. The laws and regulations of mainland China that ZTE Corporation mainly obeys are listed in the following lists.

category	Laws and regulations observed <sup>28</sup>	ZTE Corporation internal policies
	Social Security Law of the People's Republic of China Special Protection Provisions for Juvenile Workers Provisions of the Decree No. 364 of the State Council of the People's Republic of China on the Prohibition of Using Child Labor	Employment Standards for Legal Compliance in the Field of Human Resources Regulations for Prenatal Rest Leave Management
B2. Health and Safety	Labor Law of the People's Republic of China Labor Contract Law of the People's Republic of China Social Security Law of the People's Republic of China Work Safety Law of the People's Republic of China Law of the People's Republic of China on the Prevention and Control of Occupational Diseases	ZTE Corporation Health and Safety Policy Notice of Enhancing Employees' Health and Safety Emergency Preparedness and Response Procedures
B3. Developmen t and training	Labor Law of the People's Republic of China Labor Contract Law of the People's Republic of China Social Security Law of the People's Republic of China	Management Standards on Position Appointment of Employees Standards on Performance Assessment for Key Technical Personnel Positions Management Standards on Selection & Appointment of Management Cadres Measures for Establishing Management Posts for Management Cadres Measures for the Implementation of the Management of Cadres Code Specification of Management Procedure for Employee Training Implementation Specification for Construction Management of Competence Center Management Cadre Training Process Part-time Lecturer Management Specification
B4. Labor guidelines	Labor Law of the People's Republic of China Labor Contract 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 Laborers Social Security Law of the People's Republic of China	Guidelines of Compliance in Labor Employment Standards for Legal Compliance in the Field of Human Resources Regulations for Prenatal Rest Leave Management

category	Laws and regulations observed <sup>28</sup>	ZTE Corporation internal policies
	Special Protection Provisions for Juvenile Workers Provisions of the Decree No. 364 of the State Council of the People's Republic of China on the Prohibition of Using Child Labor	
B5. Supply chain management	Company Law of the People's Republic of China Contract Law of the People's Republic of China	Production Materials Supplier Sourcing Work Instruction Operating Instructions on Material Environmental Data System (Supplier) Measures for Risk Assessment and Management of Suppliers' Green Product Supplier Security Management Procedure Supplier CSR Agreement Supplier Security Agreement Supplier Commitment Letter of Transparent Cooperation ZTE Supplier Code of Conduct
B6. Product responsibilit y	People's Republic of China Network Security Law Patent Law of the People's Republic of China Intellectual Property Law of the People's Republic of China General Data Protection Regulation Directive on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment	ZTE's White Paper on Intellectual Property Reserve Business Specification for Conflict Minerals Management of ZTE Conflict-free Mineral Survey Work Instruction of ZTE ZTE Personal Data Retention and Destruction Management Standard Data Subject Request Procedure Personal Data Breach Response System Green Product Management Procedure Requirements of The Banned and Restricted hazardous Substances Green Materials Inspection Instruction Green Compliance Label Requirements Product WEEE Manual
B7. Anti- bribery	Criminal Law of the People's Republic of China Anti-Unfair Competition Law of the People's Republic of China Company Law of the People's Republic of China Contract Law of the People's Republic of China	ZTE Code of Conduct Anti-corruption and Anti-bribery Policy and Compliance Guidance of ZTE Corporation Regulations on Anti-Bribery Compliance Management for Business Associates Regulations on Anti-Bribery Compliance Management for Purchasing Transactions

category	Laws and regulations observed <sup>28</sup>	ZTE Corporation internal policies
		GiftandHospitalityComplianceManagementRegulations(for MainlandChina, Hong, Macao)GiftandHospitalityComplianceManagementRegulations(for OverseasCountries and Regions)ComplianceManagementRegulationRegardingBusinessTravelsProvided toExternal PartiesComplianceManagementRegulations onCharitableDonationsComplianceManagementCommercialSponsorshipComplianceManagementRegulationAnti-briberyComplianceManagementRegulationRegulations onAnti-briberyComplianceManagementRegulationsonAnti-briberyComplianceManagementforMergers,Acquisitionsand JointVenturesRegulations onAnti-briberyComplianceAuditManagementRegulationsonAnti-briberyComplianceManagementforCustomerTrainingComplianceAuditManagementRegulationRegulationRegulationRegulation of AccountabilityManagementZTEWhistleblowingProblemAutionRegulationsRegulationsRegulationsForturesRegulationsRegulationsForturesRegulationsRegulation of AccountabilityManagementRegulationsRegulationsRegulationsRegulations
		Real-Name Compliance Whistleblowers Constitution of ZTE Foundation
B8. Community investment	Charity Law of the People's Republic of China Regulations on Foundation Administration	Constitution of ZTE Foundation Management Measures for Volunteers in ZTE Foundation Implementation Rules for Vulnerable Assistance Project of ZTE Foundation
		Management Measures for Public Welfare Project of ZTE Foundation

# **KPIs List**

ESG Index		Unit	Data	Statistical Range <sup>29</sup>
A Environment				
A1.1	Types of Emissions and Related Emission Data <sup>30</sup>			
	Lead and its compounds	mg/m3	0.004	Technology Park <sup>31</sup> , Xili <sup>32</sup>
	Tin and its compounds	mg/m3	0.007	Technology Park, Xili
	Non-methane Total Hydrocarbon	mg/m3	2.47	
A1.3	Total amount of hazardous wastes produced (production category)	Ton	195.9	Technology Park, Xili
A1.4	Total amount of non-hazardous waste produced	Ton	1,979	
A2.1	Energy consumption			
	Diesel Oil	Liter	1,000	Technology Park, Xili, Heyuan <sup>33</sup> , Changsha <sup>34</sup>
	Natural Gas	10,000 m3	74.9	Technology Park, Xili, Heyuan, Changsha
	Outsourced Electricity	kWh	353,049,442	Technology Park, Xili, Heyuan, Changsha
	Solar Power Generation	kWh	2,792,948	Technology Park, Xili, Heyuan, Changsha
	Emission of greenhouse gases			
	Scope 1: Direct emissions	Ton	1,931.02	Technology Park, Xili
	Scope 2: Indirect emissions	Ton	173,372.33	Technology Park, Xili

<sup>&</sup>lt;sup>29</sup>If no special instructions, the scope of statistics shall be ZTE Corporation

<sup>&</sup>lt;sup>30</sup>The emission data is the maximum detected emission concentration of each exhaust cylinder

<sup>&</sup>lt;sup>31</sup>ZTE Technology Park

<sup>&</sup>lt;sup>32</sup>Xili Industrial Park of ZTE Corporation

<sup>&</sup>lt;sup>33</sup>Heyuan Production Research and Development Base of ZTE Corporation

<sup>&</sup>lt;sup>34</sup>Changsha Production Base of ZTE Corporation
ESG Index		Unit	Data	Statistical Range <sup>29</sup>
	Total amount of CO2 emissions	Ton	175,303.35	Technology Park, Xili
	Density of CO2 emissions	Ton/million revenue	2.05	Technology Park, Xili
A2.2	Total water consumption			
	Water consumption	Cubic meter	158.4	Technology Park, Xili, Heyuan, Changsha
B Society				
Employee pr	ofile			
B1.1	Total number of employees by gender type, age group and regional division			
	Total number of employees	Person	68,240	
	By gender			
	Number of male employees	Person	52,000	
	Number of female employees	Person	16,240	
	By profession			
	R&D personnel	Person	25,969	
	Production personnel	Person	16,911	
	Marketing personnel	Person	9,499	
	Administrative personnel	Person	5,728	
	Customer service	Person	10,133	
	By age			
	Less than 30 years old	Person	26,445	
	30-50 years old	Person	40,472	
	More than 50 years old	Person	1,323	
	By academic qualifications			
	Doctoral degree	Person	377	
	Master's degree	Person	21,577	
	Bachelor degree	Person	23,688	
	Other academic qualifications	Person	22,598	
Developmen	Development and training			
B3.1	Trained employees classified by gender and employee category	Total		
	Total number of trainees	Number	2,110,478	
	By gender			

ESG Index		Unit	Data	Statistical Range <sup>29</sup>
	Number of male employees	Number	1,607,970	
	Number of female employees	Number	502,508	
Product respo	onsibility			
	Satisfaction rate of product return visit			
	Domestic product	%	99.51	
	International product	%	97.93	
	Scheduled closure rate of customer problem			
	Domestic product	%	97.8	
	International product	%	97.71	
Public chariti	es			
B8.2	Resources used in focused categories <sup>35</sup>			
	Contribution of funds	10,000 Yuan	5,689,740	
	Value of donated items	10,000 Yuan	348,402.5	
	Number of volunteers	Person	407	
	Voluntary hours	Hours	1,971	

<sup>&</sup>lt;sup>35</sup>The following statistical data are from ZTE Corporation Public Welfare Foundation

# **Reporting Standard Index**

	Description	Disclosure of the paragraph			
Aspect A1: Emiss	ions				
General	Related to the emission of waste gases and greenhouse gases, the discharge of pollutants into water and land, the production of hazardous and non-hazardous wastes, etc.:	4. Protecting the environment			
disclosures	(a) Policies; and				
	(b) Compliance with relevant laws and regulations that have a significant impact on the issuer				
Key performance indicators A1.1	Emission types and related emissions data.	4.3 Managing the environmental impact			
Key performance indicators A1.2	Total greenhouse gas emissions (in tons) and density (if applicable)	4.3 Managing the environmental impact			
Key performance indicators A1.3	Total Hazardous wastes produced (in tons) and (if applicable) density	4.3 Managing the environmental impact			
Key performance indicators A1.4	Total non-hazardous wastes produced (in tons) and (if applicable) density	4.3 Managing the environmental impact			
Key performance indicators A1.5	Describe measures and results of reduction emissions.	4.3 Managing the environmental impact			
Key performance indicators A1.6 Describe the method of handling hazardous and non- hazardous waste, reducing the output, and results.		4.3 Managing the environmental impact			
Aspect A2: Use of resources					
General disclosures	Policy for effective use of resources, including energy, water and other raw materials	4.3 Managing the environmental impact			
Key performance indicators A2.1	Total consumption of direct and/or indirect energies classified by type and density	4.3 Managing the environmental impact			

## ESG reporting Guidelines Index of Hong Kong Stock Exchange

	Description	Disclosure of the paragraph		
Key performance indicators A2.2	Total water consumption and density	4.3 Managing the environmental impact		
Key performance indicators A2.3	Describe the energy use efficiency plans and results.	4.3 Managing the environmental impact		
Key performance Indicators A2.4	Describe the problems facing access to water sources, as well as water efficiency plans and results.	4.3 Managing the environmental impact		
Key performance indicators A2.5	Total amount of packaging materials used for finished goods and (if applicable) amount of per production unit.	4.3 Managing the environmental impact		
Aspect A3: Enviro	onment and natural resources			
Key performance indicators A3.1	Describe the significant impact of business activities on the environment and natural resources and the actions taken.	4. Protecting the environment		
Aspect B1: Emplo	byment			
General disclosures	Regarding remuneration and dismissal, employment and promotion, working hours, holidays, equal opportunities, diversities, anti-discrimination and other treatment and benefits: (a) Policies; and (b) Information on relevant laws and regulations	5.2 Equality and Inclusion		
Key performance indicators B1.1	Total number of employees by gender, employment type, age group and regional division.	5.2 Equality and Inclusion		
Key performance indicators B1.2	Employee turnover rate by gender, age group and regional division.	Not disclosed		
Aspect B2: Health and Safety				
General disclosures	Providing a safe working environment and protecting employees from occupational hazards: (a) Policies; and (b) Information on relevant laws and regulations	5.4 Safety and Caring		

	Description	Disclosure of the paragraph			
Key performance indicators B2.1	Number and rate of work-related fatalities.	Not disclosed			
Key performance indicators B2.2	Lost days due to work injury.	Not disclosed			
Key performance indicators B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	5.4 Safety and Caring			
Aspect B3: Devel	opment and training				
General disclosures	Policy for enhancing the knowledge and skills of employees in performing their duties, Describe training activities.	5.3 Training and Development			
Key performance indicators B3.1	Percentage of trained employees classified by gender employee category.	5.3 Training and Development			
Key performance indicators B3.2	Average training hours per employee classified by gender employee category.	5.3 Training and Development			
Aspect B4: Labor	guidelines				
	Regarding the prevention of child labor or forced labor:				
General disclosures	(a) Policies; and	5.2 Equality and Inclusion			
	(b) Information on relevant laws and regulations				
Key performance indicators B4.1	Description of measures to review employment practices to avoid child and forced labor.	5.2 Equality and Inclusion			
Key performance indicators B4.2	performance Describe actions taken in the violations.				
Aspect B5: Supply chain management					
General disclosures	Management of supply chain environmental and social risk policies.	6. Building responsible supply chain			
Key performance indicators B5.1	Number of suppliers divided by regions.	Not disclosed			

	Description	Disclosure of the paragraph
Key performance indicators B5.2	Describe the practices of employing suppliers, number of suppliers to whom the practices are performed, and the methods of executing and supervising related practices	6. Building responsible supply chain
Aspect B6: Produ	ct responsibility	
General disclosures	Matters relating to the health and safety of the products and services provided, advertising, labeling and privacy, and remedies: (a) Policies; and (b) Information on relevant laws and regulations	3. Connecting with Future
Key performance indicators B6.1	Percentage of sold or shipped products to be recalled due to safety and health reasons.	Not disclosed
Key performance indicators B6.2	Number of received complaints about products and services and the methods of dealing with the complaints.	3.4 Reliable products and services
Key performance indicators B6.3	Describe practices related to the maintenance and protection of intellectual property rights.	2.4 Intellectual property management
Key performance indicators B6.4	Describe the quality verification process and product recovery program.	3.4 Reliable products and services
Key performance indicators B6.5	performance Describe consumer data security and privacy policy, and related implementation and supervision methods	
Aspect B7: Anti-b	pribery	
General disclosures	Regarding the prevention of bribery, extortion, fraud and money laundering: (a) Policies; and (b) Information on relevant laws and regulations	2.3 Fighting corruption
Key performance indicators B7.1	Number of corruption suits filed and concluded against the affiliates and their employees during the reporting period and the outcome of the litigation.	2.3 Fighting corruption

	Description	Disclosure of the paragraph
Key performance indicators B7.2	Describe the preventive measures and reporting procedures, and the related implementation and supervision methods.	2.3 Fighting corruption
Aspect B8: Comm	nunity investment	
General disclosures	operates and ensure that their business activities take the	
Key performance indicators B8.1	Focus on contribution category	7. Making change in communities
Key performance indicators B8.2	performance Use of resources (e.g., money or time) in focused categories.	

<b>GRI Standards</b>	s Index
----------------------	---------

GRI Standard	GRI Standard indicator contents		Sustainable Development goals	Where to find	Notes
Guideline title	Number	Indicator contents			
	102-1	Name of the organization name		Our Approach	ZTE Corporation
General disclosure	102-2	Activities, Brands, Products and Services		Connecting with Future	The Group is dedicated to the provision of ICT products and solutions that satisfy the needs of customers, integrating design, development, production, sale and services with a special on carriers' networks, government and corporate business and consumer
	102-3	Location of headquarter			ZTE Corporation Building, South Science and Technology Road, High-tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China
	102-4	Location of Operations			Located in Shenzhen,

GRI Standard indica	ator contents	Sustainable Development goals	Where to find	Notes
				China, with operations in Asia, Europe, America, Oceania and Africa, etc.
102-	-5 Ownership and legal form		Our Approach	Listed company
102-	-6 Markets served			The main markets are located in China, followed by Europe, the United States and Oceania, Asia (excluding China) and Africa, serving customers in more than 160 countries and regions
102-	-7 Scale of the organization		Our Approach	
102-	-8 Information on employees and other workers	5 Haurs 8 House Dans Const Handware 1 House Dans 1 H	Making a better working place	
102-	9 Supply chain		Building responsible supply chain	
102-	organization and our supply chain		Building responsible supply chain	
102-	Precautionary 11 principle or approach		Our Approach	
102-	-12 External initiatives		Our Approach	

GRI Standard indicator c	GRI Standard indicator contents		Where to find	Notes
102-14	Statement from senior decision- maker		A message from the President, A Message from the Executive Representative for sustainability	
102-15	Key impacts, risks and opportunities		A message from the President, A Message from the Executive Representative for sustainability	
102-16	Values, principles, standards and norms of behaviour	16 Ref. astro	Our Approach	
102-17	Mechanisms for advice and concerns about ethics		Our Approach	
102-18	Governance structure	16 recease	Our Approach	
102-19	Delegating authority		Our Approach	
102-20	Executive-level responsibility for economic, environmental and social topics		Our Approach	
102-21	Counselling stakeholders on economic, environmental and social topics	16 Risc Joint Bernards Bernards	Our Approach	
102-22	Composition of the highest governance body and its committees	5 fead 16 Augustation Market Australia Market Australia	Our Approach	

GRI Standard indicator	contents	Sustainable Development goals	Where to find	Notes
102-23	Chair of the highest governance body		Our Approach	
102-24	Nomination and selection of the highest governance body	16 recent recen	Our Approach	
102-25	Conflicts of interest		Our Approach	
102-26	Role of the highest governance body in setting purpose, values and strategy		Our Approach	
102-27	Collective knowledge of highest governance body		Our Approach	
102-28	Evaluating of the highest governance body's performance		Our Approach	
102-29	Identifying and managing economic, environmental and social impacts	16 rest astro	Our Approach	
102-30	Effectiveness of risk management processes		Our Approach	
102-31	Review of economic, environmental and social themes		A message from the President, A Message from the Executive Representative for sustainability	
102-32	Highest governance		Our Approach	

GRI Standard indicato	r contents	Sustainable Development goals	Where to find	Notes
	body's role in sustainability reporting			
102-33	Communicating critical concerns		A message from the President, A Message from the Executive Representative for sustainability	
102-35	Remuneration policies		Making a better working place	
102-36	Process for determining remuneration		Making a better working place	
102-37	Stakeholders' involvement in remuneration		Our Approach	
102-40	Stakeholder groups		Our Approach	
102-41	Group agreements	8 Econterrener 10 Reports Econterrener 10 Reports Econterrener Econterener Econterenerener Econterrener Econterrener Econterrener Ec	Making a better working place	
102-42	Identifying and selecting stakeholders		Our Approach	
102-43	Approach of communicating with stakeholders		Our Approach	
102-44	Key topics and concerns raised		Our Approach	
102-45	Entities included in the consolidated financial statements		About this report	
102-46	Defining the report content and topic boundaries		About this report	

GRI Standard	GRI Standard indicator contents		Sustainable Development goals	Where to find	Notes
	102-47	List of material topics		Our Approach	
	102-48	Restatements of information		About this report	
	102-49	Changes to reporting		ZTE's 2018	
	102-50	Reporting period		About this report	
	102-51	Date of most recent report		About this report	
	102-52	Reporting cycle		About this report	
	102-53	Contact point for questions regarding the report		Appendix III: Readers' Feedback Form	
	102-54	Claims of reporting in accordance with GRI standards		Appendix I: Sustainability Performance and Reporting Standards	
	102-55	GRI Context Index		Appendix I: Sustainability Performance and Reporting Standards	
	102-56	External assurance / conviction		Appendix II: Assurance Report	
	103-1	Explanation of the material topic and its boundaries		Our Approach	
Management approach	103-2	Management approach and its components		Our Approach	
	103-3	Evaluation of management approach		Our Approach	
Economic performance	201-1	Direct economic value generated and distributed	2 mer	ZTE's 2018	

GRI Standard	GRI Standard indicator contents		Sustainable Development goals	Where to find	Notes
	201-2	Financial implications and other risks and opportunities due to climate change	13 cante Contra	Protecting the environment	
	201-3	Defining Benefit plan obligations and other retirement plans	3 GOODHALTH IMANALERANC	Making a better working place	
	203-1	Infrastructure investments and services supported		Connecting with Future	
Indirect economic impacts	203-2	Significant indirect economic impacts	1 Porter Provent Pr	Connecting with Future	
Anti-bribery	205-1	Operation assessed for risks related to corruption	16 Rest Assist Bernand Bernand	Our Approach	

GRI Standard	l indicator c	contents	Sustainable Development goals	Where to find	Notes
	205-2	Communication and training about anti- bribery policies and procedures	16 Risc attice According A	Our Approach	
	205-3	Confirmed incidents of corruption and actions taken	16 ANS ANTO CONTINUE CON	Our Approach	
	301-1	Material used by weight or volume		Protecting the environment	
Materials	301-2	Recycled input materials used	12 disponentia constantiation 13 dimiter COO	Protecting the environment	
	301-3	Reclaimed products and their packaging materials		Protecting the environment	
	302-1	Energy consumption within the organization	12 distances distances distances distances 13 dimit distances 13 dimit	Protecting the environment	
Energy	302-2	Energy consumption outside of the organization	12 distances distances distances distances 13 dimit distances 13 dimit	Protecting the environment	
	302-3	Energy intensity	12 ALEMANTARY CONSTRUCTION 13 ALEMAT CONSTRUCTION 13 ALEMAT	Protecting the environment	

GRI Standard	indicator c	contents	Sustainable Development goals	Where to find	Notes
	302-4	Reduction of energy consumption	12 properties Properties 13 properties 13 properties 13 properties 13 properties 13 properties 14 properties 15 properties 16 properties 17 properties 18 properties 19 proper	Protecting the environment	
	302-5	Reductions in energy requirements of products and services	7 cristenense 2000 12 cristenense 212 cristenense 213 cristenense 213 cristenense 213 cristenense 213 cristenense 215	Protecting the environment	
Water	303-1	Water withdrawal by source	6 CLAN MADE	Protecting the environment	
	305-1	Direct (Scope 1) GHG emissions	12 BERNARDE ADDREAMENT 13 BERNAR 13 BERNAR 14 BERNARDE 15 BERNARDE 15 BERNARDE 15 BERNARDE	Protecting the environment	
Emissions	305-2	Energy indirect (Scope 2) GHG emissions	12 disponentia All disponential 13 distant 13 distant 14 disponential 14 disponential 15 distant 15 distant 15 distant 15 distant 15 distant	Protecting the environment	
	305-4	GHG emissions intensity	13 Barnik Event 14 Mitore social 15 Mitore 15 Mitore Event 15 Mitore Event Eve	Protecting the environment	

GRI Standard	indicator c	ontents	Sustainable Development goals	ls Where to find Notes	
	305-5	Reduction of GHG emissions	13 Serrit T4 HELINGKARE T5 BETARE	Protecting the environment	
	305-6	Emissions of ozone-depleting substances (ODS)	3 DOWNELSERS -W++++++++++++++++++++++++++++++++++++	Protecting the environment	
	305-7	Nitrogen Oxides (NOx), Sulfur Oxides (SOx), and Other significant air emissions	3 BOUNDARIE -W- 12 BERNARIE BERNARIE 13 BEINE 13 BEINE 14 BEINE MART 15 BEINE 15 BEINE 15 BEINE	Protecting the environment	
Effluents and waste	306-2	Waste by type and disposal method	3 JOURNELLEURS -W- 6 Induktion 12 Information COCO	Protecting the environment	
	306-4	Transport of waste	3 continuents -/// 12 timments continuents continuents continuents	Protecting the environment	
Environment al Compliance	307-1	Violation of environmental regulations		Protecting the environment	
Supplier environment	308-1	New suppliers that were screened using	12 attenueri attenueria COO	Building responsible supply chain	

GRI Standard	indicator of	contents	Sustainable Development goals	Where to find	Notes
al assessment		environmental criteria			
	308-2	Negative environmental impacts in the supply chain and actions taken		Building responsible supply chain	
Employee-	401-1	New employees hires and employee turnover	8 іссян чок ма скланскала	Making a better working place	
employer relations 401-3 Par	Parental leave	B ICONFIC CONFIC	Making a better working place		
Occupationa l safety and health	403-2	Injury category, rate of injury, occupational disease, number of days lost, absenteeism, etc., and the number of deaths on duty	3 MORTHUM 	Making a better working place	
	403-3	Workers with high incidence and high risk of occupational- related diseases.	3 monthemer 	Making a better working place	
Training and education	404-1	Average hours of training per year employee	4 there is a second sec	Making a better working place	
	404-2	Programs for upgrading employee skills and transition assistance	B issues evens	Making a better working place	

GRI Standard	indicator o	contents	Sustainable Development goals	Where to find	Notes
	404-3	Percentage of employees receiving regular performance and career development reviews	5 (BRAT) B RECHARMENT	Making a better working place	
Diversity and equal opportunity	405-1	Diversity of governance bodies and employees	B ISSNE SAND	Making a better working place	
Nondiscrimi nation	406-1	Discrimination and improvement actions taken by the organization		Making a better working place	
Child labor	408-1	Operations and suppliers at significant risk for incidents of child labor	B EESAN WUKAMI EESAN WUKAMI 16 REKS AUSTRE AGESTRAGESTRAGE AGESTRAGESTRAGE AGESTRAGESTRAGE AGESTRAGE AG	Making a better working place	
Forced or compulsory labor	409-1	Operations and suppliers at significant risk for forced and compulsory labor	8 Itean water and tean of the and the	Making a better working place	
Supplier	414-1	New suppliers that were screened using social criteria	5 Indust Exception 8 Industrie Carbon 16 Reference Andrews States	Building responsible supply chain	
social assessment	414-2	Negative social impacts in the supply chain and actions taken	B HERRIT B HERI	Building responsible supply chain	

GRI Standard	indicator c	ontents	Sustainable Development goals	Where to find	Notes
Customer	416-1	Assessment of health and safety impacts of product and service	16 Ref. Astronometer References References	Connecting with Future	
Customer health and safety 416-2	416-2	Incidents of non- compliance concerning the health and safety impacts of products ans services		Connecting with Future	
Customer privacy	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		Connecting with Future	

### **Appendix II: Assurance Report**



#### Assurance Statement of Corporate Social Responsibility Report

TUV Asia Pacific Ltd. ('TUV NORD') has been commissioned by the management of ZTE Corporation and its subsidiaries ('ZTE' for short) to carry out an independent assurance of the 2018 Corporate Social Responsibility Report ('report' for short).

ZTE is responsible for the collection, analysis, aggregation and presentation of information within the Report. TUV NORD's responsibility in performing this work (assurance of the report) is in accordance with terms of reference agreed in the scope of engagement with ZTE. ZTE is the intended users of this statement.

This statement is based on the assumption that the data and information provided in the report is complete and true. This report is the eleventh CSR report for ZTE, and ZTE invites the third party to give independent assurance.

#### Assurance Scope

- The report revealed the accuracy and reliability for key performance, information and management system which happened in 2018.
- Assurance address is in ZTE Corporation Building, South Science and Technology Road, High-tech Industrial Park, Nanshan District, Shenzhen, Guangdong, China, where ZTE located. And we didn't visit other branch, Subordinate units or the site of Projects.
- We evaluate the collection, analysis, aggregation of the information and data.
- Because the economic data had been audited by the third party, we won't do double audit this time.
- Assurance of the Report was done on 06-08.03.2019.

#### Assurance Methodology

Assurance process including following activities:

- Review the document information which provide by ZTE;
- Interview the person who collected the report information;
- View the related websites and media reports, verify the data and information through sampling method;
- Refer to the GRI Sustainability Reporting Standards (GRI Standards) on balance, comparability, accuracy, timeliness, clarity, reliability, and give the evaluation;
- Refer to AA1000AS (2008) Assurance methodology;
- Refer to Environmental, Social and Governance Reporting Guide (HK-ESG) issued by Hong Kong Exchanges and Clearing Limited;
- Assurance activity is based on TUV NORD CSR report assurance management procedure.

#### Assurance Conclusion

ZTE CSR Report provide an appropriate and objective view of the sustainability & social programs and performances in 2018. The data in report is reliable and objective, TUV NORD didn't find the system error or substantial error, which meets the disclosure requirement of GRI Standards core option.

The structure of report is complete, the revealed information is clear, easy-understand and available;



- The report take "To enable connectivity and trust everywhere" as theme, take 'Strengthening compliance management', 'Connecting with Future', 'Protecting the environment', 'Making a better working place', 'Building responsible supply chain', and 'Making change in communities' reveal 2018 ZTE CSR idea, practice, result and typical cases;
- Determining material aspects through stakeholder survey, which feedback stakeholders' expectation and attention.

#### Suggestion for Improvement

Through assurance and evaluation, we had following improvement suggestion on CSR practice and management:

- It is suggested to add a three-year quantitative performance indicator to reflect the longitudinal comparability of the report.
- It is suggested to increase the comparison of social responsibility performance from the same industry to reflect the horizontal comparability of the report.
- It is suggested to further improve the social responsibility strategic planning and set clear responsibility objectives.

#### Special Statement

This statement excluding:

- The activity outside information reveal;
- The position, idea, faith, object, future developing direction, and promise which stated by ZTE Company.

#### Statement of Independence and Competence

TUV NORD Group is the world's leader in inspection, testing and verification, operating in more than 70 countries throughout the world and providing services which includes management systems and product certification; quality, environmental, social and ethical auditing and training; environmental; social responsibility and sustainability report assurance.

TUV Asia Pacific Ltd. affirms its' independence from ZTE and confirms that there is no conflicts of interest with the organization or any of its subsidiaries and stakeholders when performing the assurance of the Report. TUV Asia Pacific Ltd. was not involved in any manner with ZTE, when the latter was preparing the Report.

The team leader: Xuemei (Olina) Li Date: 20.03.2019

The Authorized person: Haining Song Date: 20.03.2019

Note: In case of conflict between the Chinese and English versions of the declaration, please refer to the Chinese version

## **Appendix III: Readers' Feedback Form**

Dear Readers:

Thanks for your concern and reading ZTE 2018 Sustainability Report. We will appreciate your suggestions and comment to help us keep moving forward.

Name\_\_\_\_\_ Telephone \_\_\_\_\_ E-mail \_\_\_\_\_

Please leave your comment: (' $\sqrt{}$ ' for what you think)

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Do you get the information you want to know?					
Do you think this report is easy to read?					
Will you pay attention to ZTE's future sustainability report?					

Which part are you interested most in the report?

What kind of issues you still want to know?

What's your suggestion to the future report?