
# Building a Better Connected World

Huawei Investment & Holding Co., Ltd.

2015 Annual Report

## Who is Huawei?

Huawei is a leading global information and communications technology (ICT) solutions provider. Driven by responsible operations, ongoing innovation, and open collaboration, we have established a competitive ICT portfolio of end-to-end solutions in telecom and enterprise networks, devices, and cloud computing. Our ICT solutions, products, and services are used in more than 170 countries and regions, serving over one-third of the world's population. With more than 170,000 employees, Huawei is committed to enabling the future information society, and building a Better Connected World.

## What do we offer the world?

**We create value for our customers.** Together with telecom carriers, Huawei has built over 1,500 networks, helping over one-third of the world's population connect to the Internet. Together with our enterprise customers, we employ agile enterprise networks, including open cloud networks, to drive efficient operations and agile innovation across domains like Safe City, finance, transportation, and energy. With our smart devices and smartphones, we are improving people's digital experience in work, life, and entertainment.

**We promote industry development.** Huawei advocates openness, collaboration, and shared success. Through joint innovation with our partners and peers we are expanding the value of information and communication technology to establish a robust and symbiotic industry ecosystem. Huawei actively participates in over 300 standards organizations, industry associations, and open source communities, having submitted over 43,000 proposals to drive standardization and pave the way for more effective collaboration. We have joined forces with industry partners to innovate in emerging domains like cloud computing, software-defined networking (SDN), network functions virtualization (NFV), and 5G. Together, we are promoting ongoing, collaborative industry development.

**We boost economic growth.** Huawei generates tax revenues, boosts employment, and stimulates the development of the ICT value chain in the countries where we operate. Perhaps more importantly, we deliver innovative ICT solutions that drive the digital transformation of all industries, thereby fostering economic growth and greatly improving the quality of people's lives.

**We drive sustainable development.** As a responsible corporate citizen, Huawei has made a significant contribution to bridging the digital divide. We are keenly aware of the importance of telecommunications in emergency response situations: Facing Ebola-affected areas in West Africa, nuclear contamination after the Japanese tsunami, and the massive earthquake that struck Sichuan, China, we hold fast in disaster zones to help restore communications networks and ensure the reliable operation of critical telecom equipment. To further promote sustainability, we develop the next generation of ICT talent with our global Seeds for the Future program, in which we give university students the opportunity to visit China, receive training, and gain first-hand experience in the ICT industry.

**We provide dedicated employees with a strong growth platform.** Inspiring dedication is one of Huawei's core values, and it manifests itself in many ways. We assess employees and select managers based on their results, as well as the extent of their responsibilities. We provide our teams with a global development platform, giving young team members the opportunity to shoulder greater responsibilities and accelerate their careers. In this way, we have enabled more than 170,000 employees to yield ample returns for their individual efforts, and gain memorable life experience.

## What do we stand for?

For the past 28 years, hundreds of thousands of Huawei people have maintained an unwavering focus on our core business, refusing to cut corners or pursue other forms of short-sighted opportunism. With a solid, practical approach to everything we do, we have invested patiently, amassing the long-term, focused effort that leads to great moments of technological breakthrough. Our ability to maintain this strategic focus boils down to our core values of staying customer-centric, inspiring dedication, persevering, and growing by self-reflection.

The digital era has been generous. We will make the most of the historic opportunities it has presented us, and boldly forge ahead to build a Better Connected World.


# Contents

# Message from the Rotating and Acting CEO

Ideals are not enough. We also need new theory. Ideals give us a vision, and theory gives us the means to achieve it. Over the next 10 to 20 years, we must boldly explore new technological concepts, mathematical models, and algorithms, and in doing so provide society with new theoretical approaches in these areas. In the future, networks will be standardized, simplified, and easy to use. We must broaden our horizons, have a global view, and work together to create value. We must build networks on globally unified standards. And we need to make our contribution to the concepts, theory, and architecture of future data transmission.

## 2015: Focusing on pipe produced remarkable results

In 2015, Huawei's revenue reached CNY395 billion (US$60.8 billion based on the year-end exchange rate), an increase of 37% year-on-year. Our carrier, enterprise, and consumer businesses all met the sustainable growth targets set by our Board of Directors at the beginning of 2015. While creating value for our customers, we have also increased the value of our company. And since the adoption of our pipe strategy, this year in particular has produced remarkable results.

In our carrier business, our 4G equipment was widely deployed around the world and is now being used in the capital cities of over 140 countries. We recently launched our 4.5G solution to meet consumer demand for a better experience while protecting carrier investment in 4G. We have built over 280 commercial networks with our 400G core routers. Having implemented our Product + Service strategy, we now support the operations of over 1,500 networks globally, serving more than one-third of the world's population in over 170 countries and regions. More and more carriers now recognize Huawei as a trusted strategic partner.

In our enterprise business, we applied our guiding principle of Business-Driven ICT Infrastructure (BDII) to lead the transformation of enterprise IT towards cloud architecture, and the transformation of enterprise networks towards SDN. We remain open to being integrated, and continue innovating jointly with our customers and partners. Globally, we are setting the pace for IT systems based on cloud architecture. Many Fortune Global 500 companies, such as the Industrial and Commercial Bank of China, the China Construction Bank, Deutsche Bahn, Mercedes-Benz, and Volkswagen, have selected Huawei as their partners. We have participated in the construction of over 660 data centers, including 255 cloud data centers. In the future, we will continue to work with our partners to create a sustainable ecosystem for the cloud computing industry.

In our consumer business, annual revenue grew by over 70%, securing a position for Huawei among the top three global device companies in terms of market share. This revenue growth is attributable to the robust growth of our mid-range and high-end products, our rapid development in high-end overseas markets, and the great strides we have made with our Honor business model. Following the success of our premium Mate 7 and P7 smartphones, the P8 and Mate 8 further solidified our position in the mid-range and high-end consumer markets. Owing to its approachability and vitality, our Honor brand doubled its revenue in 2015, connecting more consumers than ever before. We have made remarkable achievements in developing our overseas channel, retail, and service capabilities. Our smart watches and fitness bands have hit the fashion world like a storm. In the Internet of Vehicles (IoV), we have partnered with leading global automotive brands. We have made rapid progress in software UX and cloud services, and have effectively satisfied user experience needs across all usage scenarios.

## Equipping ourselves with ideals and theory to embrace new opportunities

Information has always been an important driving factor in the progress of human civilization. From letters, images, and voice, to today's HD video, we generate and consume information at all times. Our pursuit of high-quality information knows no bounds. Today, 4K video is no longer the talk of the town, and Virtual Reality (VR) has taken its place as the hot new trend. There is one thing that we need to understand, however: VR aims to simulate the sensory system of the human brain to deliver a near-perfect experience. This requires the ability to process about 5.2 gigabytes of data every second, which is 200 times the 25 Mbit/s standard defined by the US Federal Communications Commission (FCC) for future broadband networks.

We no longer have to take out a second mortgage to pay off a night's worth of 4G download fees. But we need to consider the possibility that a 360-degree VR movie might just stream enough data to fill the Pacific Ocean. This will present great challenges to data pipes in terms of capacity, transmission capabilities, and user experience. But at the same time, it will create tremendous opportunities for everyone in our industry. In fact, over 70% of network traffic today is video traffic. In the future, more manufacturing, security surveillance, healthcare, and entertainment applications will become part of the VR/Augmented Reality (AR) experience. In the wheat and the chessboard problem that's often used to illustrate the shocking and astronomical extent of exponential growth, this is only the beginning of massive data traffic, not unlike the first grain of wheat placed on the first square of the chessboard[1]. Data traffic will become so massive, and the scope of connections so broad, that existing data pipes will have trouble transmitting all that information. Overcoming this challenge is the mission that we've undertaken, and the ideal that we pursue.

However, ideals are not enough. We also need new theory. Ideals give us a vision, and theory gives us the means to achieve it. Over the next 10 to 20 years, we must boldly explore new technological concepts, mathematical models, and algorithms, and in doing so provide society with new theoretical approaches in these areas. In the future, networks will be standardized, simplified, and easy to use. We must broaden our horizons, have a global view, and work together to create value. We must build networks on globally unified standards. And we need to make our contribution to the concepts, theory, and architecture of future data transmission.

A Better Connected World will be a wellspring of tremendous opportunities. These will include the 100-billion-dollar video industry, the one-trillion-dollar market for cloud transformation in enterprise IT, and the IoT industry whose user base is expected to grow by a factor of 10. However, this will not all come at once. We must not overlook the opportunities that lie before us while waiting for the future to arrive. Instead, we should work together to accelerate the transformation process.

[1] The wheat and chessboard example is used to illustrate exponential growth, in which one grain of wheat is placed on the first square of a chessboard, two on the next, four after that—doubling the number over and over until the last square. At this point, there will be a total of 18,446,744,073,709,551,615 grains of wheat on the chessboard—an astounding result!

**Enhancing connectivity to stimulate innovation:** In 2025, there will be 100 billion connections around the world. Of these, connections between 7 billion people will perhaps account for only about 10% of the total; the majority of connections will be between people and things, and also between things themselves. Currently, 99% of devices with sensors are not connected to the Internet. Therefore, our top priority will be to enhance connectivity, and Narrowband Internet of Things (NB-IoT) is the core technology that will support these massive numbers of connections between things. With low power consumption, wide coverage, strong signals, and the ability to support high-density connectivity in specific areas, NB-IoT will make static objects smart and interactive, and allow numerous things to "speak". This will provide a huge boost to industry efficiency.

**Enabling digital transformation:** According to a UN report, as of 2010, the ICT industry had long been driven by supply. The technology available determined the services that were offered. Today, things have changed, and this supply-driven model is being replaced by a demand-driven one. Verticals of all types are coming up with more requirements for our networks because ICT has become a new tool for them to increase their competitiveness. The ICT industry should seize this opportunity, better understand the needs of verticals, and help them go digital. Our Safe City project in Kenya is a case in point. From 2014 to 2015, this project helped decrease the crime rate by 46% in the areas within the project's scope. Full connectivity will bring about a better digital life, and will create huge business opportunities for all industries.

**Redefining network capabilities to create competitive symbiosis in the industry ecosystem:** At the heart of all connections, carriers need to establish software-defined architecture, achieve agile operations, increase their own operational efficiency, and explore ways to monetize massive amounts of data. They also need to choose strategic partners that are capable of integration. In the meantime, by developing their own integration capabilities, carriers can help cultivate a more open and innovative ecosystem. Only by exposing network capabilities will greater opportunities emerge.

## 2016: Maintaining our strategic focus will lead to breakthroughs in technology

Looking ahead, we must keep a clear head to meet new challenges and seize new opportunities. We must focus on our core business and not lose sight of our mission to build a Better Connected World. We must not waste our strategically competitive strengths on non-strategic opportunities. We must stay customer-centric, and continue to create value for our customers.

**Focusing on pipe to promote digital transformation:** Carriers are currently in a critical period of new service development and business transformation. New services such as video, the cloud, and IoT have entered the fast lane, imposing completely new requirements on networks and operations. Software-defined networking, cloud migration, and agile operations are driving this new round of network transformation. With leading solutions built on agile and open architecture, Huawei is embracing the future, helping our customers achieve business success in this critical period of development. Following the Industrial Revolution, electrical power, and automation, the next revolution involves going digital and smart. In order to more effectively enable enterprises throughout their digital transformation process, Huawei focuses on providing leading ICT infrastructure solutions, adheres to the strategy of Being Integrated, and strives for in-depth development.

**Providing high-quality devices and services to build a premium brand and lead the global consumer market:** Consumer electronics are constantly changing, but users are unchanging in their pursuit of high-quality products and services. Today, we are shifting away from a shortage economy, and are entering a surplus economy. In this new era, quality is king. High standards lead to high quality, and high quality leads to a larger market share. In addition to high-quality devices, we must also increase our investment in services. Our ultimate purpose is to establish an effective service system and develop highly efficient service teams at different levels of the organization to support rapid market development.

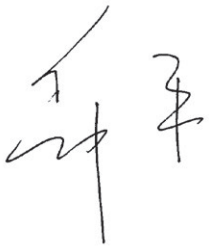
**Focusing on results in uncertain territory, and efficiency when dealing with certainties:** In this age of rapid change, moving in the right direction is critical. As we stand at the forefront of cutting-edge research, we must invest heavily in uncertain territory, and do so at multiple layers and along multiple paths of discovery. We must tolerate mistakes, and seek out new breakthroughs. What we call black swan events – or unanticipated, impactful events – will inevitably occur. Nevertheless, we must do our best to contain these events, allowing these so-called black swans to swim around in a pond of our own making. Where certainties exist in production, development, and engineering installation activities, we must plan effectively and focus on efficiency. We must avoid loose and chaotic management, and will not allow for careless or reckless mistakes.

**Breaking away from traditional models of talent deployment:** Wherever there is work, there will always be the chance for rising stars to shine. We must not allow ourselves to be limited by inflexible habits or traditions when we deploy talent. We should be open-minded to attract all sorts of talent from different walks of life – talent that will help us succeed and will share in our success. We will work to develop policies that incentivize all high-performing employees. In doing so, we will create synergy within the organization and focus all our might on improving quality, increasing efficiency, and delivering better financial results.

**Enlarging our network and expanding the market:** As technology and business models continue to evolve on a daily basis, a single enterprise will find it difficult to succeed in a bubble. Competitive cooperation across the ecosystem will be a major industry trend. While adhering to our principles of openness, collaboration, and shared success, we will focus on ICT infrastructure and work closely with different industries, developers, academia, and industry standards organizations to stimulate innovation in business and technology, and foster a healthy industry ecosystem that supports fair competition, collaboration, and shared success.

For our partners, we are in the process of establishing open labs to support joint innovation and reduce time-to-market for new services. For developers, we have built an open, enabling Ecosystem Software Development Kit (eSDK) platform to provide flexible and easy-to-use tools, along with agile support services. For those in the midst of digital transformation, we are working with leading partners in professional services and application development domains to build an ecosystem that supports verticals like transportation, energy, government, and finance. We are also engaging in joint innovation with our partners across critical fields of industry development such as 5G, NFV/SDN, cloud services, and digital operations transformation.

We're working together to make the world work better. Openness, collaboration, and shared success will smooth the way for the expansive growth of our industry. Here I would like to thank all of our customers and partners for your ongoing trust and support over the years. Let's continue to join forces in building a Better Connected World.



**Guo Ping**
Rotating and Acting CEO

# Business Highlights in 2015

## A ROADS experience drives carriers' digital transformation

End users are demanding digital services that deliver a ROADS (i.e., Real-time, On-demand, All-online, DIY, and Social) experience as the new norm. In 2015, we released the *Carrier's ICT Network 2020 Transformation* white paper. The paper covers transformation in the areas of network, architecture, operations, and services in order to help our customers begin their digital transformation driven by a ROADS experience. Since the announcement of our SoftCOM network strategy in 2012, we have partnered with dozens of leading global carriers during their future-oriented digital transformation. We have now established 36 joint innovation centers and commercially deployed over 70 NFV and SDN projects around the world.

## The MBB 2020 Strategy outlines a new blueprint

We announced our MBB 2020 Strategy, outlining a new mobile broadband blueprint for the next five years to connect the unconnected. By 2020, we expect to support 6.7 billion mobile broadband connections to provide a better service experience, and support a 1 Gbit/s access rate. We will also support 1 billion cellular IoT connections and enable ubiquitous networks to connect everything. Achieving these goals will require innovation in technology and business models, as well as cross-industry collaboration. We will focus on spectrums, air interfaces, network architecture, integrated base stations, and user experience-based operations.

## Entering the Gigaband era

4K video and cloud services will boost user demand for ultra-broadband, which is accelerating many countries' economic development. We defined our Gigaband development strategy in terms of bandwidth, coverage, and experience. In terms of bandwidth, we will upgrade broadband networks from 100 Mbit/s to 1,000 Mbit/s by continuously innovating access technologies. For coverage, we will strive to cover over 90% of households with broadband networks by 2020. When it comes to experience, we have adopted the U-vMOS system to quantify video experience indicators and form a unified video experience standard, in order to help carriers change their network construction and operations model into one that is driven by user experience.

## The BDII guiding principle fuels innovation

In 2015, we introduced our guiding principle for the enterprise market: building Business-Driven ICT Infrastructure (BDII). We continued to focus on developing ICT infrastructure with open architecture through joint innovation with our partners. This has allowed us to provide industry users with innovative, differentiated, and leading products and solutions.

## Smart devices with an inspired experience

In the future, smart devices will become smarter and more diverse. We are developing future-oriented capabilities focused on consumer needs under all scenarios, including the way people live, work, and play. We have made continuous breakthroughs with our mid-range and high-end flagship phones. The Mate 8 was a major hit among consumers, and we sold more than 100 million smartphones in 2015. Our smartphones also became market leaders in multiple countries. Our Mobile Broadband and Home Device Product Line transformed itself by focusing on consumers. Our smart watch integrates technology and fashion. In the IoV and smart home domains, we have provided consumers with easy-to-use products, superior services, and an inspired experience through innovative solutions.

## 4.5G helps carriers tap into vast new markets

Huawei was the first company in the industry to put forward the concept of 4.5G, with the goal of meeting consumers' increasing experience needs and enabling carriers to make full use of their legacy assets. Specifically, we introduced 5G technology to optimize carriers' existing 4G network infrastructure and bring about higher speeds and a better user experience. Through this, we have helped carriers tap into vast new markets and develop more new services. Huawei is an active player in standards organizations, and has helped make LTE-Advanced Pro, a 4.5G standard, the new marker for LTE standards at 3GPP. Huawei has worked with multiple leading global carriers to deploy pre-commercialized 4.5G networks in Norway, Germany, Australia, Kuwait, Saudi Arabia, the United Arab Emirates, China, Japan, Canada, and Singapore, and has achieved positive results in this regard.

## Accelerating 5G development through extensive innovation

5G development has entered a critical phase. Accelerating 5G development requires deeper technological innovation and cross-industry collaboration. We have invested heavily in innovation and emerged as a major contributor to and leader of global 5G development. While making significant breakthroughs in key 5G technologies, we have been an active player in major global 5G organizations such as the EU's 5G Infrastructure Public Private Partnership (5G-PPP). We have also launched joint innovation projects with our partners. One example is our partnership with NTT Docomo, Japan's largest mobile communications carrier, with whom we launched the world's first multi-user 5G testing site in Chengdu, China. The real-world testing environment provided at the site enables us to systematically verify 5G air interface technology and network architecture.

## Building a cloud ecosystem

We have launched our cloud ecosystem strategy, under which we focus on IaaS, enable PaaS, aggregate SaaS, and develop a leading cloud operating system, Big Data platform, and PaaS platform based on software platforms and enterprise cloud services to create an open cloud ecosystem. At the end of 2015, the number of Huawei's enterprise cloud partners exceeded 500. Working together, we have provided cloud services to over 2,500 customers in the government & public utility, telecom, energy, and finance sectors across 108 countries and regions, deploying more than 1.4 million virtual machines. We have also built 660 data centers worldwide, including 255 cloud data centers.

## Actively supporting developers

In the carrier and enterprise markets, we held our first Huawei Developers Congress (HDC), at which we also announced our open ICT developer ecosystem strategy. We have focused on ICT infrastructure, opened up our innovative and leading ICT capabilities to developers, and built an open environment and enablement platform for the carrier and enterprise markets. We aim to help developers create innovative services, rapidly respond to and meet customers' business needs, and help customers achieve business success. Over the next five years, we will invest US$1 billion to implement a Developer Enablement Plan. Through this plan, we will build a developer enablement platform, and jointly innovate with developers. In the consumer market, by relying on our 130 million consumer cloud service users and 17.5 billion app downloads in the Huawei AppStore (HiApp), we have opened up our software and hardware capabilities in cloud and devices, and provided a series of development, testing, and promotion services for 150,000 mobile app developers. We have also organized various activities such as the Maker Lecture Room, the Maker Carnival, and the Maker Competition to unleash the creativity of young people, and motivate developers to succeed.

## Adopting a Product + Service strategy

We launched our service strategy which targets a ROADS experience, shifting from a "product driven + service as support" focus to a "product driven + service driven" focus. Through open collaboration, we have established a digital business ecosystem, and continued to improve network performance, service quality, and user experience. Through consulting and system integration services, we have become a strategic partner for carriers' operations transformation and ICT infrastructure restructuring. We are now providing professional services to over 1,500 customer networks in over 170 countries and regions, serving over one-third of the world's population. We have strengthened efforts to invest in and establish competence centers and open labs. With five open labs on NFV, cloud data centers, and other domains, we have consolidated our capabilities in consulting and system integration services through concrete action, and turned carriers' digital business blueprint into deliverable and viable solutions.

## Establishing partner alliances

We have officially launched initiatives in cloud and enterprise applications in collaboration with strategic partners such as SAP and Accenture, and are actively exploring joint innovation with Infosys, GE, Microsoft, Hexagon, and other partners in the areas of smart stadiums, core banking solutions, industrial Internet, cloud services, and Smart Cities.

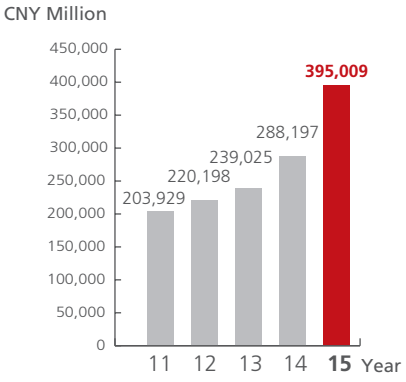
# Five-Year Financial Highlights

| | 2015 | | 2014 | 2013 | 2012 | 2011 |
|---|---|---|---|---|---|---|
| | (USD Million)* | CNY Million | | CNY Million | | |
| Revenue | **60,839** | **395,009** | 288,197 | 239,025 | 220,198 | 203,929 |
| Operating profit | **7,052** | **45,786** | 34,205 | 29,128 | 20,658 | 18,796 |
| Operating margin | **11.6%** | **11.6%** | 11.9% | 12.2% | 9.4% | 9.2% |
| Net profit | **5,685** | **36,910** | 27,866 | 21,003 | 15,624 | 11,655 |
| Cash flow from operating activities | **7,595** | **49,315** | 41,755 | 22,554 | 24,969 | 17,826 |
| Cash and short-term investments | **19,284** | **125,208** | 106,036 | 81,944 | 71,649 | 62,342 |
| Working capital | **13,711** | **89,019** | 78,566 | 75,180 | 63,837 | 56,996 |
| Total assets | **57,319** | **372,155** | 309,773 | 244,091 | 223,348 | 193,849 |
| Total borrowings | **4,464** | **28,986** | 28,108 | 23,033 | 20,754 | 20,327 |
| Owner's equity | **18,339** | **119,069** | 99,985 | 86,266 | 75,024 | 66,228 |
| Liability ratio | **68.0%** | **68.0%** | 67.7% | 64.7% | 66.4% | 65.8% |

*Note: Translated into United States dollar ("USD") using the closing rate as at December 31, 2015 of USD1.00 = CNY6.4927.

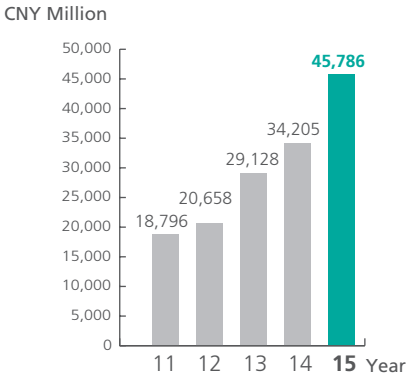
## Revenue

**CAGR: 18%**



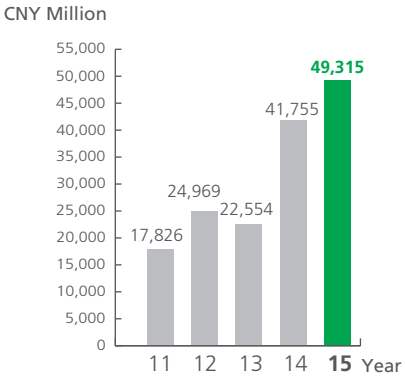

## Operating profit

**CAGR: 25%**




## Cash flow from operating activities

**CAGR: 29%**



# Message from the Chairwoman

Information technology has grown beyond the confines of its own industry to drive technological innovation and development across multiple domains. The extent to which a company, organization, or a country embraces digital technology will determine its future competitiveness. In order to enable digital transformation across all industries, drive stable development in the ICT ecosystem, and contribute to social progress, we must foster open collaboration with partners all along the value chain. Throughout this process, Huawei will remain true to its pipe strategy, focusing on ICT infrastructure development to create value for our customers.

Our society is evolving into an information society, and countless technological advancements are just on the horizon. These advancements include new materials like graphene and carbon nanotubes; Virtual Reality (VR) and Augmented Reality (AR), which will enable new forms of ergonomics and user experience; new manufacturing techniques empowered by smart robotics and 3D printing; as well as breakthroughs in Artificial Intelligence (AI) and biotechnology. Information technology is the foundation of these transformative advancements, having grown beyond the confines of its own industry to drive technological innovation and development across multiple domains. For the time being, the shape that information society will eventually take is still unclear, but we are certain about one thing: We are heading in the right direction, as connectivity has become a basic human right.

## Bridging the digital divide

The digital divide remains enormous – a fact we cannot ignore. According to a 2015 report by the International Telecommunication Union (ITU), 4.2 billion people are still unable to connect to the Internet. The rate of Internet penetration is less than 10% in the 48 least-developed countries identified by the UN. Of these, penetration falls below 2% in the six least-developed countries. We still have a long way to go before we truly bridge the digital divide. Recognizing this, the UN has set Connecting the Unconnected as one of the main goals in its 2030 Agenda for Sustainable Development.

With a long-term commitment to innovation, Huawei continues to plug away behind the scenes, serving over one-third of the world's population and doing our part to bridge the divide. Today, mobile communications cover every inch of our planet, reaching the very tip of Mountain Everest, and even the icy regions of the North Pole. There are still major gaps, however, in broadband penetration and ubiquitous connectivity. At this very moment, Huawei is driving innovation in technologies and products such as LTE, Narrowband Internet of Things (NB-IoT), and 5G to bridge these gaps and build a Better Connected World.

## Accelerating digital transformation

The extent to which a company, organization, or a country embraces digital technology will determine its future competitiveness. This is common knowledge – if not common sense. Many countries are thus using the Internet, cloud computing, IoT, Big Data, and other technologies to make their industries, governments, and enterprises smarter, thereby future-proofing the competitiveness of physical industry and real economy. Digital infrastructure, as the foundation of all these applications, is critical to their success.

In an effort to expand digital infrastructure, Huawei looks to partner up with carriers. By fully leveraging each other's strengths in technology and services, we can set a new benchmark for public cloud services used in verticals and large enterprises, and help carriers transform their business more efficiently. In addition, Huawei collaborates with customers from a number of other industries, such as public security, finance, transport, energy, and manufacturing, providing the technological foundation for their smart city, smart finance, smart transport, smart grid, and smart manufacturing initiatives. By doing so, we enable their digital transformation and help ensure that they remain competitive in future markets.

At Huawei, we are well aware that customers need commercially viable solutions. And when developing these solutions, no company can meet customer needs on its own – we must join forces with industry partners to build an open ecosystem. We continue to hold fast to our pipe strategy, focusing on ICT infrastructure development; we will not touch applications or data. To meet these needs, we have forged extensive partnerships with consulting firms, app developers, system integrators, and channel partners. And through this commitment to openness, collaboration, and shared success, we will create value for our customers, enable digital transformation across all industries, contribute to a healthy ICT ecosystem, and drive social progress.

## Continuously improving corporate governance

Effective governance ensures our ability to undertake strategic initiatives and make our corporate vision a reality. By staying customer-centric and inspiring dedication, we are making continuous improvements in our corporate governance structure, organizations, processes, and appraisal systems. This serves to increase customer satisfaction and helps us stay on track for long-term, positive growth. In 2015, Huawei's Board of Directors carefully reviewed a number of important items, including the company's annual business plan and mid- to long-term development plan, further defining our strategic objectives and key initiatives for the future.

## Adhering to operational integrity and compliance

We conduct business in an ethical manner, complying with international treaties, applicable laws and regulations in the countries where we operate. This is the cornerstone of operational compliance at Huawei, and has long been a core belief of our management team. To ensure the integrity of our operations, we benchmark our work against best industry practices. We integrate compliance requirements into our corporate policies, systems and processes, and have set up professional teams to ensure that all of these requirements are met. In business areas where regulatory compliance is especially critical, such as trade compliance (export control) and cyber security, we have established an operational compliance system that conforms to industry standards and undergoes regular third-party audits.

Huawei actively communicates with local authorities on compliance-related requirements, obtaining approval and licenses wherever necessary. Furthermore, we regularly communicate with third-party stakeholders on matters of regulatory compliance to further increase transparency, enhance mutual understanding and trust, and foster a sound business environment based on strict adherence to business ethics and regulations.

## Fulfilling our social responsibility

Huawei is committed to growing together with local communities. Leveraging our ICT expertise and management experience, we engage in a number of public service activities with governments, customers, and non-profit organizations. We support ICT innovation; participate in green initiatives and traditional cultural events; promote the development and training of local ICT talent; and provide many different forms of support to charitable organizations and underprivileged groups within the community.

In the Philippines, Bangladesh, Cameroon, Botswana, Saudi Arabia, Belarus, and other countries and regions, we fund ICT knowledge contests and provide scholarships to promote more inclusive education. In remote areas, we donate computers, tablets, and mobile phones to schools, young students, and girls to give them equal access to the Internet. In addition, we continue to implement our flagship CSR program, Seeds for the Future, to facilitate global knowledge transfer, support local training, and increase digital inclusion. Thus far, we have partnered with more than 150 universities to implement the program in 67 countries. About 15,000 students from five different continents have benefited from the program, including more than 1,700 who studied at Huawei's headquarters in China. The most outstanding participants have since joined the ICT industry, and are actively contributing to its development.

## Focus, perseverance, and technological breakthrough

At Huawei, we focus on strategic opportunities, patiently investing in future technological breakthroughs. We reject short-term opportunism, and do not waste our strategic resources on non-core areas of business. We are fortunate to find ourselves in a time of rapid ICT growth. In spite of the many opportunities that surround us, however, we remain focused, never taking shortcuts nor allowing ourselves to get distracted by irrelevant areas of potential growth. Only through solid work, moving forward one step at a time, have we managed to arrive where we are today. This has been a long and difficult process of ongoing effort, but today we look upon success and see our path forward with the utmost clarity.

**Sun Yafang**
Chairwoman of the Board

Wagenia man fishing in the Congo River

# Tireless focus, for a moment of strategic opportunity

Focus · Persevere · Breakthrough

HUAWEI

# Industry Trends

## A Better Connected World: Driving Global Progress

Information technology has taken human beings from the industrial age into the digital age. Digital Age 1.0 – represented by personal computers, the Internet, and mobile phones – has changed how we live and work. Now, the Internet of Things (IoT), Big Data, artificial intelligence (AI), Internet+, and other new technologies and industries are ushering in Digital Age 2.0, a fully connected age.

Metcalfe's law reveals the link between a network's size and its value: The larger a network is, the more value it creates. In a fully connected age, networks are no longer just physical. Networks now combine digital connections, both physical and virtual, thus greatly increasing network value. In fact, networks and data are becoming a new basic resource of production, alongside land, tools, and labor. In the future, we will discover whole new lifestyles, new businesses, and new economic models.

## Connectivity as a basic human right

The heartbeat of humanity will soon be as much digital as it is physical. The mobile Internet is a game changer for billions of people, both at work and in their personal lives. E-commerce is weaving its way into the very fabric of our lives, as the physical world and the digital world draw closer together. Via a plethora of phone apps, the basic necessities of life – clothing, food, accommodation, and transportation – are just one tap away.

As our reliance on networks grows, we are increasingly rendering our physical characteristics into digital forms, and storing, transmitting, and utilizing them online. Our cyber heartbeat – a unique multidimensional identifier of our online presence – will be with us throughout our lifetime, just like our physical heartbeat. We will be dependent on networks for emotional connections and for the resources of modern-day life. Connectivity will become a basic human right, and will be readily accessible to all. Over the next five years, there will be 1 billion new voice users, over 6.7 billion wireless broadband users, and 300 million new wireless home broadband connections around the world.

## Connectivity as an enabler to help enterprises transcend the limits of capacity and resources

In the shift toward a digital economy, ICT technologies are penetrating deeper into traditional industries as they go digital. And, as ICT technologies are being adopted for production systems, they are reshaping enterprises in terms of O&M, organization, and innovation. In the fully connected age, what matters most to an enterprise will be their strengths rather than their weaknesses. Enterprises will focus on developing their greatest expertise and delivering it as a service; they will make up for their relative weaknesses through outsourcing. From their inception, future enterprises will be borderless, with a global presence.

Fully connected enterprises will organize their business around industry cloud services, which are specially designed to address the unique business systems of each industry. Enterprises will gravitate toward hybrid cloud architecture. With cloud services, enterprises can be better positioned to innovate their offerings, collaborate with industry partners, and boost their operating efficiency.

An example is the banking industry. As finance increasingly moves online, the banking industry will evolve to Bank 3.0, where customers – not financial service providers – will have the upper hand in deciding what services are offered and how. New digital strategies will mean that ICT systems are no longer a supporting tool for bank operations; bank operations themselves will take place in the cloud.

At the same time, telecom carriers will develop new, flexible business models to support everything as a service (XaaS), and establish digital ecosystems. They need to leverage virtual infrastructure and operations platforms in order to manage and share both services and resources from end to end. Cloud data centers will deliver critical support in this aspect.

## Connectivity as a strategic engine for national economies

To drive sustainable economic growth, both developing and developed countries have launched national ICT strategies or development plans for their ICT industries. These include China's Internet+ and Made in China 2025; Germany's Industry 4.0; Industrial Internet in the US; the Digital Malaysia program; Indonesia's broadband plan; Smart City in the Netherlands; and Smart Nation 2025 in Singapore. According to a 2015 report by the ITU, 148 countries have published national ICT strategies, bringing ICT closer into industries.

The standards for broadband have been redefined globally. In early 2015, the US Federal Communications Commission defined a new broadband standard, lifting the minimum speed of broadband from 4 Mbit/s to 25 Mbit/s. In November 2015, the UK broadband regulator Ofcom officially set its minimum speed for ultra broadband to 300 Mbit/s. Even Thailand, a developing economy, views speeds of 10 Mbit/s as "yesterday's broadband". Today, more than 50 carriers around the world are offering gigabit broadband services. By 2020, all European families will have access to broadband of 50 Mbit/s or even higher. The same can be seen in urban China, and the country's most modern cities will have gigabit broadband.

A better connected economy is ready to change our world. Connectivity will fuel the modernization of the real economy, and create new types of virtual economy. The better connected economy will have six key features. First, real-time, accurate matching of supply to demand will become possible, making overcapacity a thing of the past. Second, resources can be efficiently utilized so they will no longer lay idle. Third, real-time data collection and remote data processing will help minimize resource waste. Fourth, the improved ability to quantify the value of information and a growing awareness of information sharing will end the dominance of money as the sole medium of exchange. Fifth, old economic silos will break down as innovation crosses the boundaries between industries. Sixth, user needs will become differentiated at the individual level, and one-size-fits-all mass production will become obsolete.

**These waves of seemingly mysterious changes in the ICT industry actually give us clear pointers to the future. Humanity will soon enter a fully connected age, where the heartbeat of humanity will soon be as much digital as it is physical. With full connectivity, enterprises in every industry will digitize their business systems, and those who fail to go digital will perish. Additionally, more countries will launch national ICT strategies to embrace the better connected economy. Against the backdrop of these dramatic changes, the ICT industry is set to transform in five ways: Devices will be more personal and more connected; smart networks will be re-architected; platforms will migrate to elastic clouds; the industry ecosystem will become more open and enable shared success; and the user experience will be scenario-driven. About 1,000 years ago, a Song Dynasty poet captured the turbulence of our changing times: Billowing clouds surge into dawn's hazy mist; sails toss and dance as the Milky Way recedes.**

## Better devices: more personal and more connected

Device vendors will put users at their heart and redefine their value for users. Over the next few years, a consumer-centric business revolution will take place as we move toward smart lifestyles in every scenario. Three consumer trends will shape this revolution. First, consumers born in and after the 1990s – known as digital natives – will define future customer needs. Second, middle-class consumption will tilt toward healthcare, quality lifestyles, personalization, and social identity. Third, there will be more independent female consumers with strong buying power. Focusing on the new generation of consumers, device vendors will create greater value for users by providing personal services through smart devices that offer convenience, customization, and seamless mobility across scenarios.

Wearables are cutting the user-device distance down to zero to create greater value. From mainframe computers and personal computers to laptops and mobile phones, computing devices have come closer to the user, becoming richer sources of value. Now, wearables have brought the distance down to zero.

Wearables for health & fitness, identification (e.g., for micro-payments and smart keys), ambient awareness, and enhanced interaction, will create value like we have never seen before. Wearables will generate more value if they are supported by more innovative technologies in digitization, miniaturization, and natural interaction.

Smart home products are getting connected. Most smart home products remain isolated from each other. This has made interconnectivity and information sharing impossible, and market growth has been slow. Smart home devices are now being connected in order to better serve users yearning for products that are simple, personal, and environmentally friendly. Digital technology can get devices online, and smart home platforms can connect devices to each other. Many vendors are now building smart home platforms and opening up their communications protocols and software development kits so that third-party devices can access them. Vendors are thus building an industry ecosystem to support smart homes.

## Better networks: re-architecting smart networks

A Better Connected World will require re-architected telecom networks. It is estimated that, by 2025, the number of connections worldwide will grow to 100 billion, driven by the demand for full connectivity of people, things, and businesses. Applications in vertical industries will need different levels of network connectivity. For example, smart meters and smart buildings will require networks with deep indoor coverage, low power consumption, and minimum cost. The Internet of Vehicles and smart transportation will need networks that offer wide coverage, low latency, and high mobility. Industrial control systems will demand super high-density connections with ultra-low latency.

Faced with complex demands under diverse network scenarios, carriers will need new network technologies and architecture in order to move the industry forward. That is where 5G comes into play: It will support 100 billion connections, 1 millisecond latency, and speeds of 10 Gbit/s. SDN/NFV will help carriers establish an agile, open, and flexible network architecture, and build management systems that give them a global view for better management of their networks. With SDN/NFV, carriers can drive down costs, accelerate service innovation, and adopt new business models in which resources are deployed on demand and customers can purchase exactly the services they need.

The user experience in future networks will be Real-time, On-demand, All-online, DIY, and Social (ROADS). To deliver this experience, carriers are modernizing their networks and services, driving cross-industry and cross-border consolidation. The scope of the services which carriers can deliver is being redefined, and the service portfolio is shifting toward an organic combination of mobile broadband, fixed broadband, and digital content.

## Better platforms: migrating to elastic clouds

The cloud platform will be a driver of ICT investment. In the digital age, many information services can be offered via cloud platforms, from basic lifestyle services to enterprise ICT services, from autonomous driving to AI. Extensive use of cloud services will become the new normal in enterprise ICT spending plans. With their capacity to centrally provide services and share massive data, storage, and computing resources, cloud platforms will deliver significant gains in service efficiency. And the larger the user base, the lower the cost, which means better returns on investment. But clouds will not just be a form of service provisioning: Cloud platforms can also support entire business processes, from planning and design to development. This extended functionality of cloud platforms will be a further spur to enterprise ICT investment.

Carriers – with their extensive broadband networks and ability to deliver local services – can provide enterprise customers with the hybrid cloud services they need to stay competitive over the long term. Demand for cloud data centers will grow rapidly following the widespread adoption of massive data storage, online analytics, and cloud services. By 2020, investment in cloud-based IT infrastructure is expected to exceed non-cloud IT investment, meaning that cloud will soon be the primary IT infrastructure market.

## Better ecosystems: openness and shared success

Open ecosystems are reshaping the landscape in the ICT industry. As technologies and business models continue to evolve, enterprises can no longer succeed on their own. That is why cooperation across an open ecosystem is important: Upstream and downstream players should innovate together to develop superior products and solutions for customers. Ecosystems themselves will evolve from being semi-open or alliance-based, into fully open platforms where all players can socialize and share.

Enterprises in all industries – both traditional sectors and the emerging ICT industry – are embracing new technologies and business models like never before. They are establishing new ecosystems, where all players can collaborate openly to drive the digital transformation and redefine the industry landscape. Different ecosystems will also interact with and influence each other, further restructuring each industry. Leading ICT companies are losing no time in creating open API platforms, which allow them to share their capacities and services with third parties and partners. APIs are a new type of product that enables ICT companies to monetize their ICT capacity. Meanwhile, software vendors can offer software as a service (SaaS) to better serve individual users and SMEs. More and more carriers are building their platform-based open ecosystems, in the hope of taking on the role of service enabler or service creator. And open-source hardware will open up excellent hardware development platforms to makers – tech enthusiasts fond of creating new devices. They will catalyze innovation in ICT hardware.

## Better user experience: scenario-driven

In the fully connected age, the user experience will be driven by usage scenarios. Cloud-pipe-device synergy, coupled with Big Data and AI, will make it possible to identify the scenarios in which users are involved, and then deliver the most desirable services by utilizing integrated resources from the entire ecosystem. These services will include digital assistants that can help coordinate your life and work schedules anytime and anywhere; virtual experiences, which allow you to be immersed in the outdoors from the comfort of your own home; and hassle-free lifestyle services, which deal with minor issues so that you can spend your time more meaningfully.

In these service scenarios, video will be a key part of the user experience in the fully connected age. As well as entertainment, video will find wider applications in production and the public sector: public safety, transportation management, VIP customer services, and remote fault diagnosis. 4K and 8K HD video is growing in popularity, and users are spending more time watching video each day. All these trends will make video a new key engine for carriers' revenue, so carriers are now set to make serious investments in video.

Video applications across diverse scenarios are becoming one of the basic metrics for assessing a carrier's network experience. Video data already makes up nearly 70% of all traffic across IP networks, and it will fuel network expansion and transformation. Over the next five years, video will drive a thirty-fold increase in mobile data traffic. Cloud computing will change how multimedia content is processed and transmitted, with video clouds at the core of global video delivery networks.

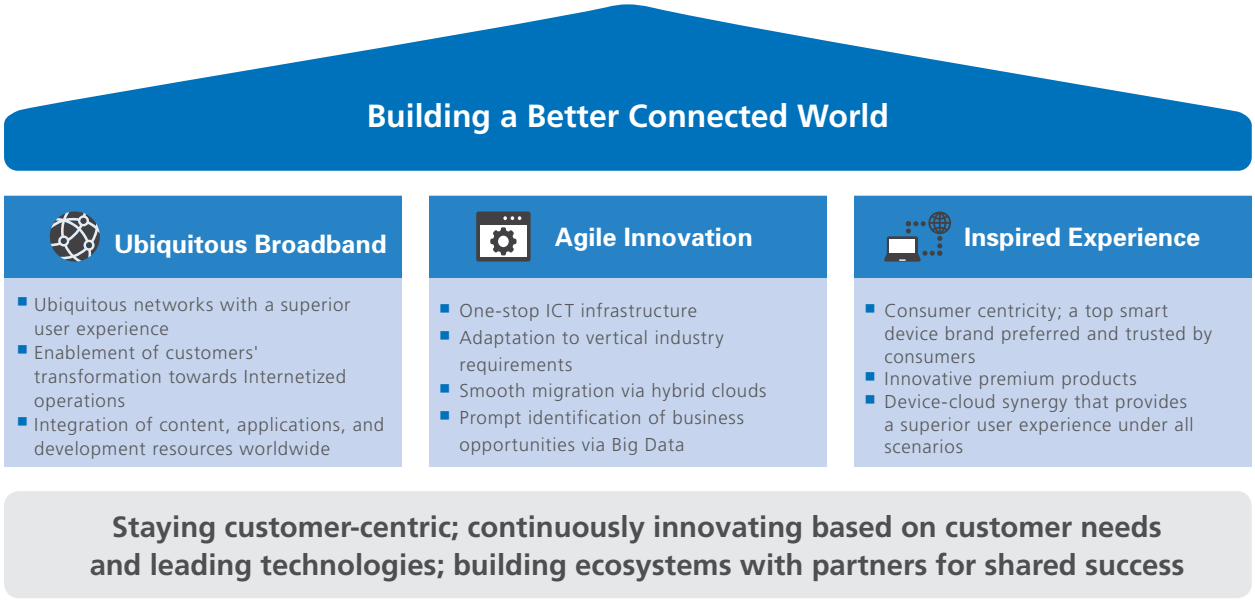
**We live in an information age, brimming with new ICT technologies: 5G, virtual reality, augmented reality, heterogeneous multi-core processors, non-volatile storage media, graphene, chip-level optical interconnects, cloud-based security systems... These advances are the engines for the exponential growth in the number of connections, and in their value; and these advances will reshape business models across many industries and drive global progress. As the Song dynasty poet said: The mighty roc is taking to the skies. The entire ICT industry shares this vision: Together, we can build a Better Connected World for everyone.**

World's northernmost LTE base station built by Huawei in Svalbard, Norway

# Management Discussion and Analysis

## Our Value Propositions

The convergence of ICT technologies continues to accelerate. New technologies, particularly cloud computing and Big Data, are becoming key enablers for ICT innovation and development. These new innovations are not only reshaping the CT industry, but also creating enormous business opportunities through the convergence of IT and CT. In response to these revolutionary changes, Huawei continues innovating based on customer needs and leading technology. Through open partnerships, Huawei focuses on providing future-oriented information pipes to build a Better Connected World and continuously create value for customers and society. Huawei aims to become a strategic partner that assists carriers in their future transformations, a leader in providing enterprise ICT infrastructure, and a top smart device brand preferred and trusted by consumers.




### Ubiquitous Broadband

The Internet makes it easier to disseminate and obtain information, which in turn stimulates consumers' desire to go online anytime, anywhere, on any device. This level of connectivity enables users to access more high-quality content and applications and enjoy the convenience of mobile offices. Enterprises are now migrating their IT systems to data centers and clouds, which places higher requirements on networks. Harnessing future data surges will require networks with greater capacity, coverage, and agility. Huawei aims to bring the benefits of networks to more and more people.

Consumers' desire for network connectivity, bandwidth, reliability, and security is far from satisfied. In response, Huawei provides carriers at different development stages with viable solutions to best suit their needs, thus helping them address business and technological challenges. Huawei is committed to helping carriers increase network capacity, optimize network management, and enable Internetized operations. As part of this goal, Huawei has continuously innovated new architectures (such as SoftCOM) and new technologies to deliver cutting-edge products and solutions that enable

seamless evolution, and help our customers build highly efficient infrastructure networks. Huawei also supports carriers' efforts to reconstruct their telecom networks with IT technologies, which is a key step to realizing Internetized operations and offering subscribers on-demand services and high-quality content. Specifically, Huawei helps carriers integrate their existing IT systems and transform their networks with NFV and SDN technologies; aggregate high-quality content to expand their revenue streams; and digitize operations to deliver a ROADS experience and make ubiquitous broadband readily accessible for all.

## Agile Innovation

The ICT industry will continue to advance rapidly well into the future. New trends such as mobility, cloud computing, Big Data, and social networking are driving the industry to new frontiers. Significant digital changes are taking place in the physical world, with the Internet driving the modernization of traditional industries.

Enterprises in all industries need to rapidly identify business opportunities and continuously enhance IT-enabled organizational collaboration in order to launch new products and services faster and more effectively. IT is evolving from a support system to a production system, becoming one of enterprises' core competences.

Huawei is committed to providing innovative one-stop ICT infrastructure. As part of this drive, we deliver cloud data center infrastructure and digital infrastructure solutions to help customers maximize resource utilization (e.g., storage, computing, and network resources). Through this, business systems can be quickly deployed, easily operated and maintained, and efficiently managed. Huawei also provides industry solutions that satisfy the needs of vertical industries. Our intelligent data analysis system leverages Big Data technologies to help customers identify business opportunities and achieve agile business innovations. Through cooperation and innovation, we integrate our ICT products into partners' industry solutions to better meet the requirements of various industries.

The next 30 years will witness the gradual replacement of traditional data centers with hybrid cloud data centers. In response to this trend, Huawei has begun delivering hybrid cloud solutions by incorporating technologies for public cloud services. As a result, our solutions are a perfect fit for enterprise customers with diverse needs, and can help carriers deploy public clouds to seize the tremendous opportunities offered by cloud services.

## Inspired Experience

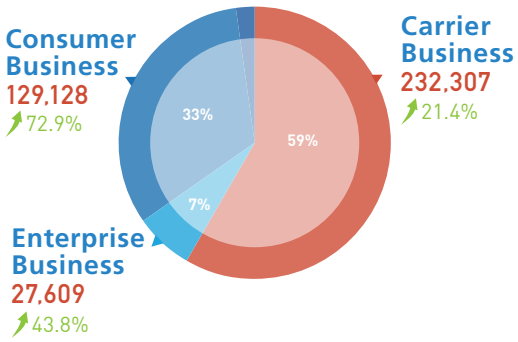
In the future, smart devices will become an integral part of people's lives, as they will be better at identifying user needs and developing situational and emotional awareness.

Through innovative industrial designs and key technologies, Huawei delivers premium products that are stylish, secure, and easy-to-use. By developing robust application and service ecosystems, Huawei offers a wide range of services, mobile phones, smart watches, and other smart devices for various scenarios (e.g., health, lifestyle, work, home, and outdoor settings). Our commitment to device-cloud synergy contributes to a superior user experience in all scenarios and creates a long-term emotional bond between Huawei and users. We also strive to provide users worldwide with a convenient online to offline (O2O) purchase experience and services, taking user experience to the next level.

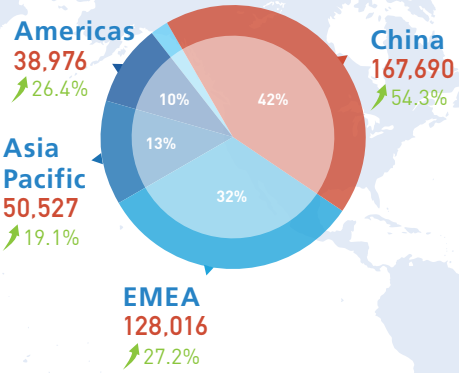
## Business Review 2015

In 2015, Huawei achieved significant results from its focus on the pipe strategy. The company achieved sustainable growth in the carrier, enterprise, and consumer businesses. Its annual revenue totaled CNY395,009 million, a 37.1% increase over the previous year.

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Carrier Business | 232,307 | 191,381 | 21.4% |
| Enterprise Business | 27,609 | 19,201 | 43.8% |
| Consumer Business | 129,128 | 74,688 | 72.9% |
| Others | 5,965 | 2,927 | 103.8% |
| Total | 395,009 | 288,197 | 37.1% |




| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| China | 167,690 | 108,674 | 54.3% |
| EMEA | 128,016 | 100,674 | 27.2% |
| Asia Pacific | 50,527 | 42,409 | 19.1% |
| Americas | 38,976 | 30,844 | 26.4% |
| Others | 9,800 | 5,596 | 75.1% |
| Total | 395,009 | 288,197 | 37.1% |




- Thanks to carriers' massive 4G network rollouts, explosive growth in the smartphone sector, and the increased expertise of the Enterprise BG on industry solutions, Huawei earned CNY167,690 million in revenue in the Chinese market, up 54.3% year-on-year.
- Rapid growth in wireless and fixed networks and increased share in the smartphone market yielded CNY128,016 million for Huawei in Europe, the Middle East, and Africa (EMEA), marking a 27.2% increase in revenue over 2014.
- Due in large part to infrastructure build-out in markets such as India, the Philippines, and Thailand, Huawei maintained its momentum in the Asia Pacific Region to achieve CNY50,527 million in revenue, up 19.1% year-on-year.
- In the Americas, carriers in Mexico, Argentina, Peru, and other countries increased their investment in communications networks. Huawei's smartphone business also grew rapidly in the US market. These factors enabled Huawei to earn CNY38,976 million in revenue from this region, up 26.4% over 2014.

Over the next three to five years, Huawei's revenue is estimated to grow at a CAGR of over 10%.

## Carrier Business

The rapid development of the ICT industry is driving ubiquitous connections that change how we perceive the world, reshape how businesses operate, and transform how cities and countries are administered. ICT has become a national imperative backed by government policies, and is continuously fueling innovation and development around the world. At the same time, users are demanding the ultimate experience of ROADS (i.e., Real-time, On-demand, All-online, DIY, and Social), thus providing an outstanding experience has become the core foundation of carriers' business competitiveness in a fully connected era, propelling their digital transformation.

Carriers connect the physical and digital worlds. As the Internet is sweeping the globe, carriers are challenged to transform themselves and the industry ecosystem in which they operate. Digital transformation is opening up new business opportunities for carriers to thrive and succeed in a Better Connected World. We believe carriers will soon lead the value chain and enable more than 100 billion connections through successful digital transformation, capability exposure, and collaborative innovation in the industry. By seizing ICT opportunities underpinning economic development, carriers will accelerate the transition toward tomorrow's digital economy and become an important driver of economic growth.

Huawei is at the forefront of enabling carriers' digital transformation through its five Big Initiatives: Big Video – Everywhere, Big IT – Enabling, Big Operation – Agile, Big Architecture – Elastic, and Big Pipe – Ubiquitous. We provide end-to-end SoftCOM solutions for these five Big Initiatives. In addition, by focusing on openness, collaboration, and shared success, Huawei is committed to working closely with carriers and industry partners to collectively drive digital transformation and create a Better Connected World through a robust industry ecosystem.

In 2015, aligned with our pipe strategy and with a strong focus on ICT infrastructure and ICT capability exposure, we continued to provide worldwide carriers with leading end-to-end ICT solutions to accelerate their digital transformation. Our technological leadership and competitiveness have been widely recognized by the industry and enabled us to achieve solid business performance. In 2015, our revenue from the carrier business totaled CNY232,307 million, an increase of

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*In November 2015, Huawei successfully hosted the 2015 Global Mobile Broadband Forum in Hong Kong. The event attracted more than 1,000 distinguished guests, over 200 of whom were C-level executives. Participants included representatives from carriers, industry partners, and the media. Guests discussed issues related to jointly building a Better Connected World, such as how to broaden the MBB pipe using 4.5G solutions and how to take advantage of more powerful pipe capabilities to explore new industry opportunities.*

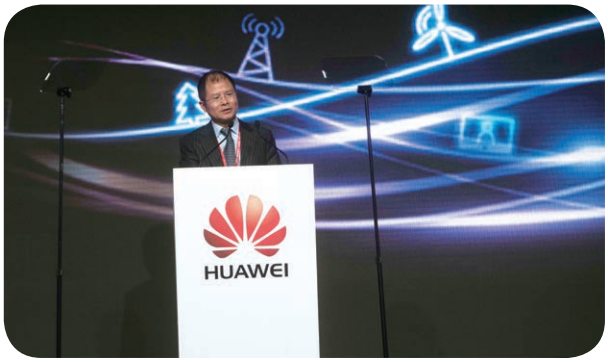
21.4% year-on-year. We made significant progress in each of our key business domains in terms of market and ecosystem development.

In the wireless network domain, our MBB 2020 strategy focused on experience and networks to evolve carriers' business models and establish a robust industry ecosystem. Specifically:

- We delivered market breakthroughs across five continents, which has driven the adoption of our LTE solutions in more than 140 capital cities. We have commercially deployed over 400 LTE networks and over 180 EPC networks, serving approximately half of all 4G users around the world.
- 4.5G technology advocated by Huawei received a formal name from 3GPP, which approved LTE-Advanced Pro as the new marker for LTE standards.
- We collaborated with carriers, device manufacturers, chip makers, and research institutes to establish industry alliances and promote the sound and sustainable development of the mobile industry with 700 MHz, 450 MHz, and 3.5 GHz.
- Our wireless network solutions won international awards in 2015 and were widely recognized across the industry. Together with HKT, we won the coveted Best VoLTE Innovation award from consultancy firm Informa at the LTE World Summit 2015. In addition, our LampSite Solution won the Best Mobile Infrastructure award at the Mobile World Congress 2015.

In the fixed network domain, the global ultra-broadband industry developed rapidly in 2015, and there was significant upgrading of fixed broadband networks from 100 Mbit/s to 1,000 Mbit/s. More than 100 carriers that focus on mobile services announced their plans to increase investment in fixed broadband services. We launched our Gigaband development strategy, and encouraged industry players to work together to achieve the goal of building ultra-broadband networks that cover 90% of the world's population and enable a 1 Gbit/s speed for all users by 2020. We continued to increase our investment in experience-focused solution development and reinforced our market leadership position in the fixed network domain. Specifically:

- In the carrier IP field, we partnered with Telefónica to complete the industry's first SDN-based IP/optical field trial. We helped Telecom Italia construct a pan-Europe backbone network based on our terabit routing platform. We also partnered with China Telecom to construct the world's largest SDN-based commercial backbone network.
- In the optical transport field, we partnered with a European carrier to build the world's first 1T OTN, and collaborated with BT to complete testing for 3 Tbit/s optical transmission on live networks, the fastest speed in the industry.
- In the access field, we worked with TDC in Denmark to complete the world's first DOCSIS 3.1 early field test, and helped BT launch the world's largest customer trial of G.fast. We also partnered with Beltelecom to construct Europe's first commercial 10G-GPON FTTH network, and provide users with one-stop smart home solutions.




*In September 2015, Huawei announced its Gigaband development strategy at the 2nd Ultra-Broadband Forum held in Madrid, Spain. Huawei defined the development stages of the ultra-broadband industry for the first time, and explained its Gigaband strategy in terms of bandwidth, coverage, and experience. According to Huawei, the Gigaband strategy improves access speeds, enhances ultra-broadband network coverage, and offers a superior user experience.*

In the global services domain, we adopted a Product + Service strategy, continued to increase investment in services, established a digital business ecosystem through open collaboration, and continued to improve network performance, service quality, and user experience. Through consulting and system integration services, we helped carriers achieve experience-driven operations transformation and infrastructure restructuring to advance their digital businesses. Specifically:

- By the end of 2015, we constructed or supported the operations of more than 30 Service Operations Centers globally with the HUAWEI SmartCare® CEM solution, providing services to 14 of the world's top 30 carriers.
- Our Network Experience PLUS solution helped customers improve their brand reputation, deliver a differentiated service experience, and enhance the service experience in key regions and during key events. We provided the Indoor Connected Solutions for more than 40,000 hotspots for 120 carriers in 75 countries.
- The Infrastructure Enabling System catalyst program themed "utilizing future mode of operations (FMO) to establish a model-driven hybrid business orchestration", a joint innovation of Huawei and carriers, won TMF's Best Adoption of Frameworx award.
- We provided data center integration services for 255 cloud data centers, and helped carriers smoothly consolidate and migrate large-scale data centers across vast geographic areas and oceans.
- In NFV/SDN integration services, we implemented over 70 commercial NFV and SDN projects worldwide.
- Our managed services helped carriers rapidly transform toward ICT converged operations and create more value.
- Through ecosystem collaboration and our Open ROADS Community, we developed ICT transformation best practices to drive the industry forward. We also continued to increase investment in competence centers and open labs to provide compelling and optimal solutions that align with carriers' strategies.

*Huawei has built five open labs, including the NFV Open Lab, Global Network Evolution and Experience Center (GNEEC), Customer Experience Transformation Center (CETC), Service Provider Operations (SPO) Lab, and Cloud Data Center Open Lab, to enable carriers to transform and create business value.*

In the carrier software domain, our "Accelerate Digitalizing" strategy enabled carriers' digital operations and transformation. Specifically:

- We continued to create the world's best digital operation enabling platform to help carriers improve their capabilities to operate digital businesses and enrich their portfolio of digital services. We developed the Universe Big Data analytics platform based on the management of customer assets to help carriers transform toward digital operations and enhance the user experience.
- We developed a Digital inCloud platform and established a digital service ecosystem that ensures shared success with carriers and partners based on our Digital Service Delivery Platform (SDP) and our capabilities in converged operations of digital services. Digital inCloud has connected 113 carriers worldwide, and helped over 2,400 partners deliver hundreds of thousands of pieces of content around the world. Huawei won TMF's Open Digital Ecosystem Award for this platform's leading concepts and successful practices.

- In BSS, we continued to serve multinational carriers including Vodafone, Telefónica, América Móvil, and STC. Our Business Enabling System (BES), based on next-generation suites, continued to explore and gain experience in the areas of customer experience improvement, omni-channel transformation, and Internetized agile operations, enabling carriers' digital operations transformation. BES was successfully deployed commercially, and won the Agile Business & IT Solution Provider Award at the TM Forum Live! 2015.


*In February 2015, Huawei announced its BES in London. By restructuring front-end IT systems and gradually optimizing background IT systems, BES brings together partners in the digital ecosystem, and helps carriers transform in multiple areas, including products, customers, experience, infrastructure, value chain, and marketing. Carriers will thus be able to provide a ROADS user experience, create an open digital ecosystem, and achieve digital and agile operations.*

In the core network domain, we focused on the evolution of converged communications, Packet Core Network (PCN), NFV, convergent data, and IoT. We optimized full-connection management and actively promoted cloud adoption. By providing a superior user experience in dual HD voice and video, monetizing traffic in all-access smart pipes, and opening up communications capabilities, we helped carriers in their transformation toward future networks. Specifically:

- In 2015, our VoLTE and VoWiFi solutions served 68 networks, and we became a preferred strategic partner of world-leading carriers. We successfully helped leading carriers, including Vodafone and China Mobile, deploy VoLTE networks, and accelerated the development of 4G converged communications.
- Our leading NFV solutions ushered in an agile, innovative, and smart cloud era for carriers, and secured over 50 commercial contracts worldwide. Our NFV-based CloudIMS solution won the Best Cloud/Virtualized IMS Solution award at the 2015 IMS World Forum. Huawei and China Mobile won the Annual Wireless Network Innovation Project award, voted by readers of *Telecom Asia*.
- Our PCN solutions continued to help carriers construct smart pipes that deliver an optimal user experience, and maintained the top spot in terms of market share. Our CloudEPC Solution, based on cloud architecture, received the Best NFV Innovation of the Year Award at the LTE World Summit 2015.
- In the convergent data field, we continued to help carriers create value from their data assets and monetize their network assets. A survey published by Frost & Sullivan ranked Huawei number one in the 2015 SDM market. Our flexible, real-time, and converged SmartPCC solution meets user demand for a differentiated service experience, and won the Best Traffic Management Solution award at the Policy Control Forum 2015.
- In October 2015, we unveiled an IoT connection management platform. This platform will enable us to continue to drive our strategy of openness, and work with developers worldwide to enable the 100 billion connections that will emerge in a fully connected era.

In the IT domain, capitalizing on the opportunity of traditional industry upgrading, Huawei focused on IT infrastructure, developed innovative hardware products, and opened up platforms to facilitate carriers' transformation. Leveraging our deep understanding of carriers' businesses gained over the years, the open IT architecture, and the company's industry-leading ICT solutions, Huawei continued to help carrier customers achieve faster and more agile digital transformation and business success.

In 2015, Huawei was selected by more than half of top-tier carriers as their provider of storage, server, and cloud computing products:

- Our storage products were widely adopted in the core systems of carriers including Telefónica, Vodafone, and MTN.
- Our servers helped global carriers, including Telefónica and TalkTalk, expand their businesses.
- Our FusionSphere cloud operating system helped UK-based O2, France's SFR, and other carriers build cloud platforms.
- Our converged resource pool solution helped many carriers build new basic network platforms.

By enabling shared success and providing differentiated and cutting-edge products, we made solid progress in ecosystem development in 2015:

- Deutsche Telekom selected Huawei as a partner under its public cloud strategy.
- China Telecom Global partnered with Huawei to build over 20 cloud sites worldwide and extend the coverage of public cloud services to enterprise customers around the world.
- As a leader of cloud architecture, we conducted in-depth collaboration with over 400 carrier customers and partners around the world to explore cloud transformation.

In the network energy domain, ICT network convergence and transformation are bringing challenges on massive data, traffic, and power consumption. We seized opportunities presented by the evolution of traditional power supply solutions toward the energy Internet; adhered to the core concepts of digitization, interconnection, and intelligence; and focused on telecom energy, data center energy, and smart PV. Through this, we provided solutions that meet the application requirements of all power supply scenarios in the ICT industry. They include:

- Next-generation intelligent MTS power supply solutions, which are the industry's most efficient and apply to both wireless and fixed network scenarios
- Simple, efficient, and reliable intelligent data center energy solutions
- A full range of efficient modular uninterruptible power supply (UPS) solutions

These solutions helped carriers maximize network efficiency and smoothly evolve their ICT networks. Our achievements in the network energy domain in 2015 included the following:

- We partnered with Orange to help reduce energy consumption and improve energy efficiency across its networks.
- With an efficiency of 98%, our ultra-high-efficiency power supply products were commercially adopted on a large scale by world-leading carriers, including Vodafone and Telstra.
- Our innovative, intelligent MTS solutions helped Telefónica and América Móvil build sites and operate efficiently.
- Our data center energy solutions were applied in carriers' data centers and deployed by BT and Telefónica. We won the largest share in China Mobile's centralized procurement of UPS products for two consecutive years.
- To date, we have deployed 1.8 million telecom energy systems in 170 countries, and enjoy the largest global market share in this regard. We also received the 2015 Global Product Innovation Leadership Award in Telecom Energy Solutions from Frost & Sullivan.

Digital transformation is creating huge opportunities for the mobile communications industry. In 2016, we will continue to focus on the concept of *Open ROADS to a Better Connected World*, and collaborate with carriers to explore strategic options for digital transformation and methods for reshaping the telecom industry in four areas: services, operations, network functions, and network architecture. We believe that a fully connected and intelligent world is just around the corner. We are committed to joining forces with our global customers and the entire ICT industry to create Open ROADS to a Better Connected World.

## Enterprise Business

The impact of innovative ICT technologies such as cloud computing, Big Data, IoT, and mobility on industries is increasing. Significant changes are taking place in customers' business models, enterprise IT architecture, and the industry ecosystem. In response to customers' business pain points and strategic demands, we have focused on ICT infrastructure and fully collaborated and jointly innovated with our partners on technology, hardware, software, services, and go-to-market. Through these efforts, we have provided our customers with innovative, differentiated, and leading products and solutions and helped them achieve business success.

In 2015, we achieved rapid growth in our focus industries, including public security, finance, transportation, and energy. Our revenue from the enterprise business reached CNY27,609 million, an increase of 43.8% year-on-year.

### Focusing on high-value industries and working with partners and customers to build Business-Driven ICT Infrastructure

In the smart city domain, we have jointly innovated with Hexagon and other partners to develop the world's first visualized and converged Safe City Solution. The solution:

- Helped city authorities and emergency response departments fully improve their capabilities in risk perception, comprehensive pre-warnings, timely responses, smart decision-making, and efficient cross-departmental collaboration.
- Served more than 400 million people in over 100 cities across over 30 countries in the Middle East, Africa, and Asia Pacific.

In the finance domain:

- Our Omni-Channel Banking Solution has been commercially deployed in more than 300 financial institutions, including 6 of the world's top 10 banks.
- We have jointly innovated with more than a dozen top-tier financial institutions and independent software vendors around the world to research next-generation IT infrastructure for banks based on cloud computing and Big Data, and help financial institutions address the challenges associated with innovation in the Internet era.
- Huawei's Financial Cloud and Big Data solutions have been adopted by over ten mid-sized and large banks such as the Industrial and Commercial Bank of China (ICBC) and China Merchants Bank (CMB). The solutions helped CMB significantly increase the number of customers applying for micro and small-sized loans, and remarkably reduce the number of text messages required to promote wealth management products.

In the transportation domain, our Digital Railway Solution served a total track length of over 100,000 km. We:

- Deployed an IP-based railway communications system in Spain.
- Completed commercial testing on the world's first LTE-powered metro CBTC system in China.
- Signed a cooperation agreement with Deutsche Bahn to help it construct a future-proof scalable train-ground communications system.

Through these projects, we are pioneering the IP- and broadband-based development of railway operations and communications.

In the energy domain:

- The Huawei Better Connected Smart Grid Solution helped Thailand's Provincial Electricity Authority (PEA) build a secure high-speed production network, driving the rapid development of smart grids.
- Huawei's Advanced Metering Infrastructure (AMI) Solution helped IE, a power company in Nigeria, build a smart power consumption system. The solution dramatically reduced electric wire losses caused by non-technical reasons, and helped IE operate more efficiently.

In the education domain:

- Huawei's Education Cloud Solution was applied in more than 40 countries and regions.
- Our Smart Campus Solution helped more than 200 universities around the world, including Newcastle University in the UK, Southern Cross University of Australia, and China's Tsinghua University, apply innovative ICT to improve teaching and research.
- Our Smart Classroom Solution has been used to facilitate the elementary level education in multiple countries, including China, the US, Turkey, and South Africa.
- Through the Huawei Authorized Information and Network Academy (HAINA), we have worked with over 140 colleges and universities around the world, including the University of Reading in the UK, University of Sydney in Australia, University of Alicante in Spain, National University of Computer & Emerging Sciences (FAST-NU) in Pakistan, and City University of Hong Kong, and have trained more than 5,000 students.

In the Internet domain:

- Huawei's data center solutions have been deployed on a large scale by many large websites, including France's Criteo and India's Flipkart.
- Our data center solutions also helped multi-tenant data center service providers, such as Evry in Norway, Digital Sense in Australia, and iAdvantage in Hong Kong, provide different types of applications (e.g., virtual desktop infrastructure) and basic services (e.g., IaaS) to enterprise customers.
- We have helped Internet service providers, such as Versatel of Germany, provide high-quality Internet services to end customers.

We have carried out in-depth cooperation with carriers worldwide in the enterprise market:

- Worked with Telefónica to help CEPSA, the largest oil company in Spain, achieve digital and smart development for flow manufacturing.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*In March 2015, Huawei showcased its latest innovations at CeBIT, the world's largest ICT trade fair. With the theme of Innovative ICT to Build a Better Connected World, Huawei hosted various activities at the event, including exhibitions, a new product launch conference, a CIO forum, signing ceremonies with customers and partners, and small forums. The theme at CeBIT 2015 was d!conomy, which focused on digital transformation. As one of the key hot topics of CeBIT 2015, Industry 4.0 is a high-tech strategy proposed by the German Government to promote the development of digital technology infrastructure and economic growth. In line with the event's focus, Huawei delivered a keynote speech titled "Innovative ICT Enables New Industrial Revolution" at the CeBIT Global Conferences.*

- Partnered with Vodafone Global Enterprise to provide innovative one-stop enterprise connectivity services, which were replicated on a large scale by Vodafone's high-value subsidiaries in Spain, Italy, and South Africa.

In the media and entertainment domain:

- We helped the Korean Broadcasting System (KBS) edit 4K ultra-HD programs to provide viewers with a superior visual experience.
- Huawei's Media Cloud Solution helped broadcasters, such as China's Henan Television, improve program production efficiency.
- Our innovative hybrid cloud architecture for TV stations which embrace omnimedia has been incorporated as part of the Whole TV Station Network Standards 2.0 of China's State Administration of Press, Publication, Radio, Film, and Television.

In the government domain, China's State Information Center adopted Huawei's Hybrid Government Cloud Solution to build a backup enrollment system for the national civil service exam of the Ministry of Human Resources and Social Security of China. The system shared a portion of the exam enrollment service's traffic, successfully stood the test of massive traffic outbreaks and long traffic peak hours, and helped ensure the enrollment service for the national civil service exam was implemented successfully.

### Providing innovative one-stop ICT products and solutions based on cloud architecture to help customers achieve agile innovation

By adhering to the concept of Make IT Simple, Make Business Agile, we have continued to develop innovative IT products, which has allowed them to become more competitive in the marketplace. Our IT products and solutions have been deployed in over 150 countries and regions, and become a new engine and benchmark for enterprises' digital transformation:

- According to a Gartner report, our storage products continued to grow rapidly. These products are now serving more than 4,000 customers across over 150 countries and regions.
- Another Gartner report showed that our server shipments in 2015 maintained the fourth spot; the growth rate of Huawei's 8-socket mission-critical servers was the fastest worldwide; and shipments of Huawei's blade servers ranked first in China.
- By the end of 2015, the number of Huawei's enterprise cloud partners exceeded 500. Working together, we provided cloud services to over 2,500 customers in the government & public utility, telecom, energy, and finance sectors across 108 countries and regions, deploying more than 1.4 million virtual machines. By the end of 2015, we had built 660 data centers worldwide, including 255 cloud data centers.

In 2015, we launched our Agile Network 3.0 Solution, which extended the innovative architecture of Huawei's Agile Network to the IoT domain. We continued to innovate on data centers, enterprise wireless campuses, and network security, and launched the Agile IoT, Cloud Fabric 3.0, Agile Mobile, and Anti-APT solutions. We also created the Cloud Mitigation Alliance (CMA) as a new security business model to protect against DDoS attacks. To date, over 2,000 customers worldwide have deployed our Agile Network Solution.

According to reports released by IDC, the market share of our data center switches grew the fastest worldwide. Following our enterprise router and firewall products, sales of both our data center switches and Ethernet switches jumped to the top spot in the Chinese market. In addition:

- Our Onboard Solution, a sub-solution of our Agile Branch Solution, has been commercially deployed on a large scale.
- We worked with multinational carriers in Europe on the resale of our Virtual Customer Premise Equipment (vCPE) Solution.

- Our AMI Solution was successfully commercialized in multiple countries.
- Our High-Density Wi-Fi Solution was successfully delivered at China's National Stadium, known more commonly as the Bird's Nest, to support the World Athletics Championships 2015.
- Our Cloud Fabric Data Center Network Solution helped Switzerland's Abraxas to successfully build an efficient SDN-ready cloud data center network.
- Our Agile Controller has been officially deployed on a commercial basis and adopted in multiple projects worldwide.

Huawei's enterprise communications products and solutions have been applied in over 150 countries and regions, and helped customers improve efficiency and provide innovative services via efficient and reliable real-time audio and video communication. According to a report from IDC, in 2015, Huawei's videoconferencing products had ranked first in China for three consecutive years and third worldwide for two consecutive years in terms of market share.

At the Huawei Network Congress 2015 (HNC 2015), Huawei and Tencent jointly launched an innovative WAN SDN solution, securing leadership in the commercial WAN SDN deployment domain. Huawei's Agile WAN Solution has been extensively applied in more than 100 countries and regions, and adopted by many customers in Germany, France, Australia, Japan, and South Korea. Huawei's All-optical Campus Solution, a new campus solution, was deployed by Mina A'Salam of Dubai, Four Seasons Hotel in Portugal, and Hollywood Roosevelt Hotel in Macau.

In 2015, many new partners joined the eLTE Industry Alliance, including Siemens CVC, research and analysis institution IHS, and British private network provider UK Broadband, bringing the total number of members to 78. The enterprise wireless ecosystem has developed rapidly, effectively driving up broadband adoption in the emergency communications market. By the end of 2015, Huawei had signed 164 eLTE network contracts, and commercially deployed 84 eLTE networks.


*In May 2015, Huawei held the Huawei Network Congress 2015 (HNC 2015), themed "From Agility to Imagination", at the China National Convention Center in Beijing. The event brought together approximately 6,000 representatives from customers, partners, media outlets, and analyst firms in 43 countries. Huawei launched Agile Network 3.0 Architecture to extend agile networks to the IoT domain. As a highlight of the architecture, Huawei introduced its Agile IoT Solution, which enables enterprises to build agile IoT infrastructure to capture infinite business possibilities and to realize the digitization of areas such as production, manufacturing, and logistics.*

In the network energy domain, we are committed to providing our customers with simple, efficient, and reliable ICT power supply solutions. In 2015, we achieved the following:

- Our solutions were widely adopted and recognized in many industries, including the ISP, finance, transportation, and energy sectors. Our customers included Tencent, iAdvantage in Hong Kong, HSBC Malaysia, the National Commercial Bank of Saudi Arabia, London Underground, Saudi Aramco, and Pemex.
- Reports from third-party consulting firms, including CCID Consulting and ICTresearch, revealed that Huawei's large-capacity UPS products and micro modular data center solution secured the largest market share in China and were ranked among the top worldwide in terms of market share.
- Huawei's innovative intelligent micro modular data center solution received The Modular Deployment

Award from DatacenterDynamics, establishing Huawei's leading position in the ICT network energy industry.

By integrating digital information, the Internet, and PV technologies, our simple and digital Smart PV Solution that supports automated operations around the world has been recognized and applied extensively by customers:

- We won a 60% share in the Pioneer Project in Datong City, China's first advanced demonstration base for PV technologies.
- China Minsheng Investment Corp., Ltd. (CMI) will use the solution to construct the world's largest PV plant in China's Ningxia Province with a capacity of 2 GW.
- We established comprehensive partnerships with China's top 50 PV plants.

*In September 2015, the Huawei Cloud Congress 2015 (HCC 2015) was held at the Shanghai Expo Center. With the theme of Make IT Simple, Make Business Agile, the congress focused on the idea of Transforming with Cloud, Setting New Benchmark. At the event, Huawei unveiled its latest cloud computing products and solutions to more than 10,000 attendees from over 80 countries, including industry experts, opinion leaders, and Huawei partners. Attendees discussed the latest industry trends and explored transformation opportunities and challenges in the cloud era. In addition to keynote speeches, the congress featured 35 forums and 239 open speeches. Over 3,000 people tuned in live via the Internet to watch the plenary keynote session. HCC has become a new big IT event.*

- The solution has been adopted by an increasing number of customers in Europe, the US, and Japan.
- We have established a robust smart PV ecosystem with upstream and downstream vendors by adhering to the principles of openness, cooperation, and shared success.

### Adhering to the Being Integrated strategy and joint innovation to build a new ecosystem through open technologies and platforms

By continuing to follow our Being Integrated strategy, we have made new progress in our efforts to build a partner ecosystem characterized by openness, collaboration, and shared success. Our global partner base has been expanding steadily. By the end of 2015, in the enterprise business we had more than 8,000 channel partners and 350 solution partners worldwide.

We have firmly implemented transparent and stable channel policies, and provided strong support to our partners in the areas of training, joint solution innovation, marketing, finance, supply chain, and IT support systems. Through this, we have continued to improve their business capabilities, facilitate their transformation, and ensure shared success.

By adhering to open collaboration, we have joined forces with customers and partners, such as Deutsche Telekom, Telefónica, SAP, Intel, and Accenture, to build an open ecosystem in the areas of cloud computing and Big Data. In addition, we have actively contributed to open source communities and driven the standardization of cloud platforms:

- By the end of 2015, as a gold member and board director of the OpenStack Foundation, Huawei was ranked sixth in commits during the development of the OpenStack Liberty release.
- In the Big Data domain, Huawei was ranked third in the Hadoop community and fourth in the Spark community in 2015.
- In August 2015, we unveiled our open source Astro project, which will significantly drive the promotion of Spark in the industry.

- Our contributions in the open source domain have won wide acclaim across the industry, and we were selected as a platinum member of The Linux Foundation in August 2015.

We provide efficient, rapid, secure, and reliable delivery and maintenance services to industry and channel partners. By developing core competencies in professional services, we strive to become a leader in high-end services in the industry. In 2015, we officially launched our professional service product series. We set the standards for ICT certification in the industry to connect job-seekers and employers and help develop ICT talent. We are also actively participating in and building an open ecosystem and working with our partners to provide services to our customers.

By the end of 2015, the number of Huawei's certified service partners (CSPs) around the world totaled 2,092, and another 13,000 engineers received a Huawei-issued certificate. The number of Huawei Certified Internetwork Experts (HCIEs), the highest-level technical certification offered by Huawei, stood at nearly 1,300. The capabilities of our service partners have continued to improve. In addition, we have continued to expand our global CSP ecosystem. By the end of 2015, we provided training and certification services to our partners across 60 countries, and to over 500,000 trainees from customers, partners, and universities.

New IT technologies, cloud architecture, IoT, and Big Data in particular, are reshaping enterprises' IT systems and business models. We will continue to adhere to our Business-Driven ICT Infrastructure (BDII) guiding principle, and leverage our advantages to continuously innovate and rapidly embrace changes. By focusing on cloud, pipe, and devices, we will deeply integrate software and hardware platforms, build a more open industry ecosystem, and develop leading, innovative, and differentiated ICT infrastructure for industries. In doing so, we strive to facilitate enterprises' transformation, continue to create value for customers' business success, and jointly build a Better Connected World.

## Consumer Business

2015 saw new achievements in our consumer business with regard to improving global brand awareness, developing channels and services, and building a product ecosystem. Our products are now trusted by more consumers and favored by more partners.

In 2015, our revenue from the consumer business reached CNY129,128 million, a year-on-year increase of 72.9%, and we shipped 108 million smartphones. We have now secured our position as one of the top three global smartphone brands.

### Remaining at the forefront of technology trends and making global breakthroughs in brand awareness

In 2015, we continued to innovate, focusing on cutting-edge technology and an inspired user experience. By openly collaborating with more partners, we have worked hard to integrate technology with culture, fashion, and art, and become an active trendsetter in technology and culture. Our brand awareness, industry influence, and consumer interest also improved. Specifically:

- Our global brand awareness jumped from 65% in 2014 to 76%, and our brand awareness increased to 97% in the Chinese market.
- Our Net Promoter Score (NPS) rose to 47 globally.
- Huawei became the only Chinese company to earn a place on Interbrand's Top 100 Best Global Brands list and BrandZ's Top 100 Global Brands, ranking 88th and 70th, respectively.

The Huawei brand's continued growth and premium product quality have won us recognition from top-tier brands worldwide:

- We partnered with Swarovski to launch the world's first smart watch designed for women, which has won wide acclaim with its elegance and high quality.
- We joined forces with Harman Kardon, the world's leading audio brand, on the M2 tablets to significantly improve their sonic experience.
- The Nexus 6P, created in collaboration with Google, has become a new benchmark in native Android-powered smartphones, and raised Huawei's position among Android smartphone makers to new heights.

Our dual Huawei and Honor brand strategy continued to create synergy. The Huawei and Honor brands have different focuses and have demonstrated their advantages amid fierce market competition. They have distinct characteristics in product presence, channel development, brand development, and user coverage. This dual-brand strategy has enabled Huawei to enter the global market and establish mobile smart ecosystems for smartphones, smart homes, and wearables.

## Bringing together the world's innovation capabilities to create an inspired user experience

We have always adhered to a strategy of high R&D investment. Through our 16 R&D centers worldwide, we bring together the world's best talent and resources to develop our global innovation capabilities and keep pace with global fashion trends. Through this, we aim to create an inspired product experience and become an industry leader.

In the smartphone domain, we have continued to focus on our premium product strategy. With cutting-edge technology and stylish designs, we bring consumers a superior hardware and software experience, which has fueled rapid business growth. In 2015:

- Our mid-range and high-end smartphones accounted for over 30% of our total smartphone shipments.
- One million Mate 8 smartphones were sold within one month of its launch.
- The Mate S and Nexus 6P were top sellers in over 60 countries.
- We shipped over 5 million P8 smartphones and 7 million Mate 7 smartphones.
- More than 40 million Honor smartphones were shipped to over 70 countries and regions.

We have actively established our presence in the smart wearable, the smart home, and the Internet of Vehicles (IoV) domains. Through technological and

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*On September 2, 2015, in Berlin, Germany, approximately 1,000 journalists, analysts, and customer representatives from dozens of countries witnessed Huawei's launch of the Mate S, the new flagship device that takes a revolutionary approach to touchscreen control. With disruptive Press Touch technology and a superior experience, the Mate S revolutionized the way we use smartphones, and became a top seller in high-end markets worldwide. It also won more than a dozen awards from international media, including Best of IFA 2015.*

brand marketing innovation, we have collaborated with top-tier global partners to develop better smart life services and deliver a better smart experience under all scenarios:

- Our wearables integrate technology and fashion, and shipments achieved scale.
- Through cross-industry innovation, our tablet shipments saw a year-on-year increase of over 130%.
- Our MBB products maintained their leadership worldwide, with shipments of 4G wireless broadband devices exceeding 20 million units.
- In the smart home market, we worked to promote the joint development of an open HiLink smart home solution.
- Our IoV products were selected and recognized by leading car makers including Audi and Volkswagen.

We achieved rapid growth and made continuous breakthroughs in the consumer cloud service market. Through an open ecosystem, we worked with our partners to achieve shared success and deliver a better user experience to consumers:

- Our mobile cloud service users exceeded 130 million.
- App downloads in the Huawei AppStore (HiApp) reached 17.5 billion.
- The number of our partners for developing cloud services grew by 150% year-on-year.
- Our cloud services passed the CSA STAR Certification, an international influential certification in the cloud security domain, thus demonstrating Huawei's industry-leading expertise in user privacy protection.

## Significantly increasing revenue and cementing our position among the global top three smartphone brands

Cutting-edge technology and brand improvements helped us make breakthroughs and achieve strong growth in the consumer business in 2015:

*Huawei actively explores new brand cooperation strategies to bring together the best in technology, art, design, and culture. On September 28, 2015, Huawei made its grand debut at Milan Fashion Week, and collaborated with Vogue to sponsor Fashion Week events. A special edition of the Huawei Watch, designed by renowned Italian designer Barnaba Fornasetti, was given as an exclusive gift to guests at Vogue China's 10th anniversary party in Milan.*

- Annual revenue jumped by over 70% year-on-year.
- Annual device shipments reached 173 million units, an increase of 25% over 2014.
- Smartphone shipments rose by 44% year-on-year, far exceeding average growth in the global smartphone industry, making Huawei the first Chinese smartphone brand to top the 100-million-unit milestone.
- Revenue from our Honor smartphones grew many times over, and Honor became a leading Internet-based mobile phone brand.

After five years of continuous innovation, we have risen in the mid-range and high-end market, and increased our share in the global market:

- A report by GfK showed that Huawei smartphones have maintained a leading retail share in the Chinese market and secured the third spot globally with a market share of 9.9%.
- We grew rapidly and achieved a leading market share in Europe, Latin America, the Middle East, and Africa.
- In certain developed Western European countries, we achieved outstanding results in the high-end smartphone market, ranking among the top three in terms of market share.

We have further improved our development of all types of channels:

- In 2015, we directly collaborated with 1,400 open channel customers in 135 countries.
- Revenue contributions from open channels (including e-commerce) increased by 130% year-on-year, accounting for over 58% of our total revenue from the consumer business.
- Retail stores worldwide exceeded 53,000, greatly enhancing consumers' retail experience with the Huawei brand.
- By staying consumer-centric, we have built convenient brick-and-mortar service centers in major cities, and deployed multi-channel online platforms in over 100 countries. We also coordinated our online and offline operations.

In 2016, Huawei will embrace strategic opportunities to reshape the industry landscape and rise globally in the consumer business. As devices become smarter and more diverse, we will develop future-oriented capabilities to adapt to consumer needs under all scenarios, including the way they live, work, and play. We will seek to cooperate with more top-tier industry players in the areas of flagship products, smart homes, and cloud services. Through technological innovation and mutually beneficial collaboration, we will deliver more innovative gadgets and service experience to consumers worldwide.

## Research and Development

Focusing on our ICT pipe strategy, we have continued to invest in key technologies, basic engineering capabilities, architecture, standards, and product development to build a Better Connected World. We aim to create a better user experience by providing broader, smarter, and more reliable pipes with higher performance and zero wait time.

**We are committed to translating leading technologies into better and more competitive products and solutions to help customers achieve business success.**

In the wireless network domain, Huawei was the first company to propose and define 4.5G. We have continued to lead innovation with key indicators including Gbps, Experience 4.0, and Connection+, to build faster mobile broadband networks that deliver a better experience and support more connections. Specifically, we:

- Released 4.5G-based NB-IoT technology. This technology equips cellular networks with the extensive connectivity of the IoT and allows for lower power consumption and more connections.
- Continued to optimize our SingleRAN solution, which supports multiple frequency bands, multiple modes, and multilayered networks.
- Launched our Blade Site Solution with a simplified design, making it more scalable and easier to deploy.
- Released our leading AAU and EasyMacro solution. Converging multiple frequency bands and modes, this solution integrates the antenna system and radio frequency units, and significantly improves network performance while simplifying site deployment. It provides strong support for rapidly constructing 4.5G networks.

In the fixed network domain, we unveiled our UBB 2020 ultra-broadband development strategy to drive the industry into the Gigaband era. We also promoted DC-centered network reconfiguration to better support the development of 4K/8K ultra-HD video and cloud services. Specifically, we:

- Released the Any Media Giga Access Platform and were the first company to commercially deploy the DOCSIS 3.1 solution.
- Became the first company to launch the NE9000 petabit router and a 2T router line card, setting a new benchmark for core routers.
- Built the world's first commercial 1T OTN in the transport technology domain, and unveiled the 400 Gbit/s short-reach optical interconnect module prototype.

- Unveiled the video experience measurement system U-vMOS and corresponding video experience optimization solutions and tools to help carriers shift the focus of their network construction to experience.
- Innovatively applied SDN technologies to multilayered networks and WAN to enable the commercial deployment of T-SDN. We also released the SDN algorithm Flow Engine 2.0, which targets IP+Optical synergy, improves network resource efficiency by over 40%, and increases algorithm efficiency 30-fold compared to conventional algorithms. These solutions focus on helping carriers more effectively shift toward digital operations and achieve agile operations.
- Received a number of awards in the ultra-broadband domain. Our core router NE5000E won the 2015 Best of Interop Grand Prize at Interop Tokyo, and our SDN-based WAN Virtualization Solution won the Best Virtualization Solution award at the Broadband InfoVision Awards, part of the World Broadband Forum 2015.

In the enterprise networking domain, we adhered to our vision of "Enable Networks to Be More Agile for Services", and continuously innovated based on the Agile Network architecture. Specifically, we:

- Launched our Agile IoT Solution by introducing SDN into the IoT domain for the first time to improve productivity and work efficiency in a fully-connected era.
- Leveraged SDN in our Cloud Fabric data center network architecture to develop a Fully-Connected SDN Solution to connect computing and storage networks, as well as multiple clouds, thus making cloud computing simpler. We also increased the link interconnection rate of data centers' internal switching fabric from 10G/40G to 100G and enabled smooth evolution from GE/10GE to 25GE servers.
- Launched innovative Agile Distributed Wi-Fi architecture and converged Wi-Fi and LTE technologies in our Agile Mobile Solution in the enterprise wireless network domain. These technologies are helping build wireless networks for large enterprise campuses that deliver the same experience as carrier networks and provide more value-added services.
- Unveiled our Big Data Anti-APT Solution that provides full-scale network protection for cloud, pipe, and devices.

In the carrier software domain, we have focused on our software platform strategy and remained committed to developing a digital service enabling platform and digital operation enabling platform. Specifically, we:

- Adopted advanced modular and cloud architecture in the Huawei Hybrid Video Solution as an important digital service enabling platform. We launched and commercially deployed a 4K ultra-HD video system that supports tens of millions of users. With this system, in the customer environment the fast channel change time is less than 0.7 seconds and the page switching time is less than 1 second. The system delivers the best service experience in the industry, and its launch marked a key milestone in the development of global ultra-HD video technologies.
- Developed the industry's first cloud- and service-based memory database optimization technology, and launched a large-capacity telecom service billing system with hour-level bill run capabilities as well as industry-leading automatic bill run and automatic accounting audit technology. The system supports elastic scaling (node scaling time < 1 minute) and active-active disaster recovery (switchover time < 3 seconds).
- Extended our digital operation enabling platform featuring cloudification, micro services, and suites to cover carriers' end-to-end processes for future digital service operations.

In the core network domain, we focused on providing customers with the best real-time voice/video, all-access smart pipe, and full connection management and control solutions, and continued to pursue industry-leading competitiveness in NFV, IoT, EPC, VoLTE, and future network architecture evolution. Specifically, we:

- Launched our cross-DC cloud-based core network architecture, featuring high reliability, high elasticity, simplified deployment, unified operation, openness, and pre-integration. The architecture's elastic scheduling algorithm supports small-capacity and efficient elastic deployment for enterprises as well as smooth and reliable expansion to the larger capacity required in the carrier market. The Huawei CloudEPC is the industry's first cloud-based EPC solution with a cloud architecture that was commercially deployed. The Huawei CloudIMS is the industry's first cloud-based IMS solution that supports releases of the OPNFV.
- Actively implemented the IoT ecosystem strategy based on Huawei IoT connection management platform and agents. We also supported the on-demand and dynamic deployment of services between cloud platforms and edge gateways, and worked with oneM2M, AllSeen, Z-Wave, and other organizations to promote interoperability and openness in the IoT industry.
- Became the first company to make breakthroughs in key H.265 high-fidelity and low-bandwidth technology and delivered the industry's best end-to-end video call experience with our VoLTE solution.

In the network energy domain, we proposed the innovative concept of replacing copper with silicon in power electronics technologies, combined leading ICT technologies with power electronics technologies, and continuously innovated regarding the digitization and high-frequency application of power supply technologies. Specifically, we:

- Became the first company to launch an industry-leading rectifier with an efficiency of 98% in the telecom energy field.
- Released our modular UPS that adapts to all types of power grid systems worldwide and delivers industry-leading efficiency and power density.
- Proposed distributed computing and control architecture to address reliability issues in the parallel operation of modular UPSs, and verified the industry's first parallel UPS system composed of 160 modules.
- Received industry-wide recognition for our Smart PV Solution.

**In the IT domain, we continued to focus on SD-DC², our Service-driven Distributed Cloud Data Center solution, and made many achievements in innovation in 2015.**

In the cloud computing field, we:

- Released FusionSphere 6.0, a cloud operating system that supports converged resource pools, converged SDN, and disaster recovery and data protection across data centers. Through the converged SDN networking of virtual and physical networks, the system supports the smooth evolution of traditional data centers toward cloud data centers.
- Developed the Huawei Enterprise Cloud based on distributed architecture across multiple data centers in the public cloud field. As a leading global public cloud service provider, we have worked extensively with world-leading carriers and helped them transform toward NFV and cloud-based operations.
- Achieved explosive growth in FusionStorage, our distributed software-defined storage system that supports classification, encryption, and deduplication. The system has been widely applied in public cloud data centers, and system capacity ranked first in the industry.

In the Big Data field, we developed key Big Data platform technologies for our FusionInsight solution based on the characteristics of the telecom and finance sectors. The technologies include real-time analysis, correlation analysis, and multi-tenant scheduling and management for massive numbers of small files and large-scale heterogeneous environments. These technologies helped preliminarily establish a favorable presence for Huawei in the telecom and finance sectors in 2015. With FusionInsight, financial risk control latency was reduced from seconds to milliseconds. Our clear and unified tenant models helped carriers construct their enterprise-class Big Data platforms. FusionInsight increases system throughput and utilization by more than three-fold in large-scale heterogeneous environments.

In the storage field, we:

- Released OceanStor 18000 V3, our high-end storage product that delivers up to 3 million IOPS, a latency of less than 1 millisecond, and 20 times faster data reconstruction.
- Released our OceanStor DJ data service platform. By virtualizing storage resources, developing templates for service deployment, and providing data applications in the form of services, the platform enables service-driven storage with multiple data application services and accelerates service launch within minutes.
- Enabled our OceanStor 9000 storage system to support both file and object interfaces, and resource pool sharing between files and objects. OceanStor 9000 also supports 4K HD video solutions, and is the industry's first storage system to support 6-layer 4K HD video production.
- Became the first company to launch 25 Gbit/s networks in order to develop more cost-effective storage network solutions.

In the server field, we:

- Launched the industry's first 32-socket x86 server, which fully meets the needs of enterprises regarding ultra large memory and running core applications.
- Launched our ES3000 NVMe SSD based on Huawei's proprietary controller chips, which significantly improves the performance of databases and virtualization services and is driving SSDs into the NVMe era.

**We have continued to increase investment in future-oriented basic research and innovation, and made tremendous achievements at the frontier of ICT development to drive industry development and business model success via technological breakthroughs.**

In the next-generation mobile communications domain, we have pioneered 5G innovation and actively contributed to industry development. In 2015, we:

- Became the first company to release new air interface technologies for 5G, including Sparse Code Multiple Access (SCMA), Filtered-OFDM, and Polar Code. These new technologies flexibly adapt to various services and increase spectrum efficiency at least three-fold without introducing additional antennas or spectrums.
- Developed a new air interface algorithm that supported a peak rate of 3.6 Gbit/s during a large-scale 5G low-frequency field trial.
- Proposed a 5G network architecture concept: An NFV/SDN-based physical network is divided into multiple virtual network slices to support different service needs.
- Made innovative breakthroughs in large-scale antenna MIMO technology and full duplex prototype technology featuring multi-path fading cancellation and high bandwidth.
- Worked extensively with the EU's 5G-PPP, the UK-based 5G Innovation Centre (5GIC), and the 5GVIA to complete large-scale testing and verification.
- Held extensive dialogues with industry players, and signed strategic partnership agreements with more than 30 leading global carriers.
- Conducted in-depth research and released a white paper on 5G security. We launched an end-to-end security architecture based on service slicing, a three-party trust model, and new concepts on security function decoupling and flexible security configurations.

In the future data center domain, we:

- Released our DC 3.0 prototype following wide industry acclaim for our DC 3.0 white paper in 2014. The prototype has performed much better than common architecture during the current period. As part of the prototype, we also launched the industry's first TPCx-HS+FusionInsight solution.
- Developed a 100k-level data center network simulation framework, with a simulation speed of up to $10^6$-level IPS.
- Developed a non-volatile memory based file system, the industry's first user-mode memory file system, and a non-volatile memory based key-value system, with their performance achieving tens of millions of IOPS.

- Served as the editor for energy efficiency for TPCx-BigBench (TPCx-BB), an international standard for Big Data benchmarks, and developed measurement standards for Big Data analytics systems.
- Provided customers with high-performance, cost-effective, and green data center solutions through flat and scalable data configurations in our DC 3.0.

In the artificial intelligence domain, we:

- Made continuous breakthroughs in deep learning, created the industry's most advanced Neural Responding Machine, and released the industry's first single-turn dialogue generation model based on deep learning.
- Invented neural machine translation technology based on the deep memory framework and achieved the world's top-tier performance in machine translation.
- Leveraged our achievements in machine learning to help carriers reduce their prepaid user churn rate from approximately 10% to 6%.
- Enabled automatic alarm correlation in GTS analysis automation for the first time in the world, and achieved an average alarm compression rate of more than 90% and a rule application rate of over 95%.
- Developed and released the world's first open source streaming processing library on Spark.

In the battery domain, we announced our next-generation quick charging technology. A battery with a 3,000 mAh capacity can be charged to 48% capacity in five minutes to allow for ten hours of talk time on Huawei mobile phones. We bonded heteroatoms to graphite molecules in anode, which serves as a catalyst for the capture and transmission of lithium through carbon bonds. The heteroatoms enable battery charging speeds that are 10 times faster than normal batteries, without decreasing energy density or battery life.

In the video domain, we continued to strengthen research on basic communications technologies to achieve a better experience in the ultra-HD and mobile video fields. Specifically, we:

- Worked with industry players to establish open platforms and research the next-generation video coding technology Future Video Codec (H.266), jointly fueling the rapid development of enabling technologies for the video industry.
- Drove the application of IP Video that delivers a 4K ultra-HD experience. By adopting H.265 and Quality Driven Streaming (QDS), we increased the video fluency of 4K OTT and IPTV services by more than 60%. IP Video also delivers ultra-HD video at 1 Mbit/s for surveillance services, which effectively promotes the rapid deployment of 4K ultra-HD video services on live networks in different industries.

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*In June 2015, Huawei won the Biggest Contribution to 5G Development Award at the 5G World Summit 2015 for its continuous innovation breakthroughs and industry contributions relating to the research and verification of key 5G technologies.*

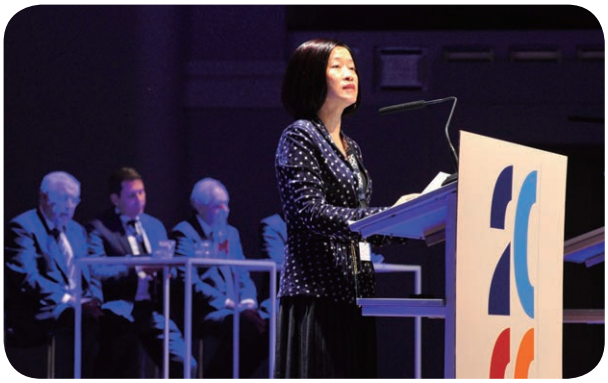
We have cooperated with global innovators through our 16 R&D institutes and centers and 36 joint innovation centers around the world. We have promoted technological progress toward a Better Connected World by sharing insights into ICT advances. Specifically, we:

- Actively promoted the development of the 5G industry and ecosystem as a major player along with our partners in North America, Asia Pacific, and Europe, made breakthroughs in key technologies on 5G air interface algorithms, and promoted 5G standardization. The tremendous value of key technologies for new 5G air interfaces was fully verified during the first field trial for 5G air interfaces in Europe. This field trial was performed in collaboration with universities, including the UK-based University of Surrey, drawing continued attention from Horizon 2020 and IMT-2020.
- Established NFV labs in collaboration with global leading carriers, Internet companies, and active industry partners to conduct open innovation and research, and influence and set standards. The collaboration is now a role model for partnerships on building NFV ecosystems for shared success in the era of ICT convergence.
- Worked with European universities to research key component behavior models for the first time in the industry. After four years of unremitting efforts, we have maintained industry leadership regarding the power amplifier efficiency of base stations, thus establishing Huawei's long-term market and technological leadership in the wireless infrastructure domain. To address the dense deployment of base stations in the future, we explored a business model for crowdsourcing-based network construction for micro base stations integrated into intelligent street lighting.
- Collaborated with research institutes to propose a novel server architecture that enables a Programmable Architecture for Resourcing on-Demand (PARD) and full hardware virtualization for data centers. The proposed architecture, which provides critical hardware-level support to address the challenge of achieving both high utilization and high quality of service (QoS) in data centers, won high acclaim from academics.
- Worked extensively with many prestigious universities, companies focused on technological innovation, and open source organizations in the areas of distributed storage, storage class memory (SCM) systems, cloud computing platforms, Big Data, artificial intelligence, knowledge libraries, and HD video, in order to drive technological innovation.

As a major contributor to the ICT industry and ICT standards setting, we have been leading industry development to expand the total addressable market. We have also partnered with stakeholders to build a mutually beneficial industry and ecosystem.

We have been actively involved in and promoted the development and implementation of mainstream international standards. Specifically, we:

- Actively participated in ITU-R/WRC-15 to provide industry policy assurances for 5G standards, and actively promoted cooperation between China and Europe in science and technology to jointly develop unified 5G standards globally.
- Helped implement LTE-Advanced Pro to continuously evolve LTE-Advanced, and explored the possibility of applying cellular technologies such as LTE-V and LTE-T to vertical industries.



*In November 2015, Huawei introduced the Huawei Innovation Research Program (HIRP), Huawei's platform for cooperative innovation, at the Enterprise 2020 Summit organized by CSR Europe. The HIRP has attracted around 100 academic institutions and over 1,000 scholars, and has funded the research of thousands of graduate students. In 2015, the HIRP sponsored over 100 new research projects to further strengthen basic research and technological innovation.*

- Actively participated in activities organized by IEEE, and drove forward project progress on Wi-Fi standards (e.g., 802.11ax, 802.11ay, and 802.11aj) to promote the development of Wi-Fi technologies.
- Were elected to the chair of the Focus Group on IMT-2020 to lead the development of 5G bearer network architecture.
- Led the development of the future-proof 400 GE technology in IEEE to expand the application scope of the Ethernet industry.
- Guided the direction of IP technology development by continuously investing in the IETF.

We are an active player in open source communities. Specifically, we:

- Participated in the establishment of open source communities such as ONOS, OCI, and CNCF to promote the robust development of the SDN and container industries.
- Became one of the most influential companies at OpenStack, and set new directions for the NFV, container, cloud management, and large-scale data center domains.
- Became a platinum member of The Linux Foundation and gained a seat on its Board of Directors, enabling Huawei to lead industry transformation together with the industry and developers and rapidly respond to customer needs.

We have taken the initiative to establish industry alliances:

- Actively participated in activities organized by GSMA and ETSI to promote the development of NFV, millimeter Wave Transmission (mWT), and IPv6 standards and the industry as a whole, and stress shared success in the industry based on a balance of interests.
- Collaborated with TMF to share customer resources, had our leading concepts regarding transformation toward digital operations recognized in the industry, and won TMF's Open Digital Ecosystem excellence award and President's Award.
- Helped establish a series of industry alliances on NFV/SDN and NB-IoT to bring together industry players and expand the total addressable market.

*In 2015, Huawei's cooperation with ONOS in the SDN domain generated rewarding achievements. ONOS was accepted by OPNFV and became a key controller platform of the OPNFV community.*

As of December 31, 2015, we had filed 52,550 patent applications in China and 30,613 outside China, with a total of 50,377 granted.

As of December 31, 2015, Huawei had become a member of over 300 standards organizations, industry alliances, and open source communities, holding more than 280 important positions. Huawei is a board member of IEEE-SA, ETSI, WFA, TMF, OpenStack, Linaro, OASIS, and CCSA. We submitted more than 5,400 proposals in 2015, with the total number exceeding 43,000.

Huawei has consistently invested over 10% of its revenue in R&D every year. In 2015, approximately 79,000 employees were engaged in R&D, comprising 45% of our total workforce. Huawei's R&D expenditures totaled CNY59,607 million in 2015, accounting for 15.1% of the company's total revenue. We have cumulatively spent more than CNY240,000 million on R&D over the past decade.

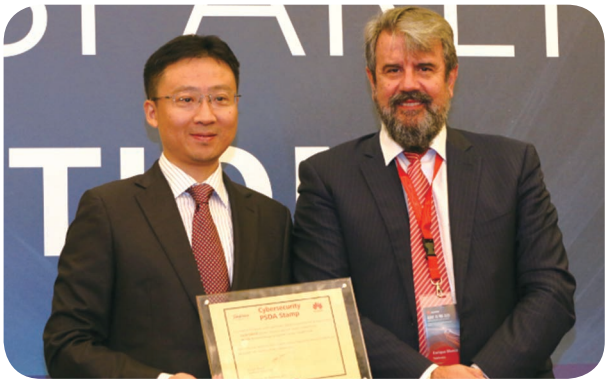
## Cyber Security

The new generation of network and information technologies (e.g., Big Data, cloud computing, IoT, and the mobile Internet) are driving the convergence of cyberspace and the physical world. Cyber security is a growing global challenge, and is exerting a profound and far-reaching impact on the ICT industry. Huawei's commitment to cyber and service security will never be outweighed by its own commercial interests. Establishing and implementing an end-to-end global cyber security assurance system is one of our core development strategies.

We attach equal importance to user privacy protection and cyber security. We have made every effort to facilitate user privacy protection in accordance with local, regional, and international laws and regulations, accepting that these are in a state of change. We have established a Global Cyber Security and User Privacy Protection Committee as the company's highest organization for managing cyber security and user privacy protection. We have also appointed a Global Cyber Security & Privacy Officer, who reports directly to the CEO. All Huawei's relevant business units have set up cyber security and user privacy protection offices. Privacy protection activities have been implemented at Huawei as part of day-to-day compliance and business operations. Protecting end users' privacy and freedom of communication has been included in Huawei's *Employee Business Conduct Guidelines (BCGs)*, and all Huawei employees around the world are required to learn, sign, and comply with the *BCGs*.

We continue to communicate and partner with governments, customers, and industry partners on security through various channels with an open, transparent, and collaborative approach, and have improved Huawei's influence and reputation in security. Our efforts have been widely recognized:

- In April 2015, Huawei received the Transparency Award for cyber security from the governments of four cities in Lower Saxony, Germany. This is the first cyber security award received by Huawei from governments in Europe.



*Telefónica presented the PSDA stamp to several Huawei products.*

- In May 2015, Huawei was presented with the 10-Year Excellence in Information Security Testing Award by ICSA Labs, demonstrating that Huawei's product security capabilities have been recognized in the industry.
- In November 2015, Telefónica awarded the Protocol of Security Development Assurance (PSDA) stamp to Huawei for several of our products at the second Huawei MBB Cyber Security Mindshare Forum held in Hong Kong. The PSDA is a successful cooperation initiative between Telefónica and Huawei, aimed at jointly building a global cyber security assurance system, openly and transparently.

We have played an active role in the development of security standards in the CT domain, such as 3GPP SA3, ETSI NFV, and Common Criteria (CC) cPPs. We have also made breakthroughs in critical security technologies, such as trusted computing, encryption algorithms, and authentication algorithms, and translated these technologies into security capabilities for our products. In addition, we are willing to share our understanding of and experience in cyber security with other industry players, and have cooperated with and learned from them while making contributions to the industry:

- Between 2012 and 2014, we published three cyber security white papers to explain our understanding of cyber security issues and demonstrate that our cyber security position and perspective are characterized by openness, transparency, and visibility. These

papers were designed to explore methods of making cyber security part of our company's DNA; to call for the development and implementation of unified international cyber security standards; and to share Huawei's Top 100 cyber security practices and experience in a bid to raise security levels across all technologies.

- In September 2015, we attended the 6th Global Cyberspace Cooperation Summit held by EastWest Institute (EWI) in New York and delivered a keynote speech expressing our willingness to collaborate with stakeholders to address cyber security issues. Huawei, Microsoft, and The Open Group co-lead the Breakthrough Group on Increasing the Global Availability and Use of Secure ICT Products and Services, part of EWI's Global Network Initiative. Huawei's Top 100 white paper has also served as an important input for the Breakthrough Group. Multiple US media reported Huawei's contributions to cyber security standards at EWI.
- In October 2015, we successfully hosted the 5th plenary meeting of the ETSI Cyber Security Technical Committee and presented a proposal on Privacy Enhancing Technologies (PET) for Big Data mining. Applying PET in the Big Data domain demonstrates that we are committed to providing carriers with a reference standard on privacy protection in this domain to drive the industry forward.
- In October 2015, we sponsored and attended ETIS's annual conference and delivered a presentation on 5G cyber security, which won wide acclaim from the audience and inspired vigorous discussions. In December, as a platinum sponsor of IEEE Globecom, we demonstrated our 5G solutions and 5G cyber security white paper on-site. The white paper was commended by attendees as the first document in the industry to describe 5G cyber security from 360 degrees.
- In November 2015, with the theme of "Building a More Secure Better Connected World", we attended ISF's Annual World Congress as a platinum sponsor. At the event, we elaborated on our cyber security practices and customer concerns and summarized the 100 things concerning cyber security that buyers must consider when selecting suppliers. We also showcased our latest security solutions for enterprise customers, and called for open collaboration among all parties to facilitate the development of cyber security standards, winning acclaim from experts in attendance.
- In 2015, we presented a stronger voice in the enterprise market through industry summits, channel conferences, and security associations in various countries and regions. We hosted the Global Financial Services Industry Summit in Beijing, the Channel Conference in London, the Western Europe Channel Conference in Munich, and the Southern Pacific Channel Conference in Singapore. We also attended the Second National Conference on Energy Cyber Security in Italy and ISF's Annual World Congress in Atlanta. At these conferences, we communicated Huawei's cyber security concepts and strategies and demonstrated Huawei's end-to-end assurance system, security capabilities, and security image of openness and transparency, receiving positive feedback from customers and channel partners.

While actively communicating with external parties to improve mutual trust on security, we use what we call the ABC model internally, "Assume nothing, Believe nobody, Check everything", to constantly improve our end-to-end cyber security assurance system. Cyber security has been incorporated into all Huawei core processes, and we can demonstrate the process, progress, openness, and transparency everywhere within our company. We have used cyber security scorecards to demonstrate the progress on our work priorities in a quantitative manner and drive the implementation of key measures. We have also performed internal third-party auditing to discover cyber security issues and risks in organizations, operations, and services, allowing us to make improvements accordingly. In doing so, we have continued to improve our cyber security assurance system, which develops continuously and allows for closed-loop improvements. Specifically, we have adopted the following measures:

- We have built an IT platform for security awareness education and training that targets all employees and regularly provided basic and business domain-specific cyber security awareness education and training. The security awareness of all employees has improved. In addition, training courses, learning materials, and skill frameworks have been created in the R&D domain and can be used during the day-to-day work of the majority of R&D employees. In 2015, over 46,000 employees received R&D cyber security training.
- We have built sophisticated code compilation, configuration management, tool management, and traceability platforms in the R&D domain to automate security activities. Our R&D engineering capabilities have improved, and vulnerability tracing and automatic virus scanning capabilities have attained an industry-leading level.
- Our independent verification approaches, such as the models adopted at the UK-based Cyber Security Evaluation Centre, Huawei's Internal Cyber Security Lab, and third-party security verification models we have advocated at EWA and CC, have been recognized by numerous governments and carrier customers. Cyber security baselines have been implemented as a quality threshold. The density of issues regarding security has showed steady improvements over the past several years and continued to be a core focus of our R&D efforts. The number of security issues identified during external testing has also been reduced significantly, and CC, PCI, and customer certification have been successful for a range of Huawei products.
- We have continued to improve the compliance levels and delivery quality of our cyber security activities throughout service delivery. We have effectively reduced privacy risks by using mature processes and platforms to process customer data stored on spare parts. In addition, we have enhanced our managed services and Global Network Operation Centers (GNOCs) and validated all tools currently in use to improve field delivery quality and ensure security in all delivery activities.
- We have controlled our supply system from start to finish to ensure end-to-end security. We have improved suppliers' delivery quality and compliance with security agreements and urged them to promptly provide solutions and patches for vulnerabilities in third-party software. In doing so, we have put in place a comprehensive security mechanism for managing suppliers.
- We have established a mature system for tracing supply chain components and enhanced security management through version control, reverse logistics management, and traceability to ensure that virtually every process and component is traceable. For software incorporated into configuration management, the affected products and customers can be identified automatically within one hour of a vulnerability's disclosure. We have also built basic software integrity protection capabilities into our end-to-end processes through the inspection of materials from suppliers, digital signatures in product versions, integrity protection for gold images, and cloud-based software management in manufacturing and GTS.

Networks are shifting toward fully-connected services, NFV/SDN-based architecture, and Internetized operations. The emergence of smart lifestyles under all scenarios will bring about more challenges for user privacy protection and cyber security. A Better Connected World presents all of human society with exciting opportunities and daunting challenges. We will continue to position cyber security and user privacy assurance as a core corporate strategy. We will establish our cyber security and user privacy protection methods and practices by leveraging our ICT knowledge and expertise in cloud, pipe, and devices, end-to-end security approaches, and supporting ICT platforms. By relying on such knowledge and expertise, we will continue to support customers, governments, and key stakeholders so that they can understand the role ICT will play over the coming years, and benefit from our knowledge on security and privacy. We hope that our key concepts of teamwork, openness, and transparency will create more value for our customers so that they can better prepare themselves for future challenges and future benefits.

## Openness, Collaboration, and Shared Success

The value of networks comes from their openness and interconnection. An open and collaborative Better Connected World is now on the horizon. In the digital economy, companies cannot innovate on their own. Instead, they must join forces with the entire industry and ecosystem to develop and thrive together.

**Huawei views openness, collaboration, and shared success as important cornerstones that support its development, and is committed to establishing a robust ecosystem for a fully-connected information society.**

In the carrier business, we have proposed the concept of *Open ROADS to a Better Connected World*. By focusing on ICT infrastructure and fully opening up our ICT capabilities, we strive to establish an open ecosystem conducive to carriers' digital transformation to bring together carriers and partners worldwide and achieve shared business success.

In the enterprise business, we adhere to the Being Integrated strategy, and have established extensive ecosystems focusing on our cloud computing, agile network, Safe City, finance, and eLTE solutions. We have more than 500 enterprise cloud partners and over 10,000 public cloud partners, and have created a FusionSphere open cloud computing alliance. By opening up our agile networks at all layers, we have developed more than 200 ecosystem partners in the areas of agile campuses, agile data centers, and agile IoT.

In the consumer business, we have partnered with top-tier international brands in the fashion, automobile, and home appliance sectors. Through this, we have conducted joint innovation on smartphones, smart watches, smart homes, and Internet of Vehicles (IoV), to bring the cutting-edge technology in each domain and a superior product experience to consumers worldwide.

We work closely with industry players, developers, academia, and standards organizations to drive business and technological innovation, and help establish a robust industry development ecosystem characterized by collaboration, shared success, and fair competition. In 2015, the number of Huawei's joint innovation centers increased to 36, and we announced a Developer Enablement Plan, in which we will invest US$1 billion over the next five years. Through our Huawei Innovation Research Program (HIRP), we sponsored over 100 new research projects in 2015. In addition, we have become more involved in international standards organizations, industry alliances, and open source communities.

To share benefits with our upstream and downstream partners on the value chain, we adhere to a *Dig In, Widen Out* approach, meaning we constantly tap into our own potential to reduce costs and increase the value of our solutions while providing more benefits to our customers and treating our industry partners with respect. In this way, we will drive the sound development of the entire industry.

To promote the ICT development of the countries where we operate, we actively participate in discussions on each country's ICT industry policies. Through this, we aim to help create a fair and reasonable policy environment, and balance the interests of infrastructure investors and consumers, thereby driving continued and sound development of the industry. We also leverage our innovative technologies and solutions to actively help implement the ICT development strategies of governments and facilitate local economic development and social progress.

By promoting openness, collaboration, and shared success, we strive to create value for our customers, make contributions to the healthy development of our industry and social progress, and ultimately build a Better Connected World.

## Results of Operations

### Financial Performance

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Revenue | 395,009 | 288,197 | 37.1% |
| Gross profit | 164,697 | 127,451 | 29.2% |
| – Gross margin | 41.7% | 44.2% | (2.5%) |
| Total operating expenses | (118,911) | (93,246) | 27.5% |
| – as % of revenue | 30.1% | 32.4% | (2.3%) |
| Operating profit | 45,786 | 34,205 | 33.9% |
| – Operating margin | 11.6% | 11.9% | (0.3%) |
| Net finance expenses | (3,715) | (1,455) | 155.3% |
| Income tax expenses | (5,077) | (5,187) | (2.1%) |
| Net profit | 36,910 | 27,866 | 32.5% |

Revenue in 2015 totaled CNY395,009 million, representing an increase of 37.1% year-on-year. Net profit grew by 32.5% year-on-year to CNY36,910 million. Profit rose due to increasing revenue and higher efficiency.

- As the consumer business grew rapidly and contributed a larger share to total revenue, the company's gross margin dropped by 2.5 percentage points since 2014.
- In 2015, Huawei continued to increase its efficiency through management transformation while increasing its future-oriented investment. As a result, the operating expense ratio decreased by 2.3 percentage points from 2014 to 2015.
- Huawei's net finance expenses rose sharply due to foreign exchange losses.
- As Huawei enjoyed more tax deductions due to increased R&D investment and recognized more deferred tax assets because certain subsidiaries became profitable income tax expenses declined by 2.1 percentage points year-on-year.

### Total Operating Expenses

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Research and development expenses | 59,607 | 40,845 | 45.9% |
| – as % of revenue | 15.1% | 14.2% | 0.9% |
| Selling and administrative expenses | 62,281 | 47,468 | 31.2% |
| – as % of revenue | 15.8% | 16.5% | (0.7%) |
| Other (income)/expenses, net | (2,977) | 4,933 | (160.3%) |
| – as % of revenue | (0.8%) | 1.7% | (2.5%) |
| Total operating expenses | 118,911 | 93,246 | 27.5% |
| – as % of revenue | 30.1% | 32.4% | (2.3%) |

In 2015, Huawei increased investment in future technologies, brand marketing, and management transformation. Due to ongoing transformation efforts, the company achieved higher efficiency and increased revenue. As a result, the company's operating expense ratio dropped by 2.3 percentage points. As the company increased investment in future technologies, research and innovation, and R&D platform and capability improvements, the R&D expense ratio rose by 0.9 percentage points. Despite the increasing investment in brand marketing and management transformation, the company benefited from higher efficiency and increased revenue. As a result, the selling and administrative expense ratio decreased by 0.7 percentage points.

## Net Finance Expenses

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Net foreign exchange loss | **4,362** | 2,135 | 104.3% |
| Other net finance gains | **(647)** | (680) | (4.9%) |
| Total net finance expenses | **3,715** | 1,455 | 155.3% |

Net finance expenses in 2015 amounted to CNY3,715 million, an increase of CNY2,260 million over 2014. This is attributable to an increase of CNY2,227 million year-on-year in exchange losses due to a sharp depreciation of currencies in Africa and emerging markets.

## Financial Position

| CNY Million | December 31, 2015 | December 31, 2014 | YoY |
|---|---|---|---|
| Non-current assets | **70,509** | 52,668 | 33.9% |
| Current assets | **301,646** | 257,105 | 17.3% |
| Total assets | **372,155** | 309,773 | 20.1% |
| Among which: Cash and short-term investments | **125,208** | 106,036 | 18.1% |
| Trade receivables | **92,425** | 75,845 | 21.9% |
| Inventories | **61,363** | 46,576 | 31.7% |
| Non-current liabilities | **40,459** | 31,249 | 29.5% |
| Among which: Long-term borrowings | **26,501** | 17,578 | 50.8% |
| Current liabilities | **212,627** | 178,539 | 19.1% |
| Among which: Short-term borrowings | **2,485** | 10,530 | (76.4%) |
| Trade payables | **61,017** | 45,144 | 35.2% |
| Owner's equity | **119,069** | 99,985 | 19.1% |
| Total liabilities and owner's equity | **372,155** | 309,773 | 20.1% |

As of December 31, 2015, the balance of cash and short-term investments reached CNY125,208 million, up 18.1% year-on-year.
In 2015, Huawei's DSO was 84 days, 11 days shorter than the 95 days in 2014.
Its ITO decreased by 8 days to 96 days compared with the 104 days in 2014.
The company's DPO was 95 days, 6 days shorter than the 101 days in 2014.
As of December 31, 2015, total short-term and long-term borrowings amounted to CNY28,986 million, an increase of 3.1% year-on-year from CNY28,108 million in 2014.

## Cash Flow from Operating Activities

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Net profit | **36,910** | 27,866 | 32.5% |
| Adjustment for depreciation, amortization, and non-operating loss, net | **10,387** | 10,193 | 1.9% |
| Actuarial losses on defined benefit obligations | **(306)** | (166) | 84.3% |
| Cash flow before change in operating assets and liabilities | **46,991** | 37,893 | 24.0% |
| Change in operating assets and liabilities | **2,324** | 3,862 | (39.8%) |
| Cash flow from operating activities | **49,315** | 41,755 | 18.1% |

Cash flow from operating activities in 2015 increased by 18.1% year-on-year to CNY49,315 million. This increase was attributable to the following factors:

- Net profit grew by 32.5% year-on-year due to increased revenue.
- Adjustments for depreciation, amortization, and non-operating losses (net) contributed an additional CNY194 million to cash flow from operating activities compared with that in 2014.
- Reductions in the capital tied up in operating assets and liabilities in 2015 contributed CNY2,324 million to the cash flow from operating activities.

## Financial Risk Management

In 2015, Huawei amended and improved its financial risk management policies and processes to further enhance the company's ability to withstand financial risks and better support its business development.

### Liquidity Risk

*Liquidity Trends*

| CNY Million | 2015 | 2014 | YoY |
|---|---|---|---|
| Cash flow from operating activities | **49,315** | 41,755 | 18.1% |
| Cash and short-term investments | **125,208** | 106,036 | 18.1% |
| Short-term and long-term borrowings | **28,986** | 28,108 | 3.1% |

Huawei has continuously refined its cash flow planning, budgeting, and forecasting system to better assess its short-term and mid-to long-term liquidity needs. The company has implemented a variety of prudent financial measures to meet its overall liquidity needs, including centralizing cash management, maintaining a reasonable level of funds, and gaining access to adequate and committed credit facilities. As of December 31, 2015, cash and short-term investments increased by 18.1% year-on-year to CNY125,208 million. An adequate capital reserve and a stable cash flow from operating activities enabled Huawei to mitigate its liquidity and borrowing risks, thus ensuring financial stability for the company.

### Foreign Exchange Risk

The Group's functional currency is CNY. Huawei has foreign currency exposure related to buying, selling, and financing in currencies other than CNY, mainly USD and EUR. According to the Group's foreign exchange risk management policy, material foreign exchange exposures are hedged unless hedging is uneconomical due to market liquidity and/or hedging costs. The Group has developed a complete set of foreign exchange management policies, processes, and instructions. These include:

- Natural hedging: The Group structures its operations to match receivables and payables in a foreign currency, to the greatest extent possible.
- Financial hedging: For certain currencies where natural hedging does not fully offset the foreign currency position, the Group hedges using a combination of short- and long-term foreign currency loans.

In countries where local currencies depreciated sharply or in those with strict foreign exchange controls, the Group managed foreign exchange exposures via different measures, including pricing in USD, accelerating payment collection, and promptly transferring payments out of these countries.

With other conditions remaining unchanged, exchange rate fluctuations will impact the Group's net profit as follows:

| | Impact on net profit CNY million |
|---|---|
| **2015** | |
| **CNY appreciates 5% against USD** | **(1,269)** |
| **CNY appreciates 5% against EUR** | **(319)** |
| 2014 | |
| CNY appreciates 5% against USD | (578) |
| CNY appreciates 5% against EUR | (173) |

## Interest Rate Risk

Interest rate risks arise from Huawei's long-term borrowings and long-term receivables. By analyzing its interest rate exposures, the company uses a combination of fixed-rate and floating-rate bank loans to mitigate interest rate risks.

a) Interest-bearing long-term financial instruments held by the Group as of December 31, 2015

| | 2015 | | 2014 | |
|---|---|---|---|---|
| | Effective Interest Rate | Amount CNY Million | Effective Interest Rate | Amount CNY Million |
| **Fixed-rate long-term financial instruments** | | | | |
| Long-term borrowings | **4.14%** | **8,070** | 5.09% | 1,645 |
| Trade and other receivables | **5.79%** | **(92)** | – | – |
| **Floating-rate long-term financial instruments** | | | | |
| Long-term borrowings | **2.55%** | **18,431** | 2.33% | 15,933 |
| Trade and other receivables | **0.40%** | **(2,839)** | 0.80% | (2,631) |
| Total | | **23,570** | | 14,947 |

b) Sensitivity analysis

Assume that the interest rate increased by 50 basis points as of December 31, 2015 and other variables remained unchanged, the Group's net profit and owner's equity would decrease by CNY64 million (in 2014, the amount was CNY66 million).

## Credit Risk

The company has established and implemented globally consistent credit management policies, processes, IT systems, and credit risk assessment tools. It has established dedicated credit management organizations across all regions and business units, and established centers of expertise specializing in credit management in Europe and the Asia Pacific. The company uses risk assessment models to determine customer credit ratings and credit limits. It has also implemented risk control points over key processes throughout the end-to-end sales cycle to manage credit risks in a closed loop. Huawei's Credit Mgmt Dept regularly assesses global credit risk exposures and develops IT tools to help field offices monitor risk status, estimate potential losses, and determine bad debt provisions as appropriate. To minimize risks, a special process is followed if a customer misses a payment or poses an unacceptably high credit risk.

## Sales Financing

With global coverage, Huawei's sales financing team maintains close contact with customers to understand their financing needs and tap into various financing resources around the world. As a bridge for communication and cooperation between financial institutions and customers, the sales financing team provides customers with professional financing solutions that contribute to ongoing customer success. Third-party financial institutions work with Huawei in export credit, leasing, and factoring activities to share the benefits and bear linked risks. Huawei has established systematic financing policies and project approval processes to strictly control financing risk exposures. Huawei only shares risks with financial institutions on certain projects, and makes provisions for risk contingencies to control business risks.

# Independent Auditor's Report

## Independent auditor's report on the consolidated financial statements summary to the Board of Directors of Huawei Investment & Holding Co., Ltd.

We are the auditor of Huawei Investment & Holding Co., Ltd. and its subsidiaries (the "Group"). We have audited the consolidated financial statements of the Group prepared in accordance with International Financial Reporting Standards (the "audited consolidated financial statements") for the year ended December 31, 2015. We have issued an unqualified audit report dated March 12, 2016 on the audited consolidated financial statements of the Group for the year ended December 31, 2015.

Huawei Investment & Holding Co., Ltd. is not a public company and is not required to publish its audited consolidated financial statements under the Company Law of the People's Republic of China.

The Group publishes a consolidated financial statements summary set out on pages 52 to 96 comprising the consolidated statement of financial position as at December 31, 2015, the consolidated statement of total comprehensive income, the consolidated statement of cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information, which is derived from the audited consolidated financial statements of the Group. The audited consolidated financial statements and the consolidated financial statements summary do not reflect the effects of events that occurred subsequent to the date of our report on the audited consolidated financial statements.

The consolidated financial statements summary does not contain all the disclosures required by International Financial Reporting Standards in the preparation of the audited consolidated financial statements of the Group, and reading the consolidated financial statements summary is not a substitute for reading the audited consolidated financial statements of the Group.

### Management's responsibility for the consolidated financial statements summary

Management is responsible for the preparation of a consolidated financial statements summary on the basis described in note 2.

### Auditor's responsibility

Our responsibility is to express an opinion on the consolidated financial statements summary based on our procedures, which were conducted in accordance with International Standard on Auditing 810, "Engagements to Report on Summary Financial Statements". Our work included examining, on a test basis, evidence supporting the consistency of the amounts and disclosures in the consolidated financial statements summary to the audited consolidated financial statements of the Group. We have not performed an audit on the consolidated financial statements summary. Accordingly, we do not express an audit opinion.

### Opinion

In our opinion, the consolidated financial statements summary derived from the audited consolidated financial statements of the Group for the year ended December 31, 2015 is consistent, in all material respects, with those consolidated financial statements, on the basis described in note 2.

KPMG Huazhen LLP
Certified Public Accountants
9th Floor, China Resources Building
5001 Shennan East Road
Shenzhen 518001, China
March 22, 2016

# Consolidated Financial Statements Summary and Notes

## CONTENTS

# Consolidated Financial Statements Summary

## Consolidated Statement of Total Comprehensive Income

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| Revenue | 8 | **395,009** | 288,197 |
| Cost of sales | | **(230,312)** | (160,746) |
| **Gross Profit** | | **164,697** | 127,451 |
| Research and development expenses | | **(59,607)** | (40,845) |
| Selling and administrative expenses | | **(62,281)** | (47,468) |
| Other income/(expenses), net | 9 | **2,977** | (4,933) |
| **Operating profit before financing costs** | | **45,786** | 34,205 |
| Finance income and expenses | 11 | **(3,715)** | (1,455) |
| Share of associates' and joint ventures' results (post tax) | | **(84)** | 303 |
| **Profit before taxation** | | **41,987** | 33,053 |
| Income tax | 12 | **(5,077)** | (5,187) |
| **Profit after tax** | | **36,910** | 27,866 |
| **Other comprehensive income** | 13 | | |
| **Not reclassifiable to profit or loss:** | | | |
| Remeasurement of defined benefit obligations | | **(306)** | (166) |
| **Reclassifiable to profit or loss:** | | | |
| Net change in the fair value of available-for-sale investments | | **1,152** | (200) |
| Translation differences on foreign operations | | **1,044** | 174 |
| | | **2,196** | (26) |
| **Total other comprehensive income** | | **1,890** | (192) |
| **Total comprehensive income** | | **38,800** | 27,674 |
| **Profit after tax attributable to:** | | | |
| Equity holders of the Company | | **36,908** | 27,851 |
| Non-controlling interests | | **2** | 15 |
| **Total comprehensive income attributable to:** | | | |
| Equity holders of the Company | | **38,797** | 27,664 |
| Non-controlling interests | | **3** | 10 |

Items of other comprehensive income are stated after tax and reclassification adjustments (see note 13).

The notes on pages 56 to 96 form an integral part of this consolidated financial statements summary.

## Consolidated Statement of Financial Position

| | Note | December 31, 2015 CNY million | December 31, 2014 CNY million |
|---|---|---|---|
| **Assets** | | | |
| Goodwill and intangible assets | 14 | **2,725** | 2,597 |
| Property, plant and equipment | 15 | **35,438** | 27,248 |
| Long-term leasehold prepayments | 16 | **3,306** | 3,349 |
| Interests in associates and joint ventures | 17 | **528** | 655 |
| Other investments | 18 | **3,961** | 540 |
| Deferred tax assets | 19 | **16,900** | 14,916 |
| Trade receivables | 21 | **2,098** | 446 |
| Other non-current assets | 22 | **5,553** | 2,917 |
| **Non-current assets** | | **70,509** | 52,668 |
| Inventories | 20 | **61,363** | 46,576 |
| Trade and bills receivable | 21 | **93,260** | 79,580 |
| Other current assets | 22 | **21,815** | 24,913 |
| Short-term investments | 18 | **14,647** | 27,988 |
| Cash and cash equivalents | 23 | **110,561** | 78,048 |
| **Current assets** | | **301,646** | 257,105 |
| **Total assets** | | **372,155** | 309,773 |
| **Equity** | | | |
| Equity attributable to equity holders of the Company | | **119,021** | 99,940 |
| Non-controlling interests | | **48** | 45 |
| **Total equity** | | **119,069** | 99,985 |
| **Liabilities** | | | |
| Loans and borrowings | 24 | **26,501** | 17,578 |
| Long-term employee benefits | | **11,533** | 9,731 |
| Deferred government grants | | **1,965** | 2,656 |
| Deferred tax liabilities | 19 | **460** | 320 |
| Provisions | 27 | **–** | 964 |
| **Non-current liabilities** | | **40,459** | 31,249 |
| Loans and borrowings | 24 | **2,485** | 10,530 |
| Income tax payable | | **4,213** | 5,947 |
| Trade and bills payable | 25 | **61,017** | 45,899 |
| Other payables | 26 | **133,779** | 108,308 |
| Provisions | 27 | **11,133** | 7,855 |
| **Current liabilities** | | **212,627** | 178,539 |
| **Total liabilities** | | **253,086** | 209,788 |
| **Total equity and liabilities** | | **372,155** | 309,773 |

The notes on pages 56 to 96 form an integral part of this consolidated financial statements summary.

## Consolidated Statement of Cash Flows

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| **Cash flows from operating activities** | | | |
| Cash receipts from goods and services | | **424,413** | 321,097 |
| Cash paid to suppliers and employees | | **(411,482)** | (321,201) |
| Other operating cash flows | | **36,384** | 41,859 |
| **Net cash generated from operating activities** | | **49,315** | 41,755 |
| **Net cash generated from/(used in) investing activities** | | **2,244** | (26,209) |
| **Net cash used in financing activities** | | **(19,763)** | (10,406) |
| **Cash and cash equivalents** | | | |
| Net increase | | **31,796** | 5,140 |
| At January 1 | 23 | **78,048** | 73,399 |
| Effect of foreign exchange rate changes | | **717** | (491) |
| **At December 31** | 23 | **110,561** | 78,048 |

The notes on pages 56 to 96 form an integral part of this consolidated financial statements summary.

# Notes to the Consolidated Financial Statements Summary

## 1 Reporting entity

Huawei Investment & Holding Co., Ltd. (the Company) is a limited liability company established in Shenzhen in the People's Republic of China (the PRC). The Company's registered office is at Huawei Industrial Base, Bantian Longgang, Shenzhen, PRC.

The Company and its subsidiaries (the Group) principally provide end to end Information Communication and Technology solutions. This includes the research, design, manufacture and marketing of telecom network equipment, IT products and solutions and smart devices for telecom carriers, enterprises and consumers. The principal activities and other particulars of the Company's major subsidiaries are set out in note 32(b) to the consolidated financial statements summary.

## 2 Statement of compliance

The Group has prepared a full set of consolidated financial statements (consolidated financial statements) for the year ended December 31, 2015 in accordance with International Financial Reporting Standards (IFRSs), and Interpretations issued by the International Accounting Standards Board (IASB) and the Interpretations Committee.

The consolidated financial statements summary has been prepared and presented based on the audited consolidated financial statements for the year ended December 31, 2015 in order to disclose material financial and operational information.

## 3 Significant accounting policies

### (a) Basis of preparation of the consolidated financial statements

The consolidated financial statements have been prepared under the historical cost basis modified for the fair valuation of financial instruments classified as available-for-sale and held-for-trading (see note 3(e)).

The preparation of consolidated financial statements in accordance with IFRSs requires management to make judgements, estimates and assumptions that affect the application of policies and reported amounts of assets, liabilities, income and expenses. Estimates and associated assumptions are based on historical experience and various other factors that are believed to be reasonable under the circumstances. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed regularly and revised when required. Revisions to accounting estimates are recognised in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

Judgements made by management in the application of IFRSs that have significant effect on the consolidated financial statements and major sources of estimation uncertainty are discussed in note 5.

### (b) Functional and presentation currency

All financial information in the consolidated financial statements summary is presented in millions of Chinese Yuan (CNY), which is the Company's functional currency.

### (c) Consolidation

The financial statements consolidate the results, assets, liabilities and cash flows of all subsidiaries which the Group controls.

Subsidiaries are consolidated from the date that control commences until the date that control passes. Intra-group balances, transactions and cash flows and any unrealised profits arising from intra-group transactions are eliminated in full.

The Group controls a subsidiary when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. When assessing whether the Group has power, only substantive rights are considered.

The Group uses the acquisition method to account for subsidiaries. The difference between the fair value of the consideration paid and the fair value of assets, liabilities and contingent liabilities acquired is recorded as goodwill as stated in note 14. Transaction costs incurred in an acquisition are included in operating costs.

Non-controlling interests represent the carrying value of the net assets of subsidiaries attributable to non-controlling shareholders. They are not held at fair value.

When the Group transfers control of a subsidiary, it is accounted for as a disposal of the entire interest in that subsidiary, with a resulting gain or loss being recognised in profit or loss. Any interest retained in that former subsidiary at the date when control is lost is recognised at fair value or, when appropriate, the cost on initial recognition of an investment in an associate or joint venture (see note 3(d)).

## (d) Associates and joint ventures

An associate is an entity in which the Group has significant influence, but not control or joint control, over its management, including participation in the financial and operating policy decisions.

A joint venture is an arrangement whereby the Group and other parties contractually agree to share control of the arrangement, and have rights to the net assets of the arrangement.

An investment in an associate or a joint venture is accounted for in the consolidated financial statements using the equity method.

Unrealised profits and losses resulting from transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the investee, except where unrealised losses provide evidence of an impairment of the asset transferred, in which case they are recognised immediately in profit or loss.

## (e) Financial instruments

### (i) Recognition and derecognition

Financial instruments, comprising financial assets and financial liabilities are recognised in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

The Group derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are transferred or where it neither transfers nor retains substantially all of the risks and rewards of ownership and loses control. When control is retained, the Group continues to recognise the financial asset to the extent of its continuing involvement.

The Group derecognises a financial liability when its contractual obligations are discharged, cancelled, or expire.

Financial assets and financial liabilities are offset and the net amount presented in the consolidated statement of financial position when, and only when, the Group currently has a legally enforceable right to set off the recognised amounts and intends either to settle them on a net basis or to realise the asset and settle the liability simultaneously.

(ii) Classification and measurement

All financial assets and liabilities are initially recognised at fair value, which is usually the transaction price including, where appropriate, transaction costs. Subsequently, measurement depends on their classification as follows:

- Financial assets at fair value through profit or loss

  Financial assets are classified as at fair value through profit or loss if they are classified as held-for-trading or are designated as such on initial recognition, and remeasured to fair value at each reporting period. Gains and losses arising from remeasurement are taken to profit or loss, as are transaction costs.

- Loans and receivables

  Loans and receivables including trade receivables are measured at amortised cost using the effective interest method less any impairment (see note 3(k)). Interest income is included in finance income.

- Available-for-sale financial assets

  Available-for-sale financial assets are non-derivative financial assets that are not classified in any of the above categories of financial assets and are recognised initially at fair value plus any directly attributable transaction costs. At the end of each reporting period the fair value is remeasured, with any resultant gain or loss being recognised in other comprehensive income and accumulated separately in equity in the available-for-sale reserve. When these assets are derecognised or impaired (see note 3(k)), the cumulative gain or loss is reclassified from equity to profit or loss.

  Available-for-sale financial assets that do not have a quoted price in an active market and whose fair value cannot be reliably measured are measured at cost less any impairment losses (see note 3(k)) at the end of each reporting period.

  Interest income on available-for-sale debt securities is recognised in finance income using the effective interest method. Dividends on available-for-sale equity securities are recognised in finance income when the right to receive dividends has been established.

- Financial liabilities

  Financial liabilities are stated at amortised cost using the effective interest method. Interest is included in finance expenses unless capitalised into property, plant and equipments (see note 3(g)).

## (f) Investment property

Investment properties are land and buildings which are owned or held under a leasehold interest (see note 3(j)) to earn rental income and/or for capital appreciation.

Investment properties are stated at cost less accumulated depreciation (see note 3(g)(ii)) and impairment losses (see note 3(k)). Rental income from investment properties is accounted for as described in note 3(q)(ii).

## (g) Other property, plant and equipment

(i) Cost

Items of property, plant and equipment are stated at cost less accumulated depreciation and impairment losses (see note 3(k)). Cost includes expenditure that is directly attributable to the acquisition of the assets including for self-constructed assets, the cost of materials, direct labour, the initial estimate, where relevant, of the costs of dismantling and removing the items and restoring the site on which they are located, and an appropriate proportion of production overheads and borrowing costs.

Borrowing costs that are directly attributable to the acquisition, construction or production of an asset which necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of that asset. Other borrowing costs are expensed in the period in which they are incurred.

Construction in progress is transferred to other property, plant and equipment when it is ready for its intended use.

Gains or losses arising from the retirement or disposal of an item of property, plant and equipment are determined as the difference between the net disposal proceeds and the carrying amount of the item and are recognised in profit or loss on the date of retirement or disposal.

(ii) Depreciation

Depreciation is calculated to write off the cost of items of property, plant and equipment, less their estimated residual value, if any, using the straight line method over their estimated useful lives as follows:

| | |
|---|---|
| ▪ Freehold land and construction in progress are not depreciated | |
| ▪ Buildings | 30 years |
| ▪ Machinery, electronic equipment and other equipment | 3 to 10 years |
| ▪ Motor vehicles | 5 years |
| ▪ Decoration and leasehold improvements | 2 to 5 years |

Where components of an item of property, plant and equipment have different useful lives, the cost or valuation of the item is allocated on a reasonable basis between the parts and each part is depreciated separately. Both the useful life of an item of property, plant and equipment and its residual value, if any, are reviewed annually.

## (h) Long-term leasehold prepayments

Long-term leasehold prepayments represent land premium paid, resettlement fees and related expenses incurred in obtaining the relevant land use rights, less accumulated amortisation and impairment losses (see note 3(k)).

Amortisation is charged to profit or loss on a straight-line basis over the period of the rights generally no more than 50 years.

## (i) Goodwill and intangible assets

(i) Goodwill

Goodwill represents the excess of the fair value of consideration paid to acquire a subsidiary over the acquisition date fair value of the acquiree's identifiable assets acquired less liabilities, including contingent liabilities, assumed as at the acquisition date, less impairment (see note 3(k)).

Where the fair value of the assets acquired less liabilities assumed exceeds the consideration paid, the excess is recognised immediately in profit or loss as a gain.

Goodwill is not amortised but subject to impairment testing (see note 3(k)) annually.

(ii) Other intangible assets

Other intangible assets that are acquired by the Group are stated at cost less accumulated amortisation and impairment losses (see note 3(k)).

(iii) Amortisation

Amortisation of other intangible assets with finite useful lives is charged to profit or loss on a straight-line basis over the assets' estimated useful lives. The following intangible assets with finite useful lives are amortised from the date they are available for use and their estimated useful lives are as follows:

| | |
|---|---|
| ▪ Software | 3 years |
| ▪ Patents | 3 to 22 years |
| ▪ Trademark and others | 1 to 14 years |

Both the period and method of amortisation are reviewed annually and revised when necessary.

(iv) Research and development

Research and development costs comprise all costs that are directly attributable to research and development activities or that can be allocated on a reasonable basis to such activities. The nature of the Group's research and development activities is such that the criteria for the recognition of such costs as assets are

generally not met until late in the development stage of the project when the remaining development costs are immaterial. Therefore most expenditure on research and development activities is recognised as an expense in the period in which it is incurred.

## (j) Leased assets

An arrangement is a lease if the substance of the arrangement conveys a right to use a specific asset or assets for an agreed period of time in return for a payment or a series of payments whether the arrangement takes the legal form of a lease or not.

### (i) Classification of assets leased to the Group

Leases which do not transfer substantially all the risks and rewards of ownership to the Group are classified as operating leases.

### (ii) Operating lease charges

Where the Group has the use of assets held under operating leases, payments made under the leases are charged to profit or loss in equal instalments over the accounting periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the leased asset. Lease incentives received are recognised in profit or loss as an integral part of the aggregate net lease payments made. Contingent rentals are charged to profit or loss in the accounting period in which they are incurred.

## (k) Impairment of assets

### (i) Impairment of financial assets

Loans and receivables and available-for-sale debt securities are reviewed at the end of each reporting period to determine whether there is objective evidence of impairment. Objective evidence of impairment includes observable data that comes to the attention of the Group about one or more of the following loss events:

- significant financial difficulty of the debtor;
- a breach of contract, such as a default or delinquency in interest or principal payments;
- it becoming probable that the debtor will enter bankruptcy or other financial reorganisation;
- significant changes in the technological, market, economic or legal environment that have an adverse effect on the debtor;
- a general decline in the ability of a group of financial assets to make payments when due; and
- a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost.

Assets are tested for impairment individually and collectively. Where there is objective evidence that a financial asset or a group of financial assets is impaired the Group recognises an impairment loss using an allowance account representing the difference between the carrying amount and the present value of estimated future cash flows, discounted at the financial assets' original effective interest rate. When assets are assessed collectively, they are grouped on the basis of similar credit characteristics.

Impairment losses are subsequently reversed if in a subsequent period the amount of an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised.

Where an available-for-sale debt security is deemed to be impaired, cumulative fair value losses recognised in the available-for-sale reserve are reclassified to profit or loss. Losses are reversed if a subsequent increase in fair value can be objectively related to an event occurring after the impairment loss was recognised.

Available-for-sale equity securities are impaired where there has been a significant or prolonged decline in their fair value below cost and the cumulative loss is reclassified to profit or loss. Impairment losses are not reversed.

(ii) Impairment of other assets

Internal and external sources of information are reviewed at the end of each reporting period to identify indications that non-financial assets, including property, plant and equipment, long-term leasehold prepayments, intangible assets and other long term assets may be impaired.

Goodwill is tested for impairment at least annually. For the purposes of impairment testing, goodwill is allocated to each cash generating unit, or groups of cash generating units, that is expected to benefit from the synergies of the acquisition. Where impairment testing is of a cash generating unit, goodwill is impaired first where the recoverable value is less than the carrying value of the unit.

Other assets are impaired and an impairment loss is recognised in profit or loss where the recoverable value of the asset is less than its carrying amount, and reversed where there has been a favourable change in the recoverable amount. Impairment of goodwill is not reversed.

The recoverable amount of an asset or group of assets is the greater of its fair value less costs of disposal and value in use. Value in use is the total estimated future cash flows from the asset or, where the asset does not generate independent cash flows independent of other assets, a group of assets, discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

## (l) Inventories

Inventories are carried at the lower of cost and net realisable value.

Cost is based on the standard cost method with periodic adjustments of cost variance to arrive at the actual cost, which approximates to weighted average cost. Cost includes expenditures incurred in acquiring the inventories and bringing them to their present location and condition. The cost of manufactured inventories and work in progress includes an appropriate share of overheads based on normal operating capacity.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories is recognised as an expense in the period in which the related revenue is recognised. Any write-down of inventories to net realisable value and all losses of inventories are recognised as an expense in the period the write-down or loss occurs.

## (m) Cash and cash equivalents

Cash and cash equivalents comprise cash at bank and on hand, demand deposits with banks and other financial institutions, and short-term, highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value. Bank overdrafts that are repayable on demand and form an integral part of the Group's cash management are also included as a component of cash and cash equivalents for the purpose of the statement of cash flows.

## (n) Employee benefits

(i) Short term employee benefits, contributions to defined contribution retirement plans and other long-term employee benefits.

Salaries, profit-sharing and bonus payments paid annual leave and contributions to defined contribution retirement plans are accrued in the year in which the associated services are rendered by employees. Where payment or settlement is deferred and the effect would be material, these amounts are stated at their present values.

(ii) Defined benefit obligations

The Group's obligation in respect of defined benefit plans is calculated separately for each plan by estimating the total amount of future benefit that employees have earned in return for their service in the current and prior periods which is then discounted to present value. The calculation is performed by management using the projected unit credit method.

Service cost and interest cost on the defined benefit obligations and any curtailment gains and losses are recognised in profit or loss.

Remeasurements arising from changes in assumptions regarding the amounts of future benefits are recognised immediately in other comprehensive income and shall not be reclassified to profit or loss in a subsequent period.

(o) Income tax

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Current tax and movements in deferred tax assets and liabilities are recognised in profit or loss except to the extent that they relate to items recognised in other comprehensive income or directly in equity, in which case the relevant amounts of tax are recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the end of the reporting period, and any adjustment to tax payable in respect of previous years.

Deferred tax is provided on all temporary differences respectively, representing the differences between the carrying amounts of assets and liabilities for financial reporting purposes and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Future taxable profits that may support the recognition of deferred tax assets arising from deductible temporary differences include those that will arise from the reversal of existing taxable temporary differences, provided those differences relate to the same taxation authority and the same taxable entity, and are expected to reverse either in the same period as the expected reversal of the deductible temporary difference or in periods into which a tax loss arising from the deferred tax asset can be carried back or forward. The same criteria are adopted when determining whether existing taxable temporary differences support the recognition of deferred tax assets arising from unused tax losses and credits, that is, those differences are taken into account if they relate to the same taxation authority and the same taxable entity, and are expected to reverse in a period, or periods, in which the tax loss or credit can be utilised.

No deferred tax is recognised on:

- the initial recognition of goodwill;
- the initial recognition of assets or liabilities that affect neither accounting nor taxable profit (provided they are not part of a business combination); and
- temporary differences relating to investments in subsidiaries to the extent that, in the case of taxable differences, the Group controls the timing of the reversal and it is probable that the differences will not reverse in the foreseeable future, or in the case of deductible differences, unless it is probable that they will reverse in the future.

The amount of deferred tax recognised is measured based on the expected manner of realisation or settlement of the carrying amount of the assets and liabilities, using tax rates enacted or substantively enacted at the end of the reporting period. Deferred tax assets and liabilities are not discounted.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow the related tax benefit to be utilised. Any such reduction is reversed to the extent that it becomes probable that sufficient taxable profits will be available.

Current tax balances and deferred tax balances, and movements therein, are presented separately from each other and are not offset. Current tax assets are offset against current tax liabilities, and deferred tax assets against deferred tax liabilities, if the Group has legally enforceable rights to set off current tax assets against current tax liabilities and the following additional conditions are met:

- in the case of current tax assets and liabilities, the Group intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously; or

- in the case of deferred tax assets and liabilities, if they relate to income taxes levied by the same taxation authority on either:
  - the same taxable entity; or
  - different taxable entities, which, in each future period in which significant amounts of deferred tax liabilities or assets are expected to be settled or recovered, intend to realise the current tax assets and settle the current tax liabilities on a net basis or realise and settle simultaneously.

## (p) Provisions and contingent liabilities

Provisions are recognised for other liabilities of uncertain timing or amount when the Group has a legal or constructive obligation arising as a result of a past event, it is probable that an outflow of economic benefits will be required to settle the obligation and a reliable estimate can be made. Where the time value of money is material, provisions are stated at the present value of the expenditure expected to settle the obligation.

Where it is not probable that an outflow of economic benefits will be required, or the amount cannot be reliably estimated, disclosure is made of the contingent liability, unless the probability of outflow of economic benefits is remote. Possible obligations, whose existence will only be confirmed by the occurrence or non-occurrence of one or more future events are also disclosed as contingent liabilities unless the probability of outflow of economic benefits is remote.

The main types of provisions are as follows:

### (i) Provision for warranties

The Group provides warranty on its products for a period typically covering 12 to 24 months. The Group estimates the costs that may be incurred under its warranty obligations and records a liability in the amount of such costs when revenue is recognised. Warranty costs generally include parts, labour costs and service centre support. Factors that affect the Group's warranty liability include the number of installed units, historical and anticipated rates of warranty claims. The Group periodically reassesses its warranty liabilities and adjusts the amounts as necessary.

### (ii) Provision for onerous contracts

A provision for onerous contracts is recognised when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract. Before a provision is established, the Group recognises any impairment loss on the assets associated with that contract.

(iii) Provision for product sales

The Group may provide rebates to customers and other sales based incentives based on contractual agreements or specific incentive programme. The provisions for such incentives is estimated, and regularly reviewed, based on various factors including, but not limited to, contractual terms, customary business practices, expected take up rates, experience of similar contracts, and historical experience.

The Group also provides sales incentives in the form of discounts when eligible purchases exceed a defined value or volume and may be either for a fixed or variable amount depending on the nature of the contractual agreement. These provisions are estimated, and regularly reviewed, based on several factors, including but not limited to, expected purchase volumes, contractual terms, customary business practices and historical experience.

## (q) Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable. Where it is probable that the economic benefits will flow to the Group and the revenue and costs, if applicable, can be measured reliably, revenue is recognised in profit or loss as follows:

(i) Sale of goods and provision of services

Revenue from sale of goods is recognised when the significant risks and rewards of ownership of goods have been transferred to the buyer. Revenue from the provision of services is recognised at the time when the services are provided. No revenue is recognised if there are significant uncertainties regarding the recovery of the consideration due, associated costs or the possible return of goods. Revenue excludes value added tax or other sales taxes and is after deduction of any trade discounts.

(ii) Rental income from operating leases

Rental income receivable under operating leases is recognised in profit or loss in equal instalments over the periods covered by the lease term, except where an alternative basis is more representative of the pattern of benefits to be derived from the use of the leased asset. Lease incentives granted are recognised in profit or loss as an integral part of the aggregate net lease payments receivable. Contingent rentals are recognised as income in the accounting period in which they are earned.

## (r) Government grants

Government grants are recognised in the consolidated statement of financial position only when there is reasonable assurance that they will be received and that the Group will comply with the conditions attaching to them. Grants that compensate the Group for expenses incurred are recognised as other income in profit or loss on a systematic basis in the same periods in which the expenses are incurred. Grants that compensate the Group for the cost of an asset are recognised as deferred income and consequently are effectively recognised in profit or loss on a systematic basis over the useful life of the asset.

## (s) Translation of foreign currencies

(i) Foreign currency transactions

Foreign currency transactions during the year are translated to the respective functional currencies of group entities at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the foreign exchange rates ruling at the end of the reporting period. Exchange gains and losses are recognised in profit or loss.

Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was measured.

(ii) Foreign operations

The results of foreign operations, except for foreign operations in hyperinflationary economies, are translated into CNY at the exchange rates approximating the foreign exchange rates ruling at the dates of the transactions. Statement of financial position items are translated into CNY at the closing foreign exchange rates at the end of the reporting period. The resulting exchange differences are recognised in other comprehensive income and accumulated separately in equity in the translation reserve. If the operation is a non-wholly-owned subsidiary, then the relevant proportionate share of the translation difference is allocated to the non-controlling interests.

The results of foreign operations in hyperinflationary economies are translated to CNY at the exchange rates ruling at the end of the reporting period. Prior to translating the financial statements of foreign operations in hyperinflationary economies, their financial statements for the current year are restated to account for changes in the general purchasing power of the local currencies. The restatement is based on relevant price indices at the end of the reporting period.

When a foreign operation is disposed of in its entirety or partially such that control, significant influence or joint control is lost, the cumulative amount in the translation reserve related to that foreign operation is reclassified to profit or loss as part of the gain or loss on disposal.

## 4 Changes in accounting policies

The IASB has issued the following amendments to IFRSs that are first effective for the current accounting period of the Group.

- Amendments to IAS 19, *Employee Benefits: Defined benefit plans: Employee contributions*
- Annual Improvements to IFRSs 2010 – 2012 Cycle
- Annual Improvements to IFRSs 2011 – 2013 Cycle

None of these had a material impact on the Group's financial reporting. There were no other changes to accounting policies in the year.

## 5 Accounting judgements and estimates

### Sources of estimation uncertainty

Notes 14 contains information about the assumptions and risk factors relating to valuation of goodwill impairment. Other key sources of estimation uncertainty are as follows:

(a) Revenue recognition

Revenue from sale of goods and provision of services are recognised when the criteria set out in note 3(q) are met. Managerial judgement is applied relating to, inter alia, conformance with acceptance criteria and if transfer of risks and rewards to the customer has taken place to determine if revenue should be recognised in the current year and the customer credit standing to assess whether payment is likely or not to justify revenue recognition. Revenues may materially change if management's assessment of such criteria was determined to be inaccurate.

(b) Impairment of receivables

Credit risks of customers are regularly assessed with reference to the estimated future cash flow of an individual debtor or a portfolio of debtors and changes in the financial condition that have

an adverse effect on the debtor, and allowances are recorded for estimated losses. If the financial condition of customers were to deteriorate or improve, additional allowances or reversals may be required in future periods.

(c) Net realisable value of inventories

The net realisable value of inventories is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale. These estimates are based on the current market condition and the historical experience of distributing and selling products of similar nature. It could change significantly as a result of competitor actions in response to severe industry cycles or other changes in market condition. Management will reassess the estimations at the end of each reporting period.

(d) Depreciation and amortisation

Property, plant and equipment are depreciated on a straight-line basis over the estimated useful lives, after taking into account the estimated residual value. Intangible assets with finite useful life are amortised on a straight-line basis over the estimated useful lives. Both the period and method of depreciation and amortisation are reviewed annually. The depreciation and amortisation expense for future periods is adjusted if there are significant changes, such as operational efficiency or changes in technologies, from previous estimates.

(e) Impairment losses of long-lived assets

The carrying amounts of long-lived assets (including goodwill) are reviewed periodically in order to assess whether the recoverable amounts have declined below the carrying amounts. In order to determine the recoverable amount, the Group uses assumptions and develops expectations, which requires significant judgement relating to the definition of units generating cash flows. The Group uses all readily available information in determining an amount that is a reasonable approximation of recoverable amount, including estimates based on reasonable and supportable assumptions and projections of production volume, sales price, amount of operating costs, discount rate and growth rate.

(f) Income tax

The Group is subject to income taxes in various jurisdictions. Significant judgement is required in determining the worldwide provision for income taxes. There are many transactions and calculations for which the ultimate tax determination is uncertain during the ordinary course of business. The Group recognises liabilities based on estimates of whether additional taxes will eventually be due. Where the final tax outcome of these matters is different from the amounts that were initially recorded, such differences will impact the income tax and deferred tax provisions for the period in which such decision is made.

(g) Provision for warranties

As explained in note 27, the Group makes provision for warranties in respect of its products, taking into account the Group's recent claim experience and anticipated claim rates for its products. As the Group is continually upgrading its product designs and launching new models, it is possible that the recent claim experience is not indicative of future claims that it will receive in respect of past sales. Any increase or decrease in the provision would affect income in future years.

(h) Other provisions

The Group makes provisions for onerous contracts, product sales, outstanding litigations and claims based on project budgets, contract terms, available knowledge and past experience. The Group recognises provisions to the extent that it has a present legal or constructive obligation as a result of a past event; that it is probable that an outflow of resources will be required to settle the obligation; and that the amount can be reliably estimated.

## 6 Possible impact of amendments, new standards and interpretations issued but not yet effective for the year ended December 31, 2015

Up to the date of issue of these financial statements, the IASB has issued new standards and amendments which are not yet effective in the current year but will affect the Group's financial statements in future periods.

The standards that are expected to have the most significant impacts are:

- IFRS 15, *Revenue from contracts with customers*

  IFRS 15 establishes a single comprehensive framework for entities to use in accounting for revenue arising from contracts with customers, and will supersede IAS 18, *Revenue*, IAS 11, *Construction Contracts* and all related Interpretations when it becomes effective. Under the new standard, revenue is recognised as performance obligations in the contract are satisfied to reflect the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.

  IFRS 15 is effective from January 1, 2018.

- IFRS 9, *Financial instruments*

  IFRS 9 replaces IAS 39, *Financial Instruments: Recognition and Measurement* and affects the classification and measurement of financial assets and introduces a new expected credit loss model for calculating impairment on financial assets and financial guarantee contracts, and introduces simplified hedge accounting requirements.

  IFRS 9 is effective from January 1, 2018.

- IFRS 16, *Leases*

  IFRS 16 replaces IAS 17, *Leases* and will affect how the Group accounts for leasing transactions both as lessor and lessee. The main change is that the Group will recognise an asset in respect of the right to use assets held under operating leases, and a liability for its obligations to make payments under such leases.

  IFRS 16 is effective from January 1, 2019.

The Group is considering how to apply these new standards but has yet to determine the financial impacts.

Other changes to accounting standards and interpretations may be relevant to the Group but are expected to be less significant as follows:

| | *Effective for accounting periods beginning on or after* |
|---|---|
| Annual improvements to IFRSs 2012-2014 cycle | January 1, 2016 |
| Amendments to IFRS 10 and IAS 28, *Sale or contribution of assets between an investor and its associate or joint venture* | January 1, 2016 |
| Amendments to IFRS 11, *Accounting for acquisitions of interests in joint operations* | January 1, 2016 |
| Amendments to IAS 1, *Disclosure initiative* | January 1, 2016 |
| Amendments to IAS 16 and IAS 38, *Clarification of acceptable methods of depreciation and amortisation* | January 1, 2016 |

The Group is assessing what the impact of these amendments is expected to be but is at the date of approval of these financial statements unable to provide an estimate of the financial impacts.

## 7 Segment information

The Group divides its business into three operating segments, according to the types of products and services provided:

- Carrier Network

  The Carrier network segment develops and manufactures a wide range of wireless network, fixed network, carrier software and core network, as well as services solutions to telecommunications operators.

- Enterprise

  The Enterprise segment develops integratable ICT products and solutions including enterprise network infrastructure, cloud-based green data centres, enterprise information security and unified communication and collaboration. It delivers these solutions to several organisations in a variety of industries such as governments and public utilities, enterprises, energy, power, transportation and finance.

- Consumer

  The Consumer segment develops, manufactures and sells to both consumers and businesses: mobile broadband devices, home devices, smartphones, as well as the applications on these devices.

Reportable segments are determined based on the Group's organisation structure, management requirement and reporting system.

Each reportable segment is managed separately because each requires different technology and marketing strategies. There are no inter-segment transactions. The financial information of the different segments is regularly reviewed by the Group's most senior executive management for the purpose of resource allocation and performance assessment.

### Revenue information in respect of business segments

| | 2015<br>CNY million | 2014<br>CNY million |
|---|---|---|
| Carrier Network | **232,307** | 191,381 |
| Enterprise | **27,609** | 19,201 |
| Consumer | **129,128** | 74,688 |
| Unallocated items | **5,965** | 2,927 |
| Total | **395,009** | 288,197 |

Revenue information in respect of geographical segments

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| China | **167,690** | 108,674 |
| Americas | **38,976** | 30,844 |
| Asia Pacific | **50,527** | 42,409 |
| Europe, the Middle East and Africa | **128,016** | 100,674 |
| Others | **9,800** | 5,596 |
| Total | **395,009** | 288,197 |

## 8 Revenue

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Sale of goods and provision of services | **394,922** | 288,116 |
| Rental income (note 28(b)) | **87** | 81 |
| | **395,009** | 288,197 |

## 9 Other income/(expenses), net

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Factoring expenses | **(639)** | (841) |
| Government grants | **2,076** | 1,033 |
| Impairment loss on intangible assets and goodwill | **(45)** | (3,445) |
| Net loss on disposal of property, plant and equipment, and intangible assets | **(222)** | (55) |
| Others | **1,807** | (1,625) |
| | **2,977** | (4,933) |

### Government grants

During the year ended December 31, 2015, the Group received unconditional government grants of CNY539 million (2014: CNY422 million) in respect of its contributions to the development of research and innovation in the PRC. These grants were directly recognised as other income.

During the year ended December 31, 2015, the Group received government grants of CNY846 million (2014: CNY521 million) which were conditional upon completion of certain research and development projects. These grants were initially recognised in the consolidated statement of financial position as deferred government grants and are amortised through the consolidated statement of total comprehensive income on a systematic basis in the same periods in which the related research and development expenses are incurred. During the year ended December 31, 2015, conditional government grants of CNY1,537 million (2014: CNY611 million) were recognised in profit or loss.

## 10 Personnel expenses

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Salaries, wages and other benefits | **80,214** | 61,540 |
| Time-based unit plan (TUP) | **8,923** | 963 |
| Post-employment plans | | |
| – Defined benefit plan | **2,451** | 1,918 |
| – Defined contribution plans | **9,246** | 7,387 |
| | **11,697** | 9,305 |
| | **100,834** | 71,808 |

### Defined contribution plans

The Group contributes to defined contribution retirement plans for eligible employees. The plans are managed either by the government in the countries where the employees are employed, or by independent trustees. Contribution levels are determined by the relevant laws and regulations concerned.

### TUP

TUP is a profit-sharing and bonus plan based on employee performance for all eligible employees (recipients) in the Group. Under TUP, time-based units (TBUs) are granted to recipients for a period of five years which entitle them to receive an annual cash incentive based on an annual profit-sharing amount and a cumulative end-of-term appreciation amount. Both the annual profit-sharing and the end-of-term appreciation amount are determined at the discretion of the Group. TBUs granted to recipients in 2015 and all granted before 2015 become exercisable on January 1 2016. Recipients will receive the annual profit-sharing amount accordingly. TBUs expire either at the end of the fifth year period or on the date recipients leave the Group's employment, when the end-of-term appreciation amount will be paid.

## 11 Finance income and expenses

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| Interest income | | **2,868** | 2,402 |
| Gain on disposal of available-for-sale financial assets stated at fair value, net | 13(b) | **331** | 821 |
| Gain from other financial assets, net | | **17** | 12 |
| Dividend income | | **1** | 7 |
| Finance income | | **3,217** | 3,242 |
| Interest expense | | **(1,536)** | (1,659) |
| Net foreign exchange loss | | **(4,362)** | (2,135) |
| Impairment loss on equity securities | | **–** | (3) |
| Bank charges | | **(638)** | (451) |
| Interest cost on defined benefit obligations | | **(396)** | (458) |
| | | **(6,932)** | (4,706) |
| Less: interest expense capitalised | | **–** | 9 |
| Finance expenses | | **(6,932)** | (4,697) |
| Net finance expenses | | **(3,715)** | (1,455) |

No borrowing costs were capitalised during 2015. Borrowing costs were capitalised at a rate of 5.90% per annum in 2014.

## 12 Income tax in the consolidated statement of total comprehensive income

### Charge for the year

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| **Current tax** | | |
| Provision for the year | **7,880** | 8,314 |
| (Over)/under-provision in respect of prior years | **(515)** | 543 |
| | **7,365** | 8,857 |
| **Deferred tax** | **(2,288)** | (3,670) |
| | **5,077** | 5,187 |

## 13 Other comprehensive income

### (a) Tax effects relating to each component of other comprehensive income

| | 2015 | | | 2014 | | |
|---|---|---|---|---|---|---|
| | Before-tax amount CNY million | Tax benefit/ (expense) CNY million | Net-of-tax amount CNY million | Before-tax amount CNY million | Tax benefit CNY million | Net-of-tax amount CNY million |
| Remeasurement of defined benefit obligations | | | | | | |
| – The Group | (361) | 55 | (306) | (196) | 30 | (166) |
| Net change in the fair value of available-for-sale investments | 1,548 | (396) | 1,152 | (218) | 18 | (200) |
| Translation differences on foreign operations | | | | | | |
| – The Group | 1,050 | – | 1,050 | 175 | – | 175 |
| – Share of associates and joint ventures | (6) | – | (6) | (1) | – | (1) |
| | 1,044 | – | 1,044 | 174 | – | 174 |
| | 2,231 | (341) | 1,890 | (240) | 48 | (192) |

### (b) Components of other comprehensive income, including reclassification adjustments

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Available-for-sale investments: | | |
| Changes in fair value recognised during the year | 1,879 | 603 |
| Reclassification adjustment for amounts transferred to profit or loss: | | |
| – Gain on disposal (note 11) | (331) | (821) |
| – Net deferred tax (charged)/credit to other comprehensive income | (396) | 18 |
| Net movement in the available-for-sale reserve during the year | 1,152 | (200) |

## 14 Goodwill and intangible assets

| | Goodwill | Software | Patents | Trademark and others | Total |
|---|---|---|---|---|---|
| | CNY million | CNY million | CNY million | CNY million | CNY million |
| **Cost:** | | | | | |
| At January 1, 2014 | 3,566 | 2,249 | 2,180 | 86 | 8,081 |
| Exchange adjustments | 44 | (42) | (18) | (5) | (21) |
| Additions | – | 436 | 136 | 9 | 581 |
| Acquisition of subsidiaries | 108 | – | 59 | – | 167 |
| Disposals | – | (28) | (31) | (1) | (60) |
| At December 31, 2014 | 3,718 | 2,615 | 2,326 | 89 | 8,748 |
| At January 1, 2015 | 3,718 | 2,615 | 2,326 | 89 | 8,748 |
| Exchange adjustments | 143 | (22) | 20 | (71) | 70 |
| Reclassification | – | (533) | 78 | 455 | – |
| Additions | – | 196 | 467 | 150 | 813 |
| Acquisition of subsidiaries (note 32(c)) | 101 | – | 27 | 7 | 135 |
| Disposals | – | (254) | (346) | (122) | (722) |
| At December 31, 2015 | 3,962 | 2,002 | 2,572 | 508 | 9,044 |
| **Amortisation and impairment:** | | | | | |
| At January 1, 2014 | 223 | 1,312 | 747 | 46 | 2,328 |
| Exchange adjustments | (35) | (16) | – | (2) | (53) |
| Amortisation for the year | – | 272 | 196 | 8 | 476 |
| Impairment loss (note 9) | 3,223 | – | 222 | – | 3,445 |
| Disposals | – | (21) | (23) | (1) | (45) |
| At December 31, 2014 | 3,411 | 1,547 | 1,142 | 51 | 6,151 |
| At January 1, 2015 | 3,411 | 1,547 | 1,142 | 51 | 6,151 |
| Exchange adjustments | 145 | (17) | 16 | (1) | 143 |
| Reclassification | – | – | (187) | 187 | – |
| Amortisation for the year | – | 243 | 143 | 94 | 480 |
| Impairment loss (note 9) | 10 | – | – | 35 | 45 |
| Disposals | – | (155) | (321) | (24) | (500) |
| At December 31, 2015 | 3,566 | 1,618 | 793 | 342 | 6,319 |
| **Carrying amount:** | | | | | |
| At December 31, 2015 | 396 | 384 | 1,779 | 166 | 2,725 |
| At December 31, 2014 | 307 | 1,068 | 1,184 | 38 | 2,597 |

(i) The amortisation charge for the year is allocated to "cost of sales", "research and development expenses", "selling and administrative expenses" in the consolidated statement of total comprehensive income based on the use of the related assets. Impairment losses are included in "other expenses".

### (ii) Goodwill impairment testing

Goodwill is allocated to the Group's cash-generating units (CGU) or group of CGUs, which is not larger than an operating segment and is expected to benefit from the synergies of the acquisition, as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Sectors under Enterprise business group | – | – |
| Beijing Huawei Longshine Information Technology Company Limited (Beijing Huawei Longshine) | 154 | 154 |
| Others | 242 | 153 |
| | 396 | 307 |

For impairment test purposes, the recoverable amounts of the CGUs are based on value-in-use calculations by using a discounted cash flow model. The calculations use cash flow projections based on financial budgets approved by management covering a five-year period, based on industry knowledge. Cash flows beyond the five-year periods are extrapolated using an estimated growth rate which does not exceed the long-term average growth rate for the business in which the CGU or group of CGUs operates. Cash flows are discounted using pre-tax discount rates that reflect specific risks relating to respective CGU or group of CGUs.

Key assumptions used in the calculation are as follows:

| | As at December 31 | |
|---|---|---|
| | 2015 % | 2014 % |
| **Sectors under Enterprise business group** | | |
| – Discount rate | N/A | 16.4 |
| – Terminal value growth rate | N/A | 3.0 |
| **Beijing Huawei Longshine** | | |
| – Discount rate | 15.5 | 15.5 |
| – Terminal value growth rate | 3.0 | 3.0 |

During the year ended December 31, 2014, impairment loss of CNY3,223 million and CNY222 million respectively were recognised for the goodwill allocated to and the intangible assets of the acquired sectors under Enterprise business group. Goodwill relating to this CGU was written off in full.

## 15 Property, plant and equipment

| | Freehold land | Buildings | Machinery, electronic equipment and other equipment | Motor vehicles | Construction in progress | Investment property | Decoration and leasehold improvements | Total |
|---|---|---|---|---|---|---|---|---|
| | CNY million | CNY million | CNY million | CNY million | CNY million | CNY million | CNY million | CNY million |
| **Cost:** | | | | | | | | |
| At January 1, 2014 | 106 | 9,428 | 19,501 | 544 | 4,910 | 434 | 6,502 | 41,425 |
| Exchange adjustments | 1 | (8) | (423) | (32) | (21) | – | (47) | (530) |
| Additions | 36 | 318 | 3,196 | 90 | 4,200 | – | 124 | 7,964 |
| Transfer from construction in progress | – | 1,637 | 809 | – | (3,500) | – | 1,054 | – |
| Acquisition of subsidiaries | – | 617 | 365 | – | – | – | 487 | 1,469 |
| Transfer from investment property | – | 187 | 83 | – | – | (334) | 64 | – |
| Disposals | – | (3) | (919) | (73) | – | – | (91) | (1,086) |
| At December 31, 2014 | 143 | 12,176 | 22,612 | 529 | 5,589 | 100 | 8,093 | 49,242 |
| At January 1, 2015 | 143 | 12,176 | 22,612 | 529 | 5,589 | 100 | 8,093 | 49,242 |
| Exchange adjustments | 1 | (65) | (334) | (16) | 1 | – | (46) | (459) |
| Additions | – | – | 7,288 | 87 | 6,217 | – | 304 | 13,896 |
| Transfer from construction in progress | – | 1,742 | 1,656 | – | (4,406) | – | 1,008 | – |
| Transfer to construction in progress | – | (212) | (83) | – | 77 | – | (1) | (219) |
| Disposals | – | (344) | (2,012) | (86) | – | – | (482) | (2,924) |
| At December 31, 2015 | 144 | 13,297 | 29,127 | 514 | 7,478 | 100 | 8,876 | 59,536 |
| **Accumulated depreciation:** | | | | | | | | |
| At January 1, 2014 | – | 2,554 | 11,717 | 361 | – | 307 | 4,277 | 19,216 |
| Exchange adjustments | – | – | (244) | (19) | – | – | (37) | (300) |
| Depreciation charge for the year | – | 470 | 2,391 | 63 | – | 3 | 1,091 | 4,018 |
| Transfer from investment property | – | 85 | 77 | – | – | (226) | 64 | – |
| Disposals | – | (2) | (794) | (65) | – | – | (79) | (940) |
| At December 31, 2014 | – | 3,107 | 13,147 | 340 | – | 84 | 5,316 | 21,994 |
| At January 1, 2015 | – | 3,107 | 13,147 | 340 | – | 84 | 5,316 | 21,994 |
| Exchange adjustments | – | 1 | (189) | (10) | – | – | (30) | (228) |
| Depreciation charge for the year | – | 345 | 3,523 | 64 | – | 1 | 1,042 | 4,975 |
| Transfer to construction in progress | – | (139) | (78) | – | – | – | (2) | (219) |
| Disposals | – | (165) | (1,774) | (80) | – | – | (405) | (2,424) |
| At December 31, 2015 | – | 3,149 | 14,629 | 314 | – | 85 | 5,921 | 24,098 |
| **Carrying amount:** | | | | | | | | |
| At December 31, 2015 | 144 | 10,148 | 14,498 | 200 | 7,478 | 15 | 2,955 | 35,438 |
| At December 31, 2014 | 143 | 9,069 | 9,465 | 189 | 5,589 | 16 | 2,777 | 27,248 |

### Investment property

The fair value of investment property as at December 31, 2015 is estimated by management to be CNY147 million (2014: CNY 71 million).

The fair value of investment property is determined by the Group internally with reference to market conditions and discounted cash flow forecasts, taking into account current lease agreements on an arm's-length basis. The fair value measurement is categorised into level 3 of the fair value hierarchy as defined in IFRS 13, *Fair value measurement*.

## 16 Long-term leasehold prepayments

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| At January 1 | **3,349** | 2,761 |
| Additions | **37** | 607 |
| Acquisition of subsidiaries | **–** | 61 |
| Amortisation for the year | **(80)** | (80) |
| At December 31 | **3,306** | 3,349 |

## 17 Interests in associates and joint ventures

| | Associates | | Joint ventures | | Total | |
|---|---|---|---|---|---|---|
| | 2015 CNY million | 2014 CNY million | 2015 CNY million | 2014 CNY million | 2015 CNY million | 2014 CNY million |
| Share of net assets | **424** | 521 | **78** | 107 | **502** | 628 |
| Goodwill | **43** | 43 | **–** | – | **43** | 43 |
| Subtotal | **467** | 564 | **78** | 107 | **545** | 671 |
| Less: impairment loss | **(17)** | (16) | **–** | – | **(17)** | (16) |
| Total | **450** | 548 | **78** | 107 | **528** | 655 |

All associates and joint ventures are accounted for using the equity method in the consolidated financial statements.

Particulars of material associates and joint ventures, all of which are unlisted corporate entities whose quoted market price is not available, are set out below:

| Name of associate or joint venture | Form of business structure | Place of incorporation and business | Proportion of ownership interest | | Nature of the relationship |
|---|---|---|---|---|---|
| | | | 2015 | 2014 | |
| *Associate* | | | | | |
| TD Tech Holding Limited (TD Tech) | Incorporated | Hong Kong, PRC | 49% | 49% | Note (a) |
| Tianwen Digital Media Technology (Beijing) Co., Ltd. (Tianwen Digital Media) | Incorporated | Beijing, PRC | 24% | 49% | Note (b) |
| *Joint venture* | | | | | |
| Huawei Marine Systems Co., Ltd. (Huawei Marine) | Incorporated | Hong Kong, PRC | 51% | 51% | Note (c) |

Note (a): TD Tech's principal activity is research and development, production and sale of TD-SCDMA telecommunication products.

Note (b): Tianwen Digital Media's principal activity is development, publication and operation of digital media related services. In 2015, the Group disposed of 25% of its interests in Tianwen Digital Media to a third party.

Note (c): Huawei Marine's principal activity is construction and operation of submarine fibres.

Summarised financial information of the material associates, reconciled to the carrying amounts in the consolidated financial statements, is as follows:

| | TD Tech | | Tianwen Digital Media | |
|---|---|---|---|---|
| | 2015 CNY million | 2014 CNY million | 2015 CNY million | 2014 CNY million |
| *Gross amounts of the associates'* | | | | |
| Current assets | **1,557** | 3,949 | **526** | 432 |
| Non-current assets | **67** | 49 | **14** | 8 |
| Current liabilities | **(1,022)** | (3,412) | **(246)** | (159) |
| Non-current liabilities | **–** | (109) | **–** | (7) |
| Equity | **602** | 477 | **294** | 274 |
| | | | | |
| Revenue | **4,747** | 7,604 | **396** | 233 |
| Profit (note a) | **125** | 234 | **20** | 24 |
| Total comprehensive income (note a) | **125** | 234 | **20** | 24 |
| | | | | |
| *Reconciled to the Group's interest in the associates* | | | | |
| Gross amounts of net assets of the associate | **602** | 477 | **294** | 274 |
| Group's effective interest | **49%** | 49% | **24%** | 49% |
| Group's share of net assets of the associate | **295** | 202 | **71** | 134 |
| Goodwill | **–** | – | **2** | 5 |
| Elimination of unrealised profit | **(208)** | – | **–** | – |
| Carrying amount in the consolidated financial statements | **87** | 202 | **73** | 139 |

Note a: Amounts included in the financial statements relating to TD tech are based on unaudited financial information. Any difference between this are to be accounted for in the Group's next financial period.

Summarised financial information of the material joint venture, reconciled to the carrying amounts in the consolidated financial statements, is as follows:

| | Huawei Marine | |
|---|---|---|
| | **2015 CNY million** | **2014 CNY million** |
| *Gross amounts of the joint ventures'* | | |
| Current assets | **729** | 734 |
| Non-current assets | **31** | 16 |
| Current liabilities | **(519)** | (598) |
| Non-current liabilities | **(14)** | (19) |
| Equity | **227** | 133 |
| | | |
| Included in the above assets and liabilities: | | |
| Cash and cash equivalents | **176** | 107 |
| | | |
| Revenue | **1,259** | 488 |
| Profit | **94** | 8 |
| Other comprehensive income | **(9)** | (2) |
| Total comprehensive income | **85** | 6 |
| | | |
| Included in the above profit: | | |
| Depreciation and amortisation | **(1)** | (9) |
| Income tax expense | **(2)** | – |
| | | |
| *Reconciled to the Group's interest in the joint ventures* | | |
| Gross amounts of net assets of the joint venture | **227** | 133 |
| Group's effective interest | **51%** | 51% |
| Group's share of net assets of the joint venture | **116** | 67 |
| Elimination of unrealised profit | **(83)** | – |
| Carrying amount in the consolidated financial statements | **33** | 67 |

Aggregate carrying amounts and summarised financial information of individually immaterial associates and joint ventures are as follows:

| | Associates | | Joint ventures | |
|---|---|---|---|---|
| | 2015 CNY million | 2014 CNY million | 2015 CNY million | 2014 CNY million |
| Aggregate carrying amount | 290 | 207 | 45 | 40 |
| Aggregate amount of the Group's share of those associates' and joint ventures' | | | | |
| Profit/(loss) | 84 | 62 | (1) | (1) |
| Other comprehensive income | (1) | – | (1) | – |
| Total comprehensive income | 83 | 62 | (2) | (1) |

## 18 Short-term and other investments

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| Investment funds | (i) | 2,823 | 27,326 |
| Debt securities | | 5,930 | 699 |
| Equity securities – unlisted | | 393 | 516 |
| Equity securities – listed | | 1,752 | 7 |
| Forward exchange contract | | 11 | – |
| Fixed deposits | | 7,719 | – |
| | | 18,628 | 28,548 |
| Less: impairment loss | (ii) | (20) | (20) |
| | | 18,608 | 28,528 |
| Non-current portion | | 3,961 | 540 |
| Current portion | | 14,647 | 27,988 |
| | | 18,608 | 28,528 |

(i) Investment funds comprise short-term investments in wealth management products and money market funds.

(ii) As at December 31, 2015 and 2014, certain of the Group's other investments were individually determined to be impaired on the basis of a material decline in value and adverse changes in the market in which the investees operated. This indicated that the carrying amount of these investments may not be recovered in full and impairment losses were recognised in profit or loss in accordance with the policy set out in note 3(k).

## 19 Deferred tax assets and liabilities

### (a) Components of recognised deferred tax assets/(liabilities)

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Accruals and provisions | **9,791** | 8,858 |
| Depreciation of property, plant and equipment | **341** | 220 |
| Provision for impairment losses | **1,075** | 873 |
| Tax losses | **309** | 172 |
| Undistributed profits of subsidiaries | **(149)** | (141) |
| Unrealised profit | **4,081** | 3,460 |
| Fair value adjustments on acquisition of subsidiaries | **(26)** | (34) |
| Others | **1,018** | 1,188 |
| Total | **16,440** | 14,596 |

Reconciliation to the consolidated statement of financial position

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Net deferred tax assets recognised in the consolidated statement of financial position | **16,900** | 14,916 |
| Net deferred tax liabilities recognised in the consolidated statement of financial position | **(460)** | (320) |
| | **16,440** | 14,596 |

### (b) Deferred tax assets not recognised

In accordance with the accounting policy set out in note 3(o), as at December 31, 2015 and 2014, deferred tax assets were not recognised in relation to certain unused tax losses and other deductible temporary differences.

Unused tax losses of CNY3,371 million have not been recognised as deferred tax assets as at December 31, 2015 (2014: CNY3,842 million). The expiry dates of unrecognised unused tax losses are analysed as follows:

| | 2015 CNY million |
|---|---|
| Expiring in: | |
| 2016 | **11** |
| 2017 | **9** |
| 2018 | **70** |
| 2019 | **679** |
| 2020 and afterwards or no expiring period | **2,602** |
| | **3,371** |

In addition, certain provisions for impairment losses and other provisions amounting to CNY9,411 million have not been recognised as deferred tax assets as at December 31, 2015 (2014: CNY12,610 million).

## 20 Inventories

(a) Analysis of inventories

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Raw materials | **10,916** | 6,261 |
| Manufacturing work in progress | **5,765** | 5,224 |
| Finished goods | **16,045** | 11,569 |
| Contract work in progress | **27,892** | 23,476 |
| Other inventories | **745** | 46 |
| | **61,363** | 46,576 |

(b) Amount of inventories recognised as an expense and included in profit or loss:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Carrying amount of inventories sold | **177,399** | 116,062 |
| (Reversal)/write down of inventory | **(538)** | 2,120 |
| | **176,861** | 118,182 |

## 21 Trade and bills receivable

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| **Trade receivables** | | | |
| Trade receivables due from third parties | | **92,030** | 75,018 |
| Trade receivables due from related parties | 31 | **395** | 827 |
| | | **92,425** | 75,845 |
| **Bills receivable** | | | |
| Bank acceptance bills | | **1,101** | 2,334 |
| Commercial acceptance bills | | **735** | 1,000 |
| Letter of credit receivables | | **1,097** | 847 |
| | | **2,933** | 4,181 |
| | | **95,358** | 80,026 |
| Non-current portion | | **2,098** | 446 |
| Current portion | | **93,260** | 79,580 |
| | | **95,358** | 80,026 |

### (a) Ageing analysis

At the end of the reporting period, the ageing analysis of trade receivables due from third parties is as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Not past due | **67,100** | 55,700 |
| Less than 90 days past due | **19,588** | 15,120 |
| 90 days to 1 year past due | **8,857** | 7,706 |
| 1 year and above past due | **3,658** | 1,559 |
| | **99,203** | 80,085 |
| Less: Allowance for doubtful debts | **(7,173)** | (5,067) |
| | **92,030** | 75,018 |

### (b) Impairment of trade receivables due from third parties

Impairment losses in respect of trade receivables due from third parties are recorded using an allowance account unless the Group is satisfied the possibility of recovery is remote, in which case the receivables are written off (see note 3(k)).

The movement in the allowance for doubtful debts in respect of trade receivables due from third parties during the year is as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| At January 1 | **5,067** | 4,340 |
| Exchange adjustments | **(263)** | 117 |
| Impairment loss recognised | **1,932** | 72 |
| Collection of previously written-off debtors | **900** | 895 |
| Uncollectible amounts written off | **(463)** | (357) |
| At December 31 | **7,173** | 5,067 |

As at December 31, 2015, the impairment allowance includes individually assessed allowance of CNY2,143 million (2014: CNY2,610 million) on receivables due from third parties of CNY3,143 million (2014: CNY3,380 million) relating to customers who are in financial difficulties and the likelihood of recovery is expected to be in doubt.

### (c) Trade receivables due from third parties that are not impaired

The analysis of trade receivables due from third parties that are neither individually nor collectively considered to be impaired is as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Neither past due nor impaired | 64,283 | 51,974 |

Receivables that are neither past due nor impaired relate to a wide range of customers for whom there was no recent history of default.

Receivables that are past due but not impaired are immaterial.

### (d) Trade receivables due from related parties

The Group monitors the trade receivables due from related parties on an ongoing basis considering the financial results of the related parties and repayments made by the related parties. As at December 31, 2015, allowance for doubtful debts in respect of trade receivables due from related parties was CNY8 million (2014: CNY17 million).

### (e) Factoring trade receivables

As at December 31, 2015, the Group's trade receivables of CNY2,443 million (2014: nil) have been factored with PRC commercial banks to receive financing of CNY2,443 million (2014: nil). As the transaction was with recourse and the Group retained substantially all the risks and rewards thereof, it continue to recognise the factoring trade receivables and the financing received was recognised as loans and borrowings (note 24).

## 22 Other assets

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| Advance payments to suppliers | | 3,384 | 1,932 |
| Prepayment for acquisition of long-term leasehold land | | – | 30 |
| Tax related assets | | 10,638 | 7,117 |
| Pledged deposits | | 1,898 | 2,530 |
| Proceeds receivable from disposal of associates | | – | 24 |
| Other receivables due from third parties | | 10,497 | 12,509 |
| Other receivables due from related parties | 31 | 401 | 3,276 |
| Dividend receivables | | 2 | – |
| Other long-term deferred assets | | 548 | 412 |
| | | 27,368 | 27,830 |
| Non-current portion | | 5,553 | 2,917 |
| Current portion | | 21,815 | 24,913 |
| | | 27,368 | 27,830 |

## 23 Cash and cash equivalents

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Cash in hand | 10 | 13 |
| Deposits with banks and other financial institutions | 72,442 | 55,802 |
| Highly liquid short-term investments | 38,109 | 22,233 |
| | 110,561 | 78,048 |

As at December 31, 2015, the Group had short-term investments of CNY38,109 million (2014: CNY22,233 million). These short-term investments were highly liquid, readily convertible into known amounts of cash and were subject to an insignificant risk of changes in value, including wealth management products purchased from commercial banks with maturities of less than three months or with maturities of less than one year which can be redeemed at any time without any interest penalty, and money market funds that comprise investments in short-term debt securities which have constant net asset values.

As at December 31, 2015, cash and cash equivalents of CNY653 million (2014: CNY1,010 million) were held in countries where exchange controls or other legal restrictions are applicable.

At December 31, 2015, the Group held CNY15,312 million (2014 CNY5,589 million) of cash in two multicurrency pooling arrangements used to meet its day to day cash requirements and also to economically hedge foreign exchange rate movements arising from foreign currency cash flows. The facilities allows participating subsidiaries to place deposits and borrow funds from the counterparty banks, in substance to hold long and short positions, in any freely convertible currency subject to the overall balance on the pools being positive.

## 24 Loans and borrowings

Contractual terms of the Group's loans and borrowings are summarised below.

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Short-term loans and borrowings: | | |
| – Intra-group guaranteed | **568** | 1,891 |
| – Unsecured | **1,299** | – |
| | **1,867** | 1,891 |
| Long-term loans and borrowings: | | |
| – Intra-group guaranteed | **15,534** | 22,254 |
| – Factoring (note 21(e)) | **2,443** | – |
| – Unsecured | **1,150** | 1,382 |
| – Corporate bond | **7,992** | 2,581 |
| | **27,119** | 26,217 |
| | **28,986** | 28,108 |
| Non-current portion | **26,501** | 17,578 |
| Current portion | **2,485** | 10,530 |
| | **28,986** | 28,108 |

Intra-group guaranteed loans are borrowings which have been issued by one group entity but contractual payments of principal and interest are guaranteed by another group entity.

## Terms and repayment schedule

A summary of the main terms and conditions of outstanding loans and borrowings are as follows:

| | | Interest rate | Total CNY million | 1 year or less CNY million | 1 to 5 years CNY million | over 5 years CNY million |
|---|---|---|---|---|---|---|
| **Intra-group guaranteed bank loans:** | | | | | | |
| Euro (EUR) | variable | 1.15% ~ 1.5% p.a. | 2,828 | – | 2,828 | – |
| Indian Rup | variable | 8.8% ~ 9.2% p.a. | 408 | 408 | – | – |
| Kazakhstan Tenge (KZT) | fixed | 7% p.a. | 71 | 71 | – | – |
| KZT | fixed | 8.5% p.a. | 35 | 35 | – | – |
| Nepal Rupee | fixed | 7.5% p.a. | 28 | 28 | – | – |
| Russian Ruble | variable | 12.86% ~ 13.16% p.a. | 61 | 61 | – | – |
| United States dollar (USD) | variable | 1.15% ~ 1.83% p.a. | 11,340 | – | 11,340 | – |
| CNY | variable | 5.53% ~ 6.15% p.a. | 1,331 | 226 | 537 | 568 |
| | | | 16,102 | 829 | 14,705 | 568 |
| **Factoring:** | | | | | | |
| USD | variable | 3.97% ~ 4.55% p.a. | 2,443 | – | 723 | 1,720 |
| **Unsecured bank loan:** | | | | | | |
| Hugarian Forint | fixed | 4.36% p.a. | 78 | – | – | 78 |
| CNY | variable | 4.90% ~ 5.54%p.a. | 1,072 | 357 | 381 | 334 |
| USD | variable | 1.10% p.a. | 1,299 | 1,299 | – | – |
| | | | 2,449 | 1,656 | 381 | 412 |
| **Corporate bond:** | | | | | | |
| CNY | fixed | 4.55% p.a. | 1,589 | – | 1,589 | – |
| USD | fixed | 4.125% p.a. | 6,403 | – | – | 6,403 |
| | | | 7,992 | – | 1,589 | 6,403 |
| | | | 28,986 | 2,485 | 17,398 | 9,103 |

The carrying amount of the above loans and borrowings approximates to their fair value.

Certain of the Group's banking facilities are subject to compliance with normal covenants relating to certain of the borrower's statement of financial position ratios. If the Group were to breach the covenants, the drawn down facilities would become payable on demand. The Group regularly monitors its compliance with these covenants. As at December 31, 2015 and 2014, none of the covenants relating to draw down facilities had been breached.

### Corporate bond

On May 19, 2015, Proven Honour Capital Limited, a wholly-owned subsidiary of the Company, issued a corporate bond with a principal amount of USD1,000 million with ten years maturity at an annual interest rate of 4.125%. This corporate bond is fully guaranteed by the Company.

On September 17, 2014, Proven Honour Capital Limited issued a corporate bond with a principal amount of CNY1,600 million with three years maturity at an annual interest rate of 4.55%. This corporate bond is fully guaranteed by the Company.

## 25 Trade and bills payable

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| **Trade payables** | | | |
| Trade payables due to related parties | 31 | **1,099** | 857 |
| Trade payables due to third parties | | **59,918** | 44,287 |
| | | **61,017** | 45,144 |
| **Bills payable** | | | |
| Bank acceptance bills | | **–** | 755 |
| | | **61,017** | 45,899 |

## 26 Other payables

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Interest payable | **626** | 662 |
| Advances received | **40,116** | 33,475 |
| Accrued expenses | | |
| – Staff related | **46,352** | 29,111 |
| – Suppliers related | **18,486** | 17,203 |
| Other taxes payable | **9,327** | 7,478 |
| Purchase of property, plant and equipment | **2,209** | 2,185 |
| Others | **16,663** | 18,194 |
| | **133,779** | 108,308 |

## 27 Provisions

| | Note | 2015 CNY million | 2014 CNY million |
|---|---|---|---|
| Provision for warranties | (b) | **5,283** | 3,662 |
| Onerous contracts | | **1,862** | 1,001 |
| Provision for product sales | | **1,841** | 605 |
| Other provisions | (c) | **2,147** | 3,551 |
| | | **11,133** | 8,819 |
| Non-current portion | | **–** | 964 |
| Current portion | | **11,133** | 7,855 |
| | | **11,133** | 8,819 |

### (a) Movement in provisions during the year is shown as below:

| | Provision for warranties CNY million | Onerous contracts CNY million | Provision for product sales CNY million | Other provisions CNY million | Total CNY million |
|---|---|---|---|---|---|
| At January 1, 2015 | 3,662 | 1,001 | 605 | 3,551 | 8,819 |
| Exchange adjustments | (67) | – | (1) | (83) | (151) |
| Provisions made/(reversed) | 5,558 | 1,874 | 3,137 | (869) | 9,700 |
| Provisions utilised | (3,870) | (1,013) | (1,900) | (452) | (7,235) |
| At December 31, 2015 | 5,283 | 1,862 | 1,841 | 2,147 | 11,133 |

### (b) Provision for warranties

The provision for warranties relates primarily to equipment sold during the year. The provision is determined based on estimates made from historical warranty data associated with similar products and anticipated rates of warranty claims for the products. The Group expects to settle the majority of the liability within the next twelve months.

### (c) Other provisions

Other provisions are mainly for outstanding litigation and claims.

## 28 Operating leases

### (a) As lessee

As at December 31, 2015 and 2014, the total future minimum lease payments under non-cancellable operating leases are payable as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Within 1 year | **2,082** | 1,471 |
| After 1 year but within 5 years | **2,339** | 1,935 |
| After 5 years | **268** | 341 |
| | **4,689** | 3,747 |

The Group leases a number of warehouses, factory facilities, office premises and staff apartments under operating leases. These leases typically run for an initial period of one to five years. None of the leases includes contingent rental payments.

During the year ended December 31, 2015, CNY3,539 million was recognised as an expense in the consolidated statement of total comprehensive income in respect of operating leases (2014: CNY3,245 million).

### (b) As lessor

The Group leases out certain of its properties under operating leases (see note 8 and note 15). As at December 31, 2015 and 2014, the Group's total future minimum lease payments under non-cancellable operating leases are receivable as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Within 1 year | **17** | 18 |
| After 1 year but within 5 years | **45** | 61 |
| | **62** | 79 |

During the year ended December 31, 2015, CNY87 million was recognised as rental income in the consolidated statement of total comprehensive income (2014: CNY81 million).

## 29 Capital commitments

### (a) Acquisition and construction of property, plants and equipments

Capital commitments of the Group in respect of acquisition and construction of property, plants and equipments outstanding at December 31, 2015 and 2014 not provided for in the consolidated financial statements were as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Contracted for | 6,756 | 3,496 |
| Authorised but not contracted for | 13,888 | 10,585 |
| | 20,644 | 14,081 |

### (b) Other capital commitments

Other contracted capital commitments outstanding at December 31, 2015 and 2014 not provided for in the consolidated financial statements were as follows:

| | 2015 CNY million | 2014 CNY million |
|---|---|---|
| Investment commitment | – | 9 |

## 30 Contingencies

(i) In July 2011, InterDigital Corporation (IDC) filed a complaint with the United States International Trade Commission (the USITC or Commission) and the United States District Court for the District of Delaware against Huawei Technologies Co., Ltd. (Huawei Tech) and Futurewei Technologies Inc. (Futurewei), both wholly-owned subsidiaries of the Company. The complaint alleged that sales of imported 3G wireless devices by the said subsidiaries within the United States had infringed IDC's 3G wireless patents and requested for issuance of exclusion order and cease and desist order in relation to the accused 3G wireless devices concerned (the first complaint).

In December 2011, Huawei Tech filed a complaint against IDC in the PRC for violation of the fair, reasonable, and non-discriminatory (FRAND) policies and the PRC's Anti-Monopoly Law. In June 2012, Huawei Tech filed another complaint with the European Commission (the EC) to request an investigation into the licensing fees requested by IDC, which it deemed exploitative, discriminatory, and in violation of the FRAND policies as well as the EC's antitrust law.

On January 2, 2013, IDC filed another two complaints with the USITC and the United States District Court for the District of Delaware against Huawei Tech, Futurewei, and Huawei Device USA Inc. (USA Device), another wholly-owned subsidiary of the Company. The complaints further alleged that the sales of certain 3G and 4G wireless devices sold by the said subsidiaries within the United States had infringed three of IDC's other patents.

On February 4, 2013, the Shenzhen Intermediate People's Court ruled that IDC had violated the PRC's Anti-Monopoly Law and ordered IDC to compensate the Group for damages of CNY 20 million. The Court also ruled that the royalty rates licenses to Huawei Tech for IDC's Chinese essential standard patents in wireless communication should not exceed 0.019% of the actual sales prices of Huawei Tech's wireless devices.

On March 11, 2013, IDC filed appeals to the Guangdong Higher People's Court in respect of the rulings made by the Shenzhen Intermediate People's Court. On October 25, 2013, the Guangdong Higher People's Court upheld the Shenzhen Intermediate People's Court's ruling which is the final ruling.

On June 28, 2013 and December 19, 2013, the USITC ruled in favor of Huawei Tech, Futurewei and USA Device in respect of the first complaint in the initial determination and the final determination, respectively.

On December 23, 2013, Huawei Tech, Futurewei and USA Device reached a settlement agreement with IDC to withdraw or dismiss all the ongoing legal actions against each other. Under the settlement agreement, the parties will solve their dispute through arbitration.

On January 12, 2015, the arbitration hearing was held in the United States to solve the dispute between the Group and IDC. The arbitration award was issued on May 22, 2015. The Group consider this was being made erroneously and is not accordance with relevant law. As such, the Group filed a legal action with the Paris Appeal Court to annul the award on June 9, 2015. So far the proceeding before the Paris Court is still pending.

At this stage, the Group is unable to predict the outcome of the annulment action, or reasonably estimate a range of possible loss, if any, given the current pending status of the annulment action.

(ii) On July 24, 2012, Technology Properties Limited LLC (TPL) filed a complaint with the USITC, requesting the Commission to commence an investigation under Section 337 of the Tariff Act of 1930 into certain wireless consumer electronics devices and components manufactured by thirteen companies and their affiliates by reason of alleged patent infringement and requested for issuance of an exclusion order and cease and desist order in relation to the electronic products concerned. Huawei Tech was named as one of the thirteen companies. On August 21, 2012, the USITC decided to institute Section 337 investigation in relation to the electronic products concerned. TPL also filed another complaint before the United States District Court for the Northern District of California for the same reason. On September 6, 2013, the Administrative Law Judge of the USITC issued an initial determination that the Group did not infringe the asserted patent. On February 19, 2014, the USITC issued a final determination that the Group did not infringe the asserted patent. TPL did not appeal the final determination within the statutory period, as a result, the USITC investigation formally terminated. With the termination of the investigation, the suit before the United States District Court for the Northern District of California was reopened. Given the fact that the suit in the district court remains in an early stage, the Group is unable to predict the outcome of the suit, or reasonably estimate a range of possible loss if any.

## 31 Related parties

Transactions with associates and joint ventures

| | 2015 (CNY million) | | | | | |
|---|---|---|---|---|---|---|
| | Sales | Purchases and processing expenses | Service income | Rental income | Service expenses | Rental expenses |
| TD Tech | 786 | 517 | 29 | – | 86 | – |
| Huawei Marine | 258 | 877 | 25 | 8 | – | – |
| Chinasoft International Technology Services Ltd | – | – | – | – | 1,758 | – |
| iSoftStone Technology Service Company Limited | – | – | – | – | 1,483 | 37 |
| | 1,044 | 1,394 | 54 | 8 | 3,327 | 37 |

| | 2014 (CNY million) | | | | | |
|---|---|---|---|---|---|---|
| | Sales | Purchases and processing expenses | Service income | Rental income | Service expenses | Rental expenses |
| TD Tech | 1,852 | 411 | 3 | – | – | – |
| Huawei Marine | 244 | 502 | 10 | 4 | – | – |
| Chengdu Huawei Investment Co., Ltd. (CD investment) (note a) | – | – | – | – | – | 38 |
| Tianwen Digital Media | – | – | 2 | – | – | – |
| Chinasoft International Technology Services Ltd | – | – | – | – | 1,122 | – |
| iSoftStone Technology Service Company Limited | – | – | – | – | 897 | – |
| | 2,096 | 913 | 15 | 4 | 2,019 | 38 |

Note a: The Company acquired the 51% equity interests previously held by a third party in CD investment in March 2014 and CD investment became the wholly-owned subsidiary of the Company.

Balances with associates and joint ventures

| | December 31, 2015 (CNY million) | | | |
|---|---|---|---|---|
| | Trade receivables | Other receivables | Trade payables | Other payables |
| TD Tech | 254 | 360 | 392 | 1 |
| Huawei Marine | 141 | 41 | 346 | 13 |
| Chinasoft International Technology Services Ltd. | – | – | 182 | – |
| iSoftStone Technology Service Company Limited | – | – | 179 | – |
| | 395 | 401 | 1,099 | 14 |

| | December 31, 2014 (CNY million) | | | |
|---|---|---|---|---|
| | Trade receivables | Other receivables | Trade payables | Other payables |
| TD Tech | 477 | 3,261 | 169 | 2,613 |
| Huawei Marine | 348 | 15 | 389 | 16 |
| Tianwen Digital Media | 2 | – | – | – |
| Chinasoft International Technology Services Ltd. | – | – | 154 | – |
| iSoftStone Technology Service Company Limited | – | – | 145 | – |
| | 827 | 3,276 | 857 | 2,629 |

## 32 Group enterprises

### (a) Parent and ultimate controlling party

The Group's ultimate controlling party is the Union of Huawei Investment & Holding Co., Ltd..

### (b) Major subsidiaries

| Name of subsidiary | Place of incorporation and business | Proportion of ownership interest | | Principal activity |
|---|---|---|---|---|
| | | 2015 | 2014 | |
| Huawei Technologies Co., Ltd. | PRC | 100% | 100% | Development, manufacture and sale of telecommunication and related products and provision of support and maintenance services. |
| Huawei Machine Co., Ltd. | PRC | 100% | 100% | Manufacture of telecommunication products. |
| Shanghai Huawei Technologies Co., Ltd. | PRC | 100% | 100% | Development and sale of telecommunication products and ancillary services. |
| Beijing Huawei Digital Technologies Co., Ltd | PRC | 100% | 100% | Development and sale of telecommunication products and ancillary services. |
| Huawei Tech. Investment Co., Limited | Hong Kong | 100% | 100% | Distribution of telecommunication products. |
| Huawei International Co. Limited | Hong Kong | 100% | 100% | Distribution of telecommunication products. |
| Huawei International Pte. Ltd. | Singapore | 100% | 100% | Distribution of telecommunication products. |
| PT. Huawei Tech Investment | Indonesia | 100% | 100% | Development and sale of telecommunication products and ancillary services. |
| Huawei Technologies Japan K.K. | Japan | 100% | 100% | Development and sale of telecommunication products and ancillary services. |
| Huawei Technologies Deutschland GmbH | Germany | 100% | 100% | Development and sale of telecommunication products and ancillary services. |
| Huawei Device Co., Ltd. | PRC | 100% | 100% | Development, manufacture and sale of mobile communication products and ancillaries. |
| Huawei Device (Dongguan) Co., Ltd. | PRC | 100% | 100% | Development, manufacture and sale of mobile communication products and ancillaries. |
| Huawei Device (Hong Kong) Co., Limited | Hong Kong | 100% | 100% | Sale and related services of mobile communication products and ancillaries. |

| Name of subsidiary | Place of incorporation and business | Proportion of ownership interest | | Principal activity |
|---|---|---|---|---|
| | | 2015 | 2014 | |
| HUAWEI TECHNICAL SERVICE CO., LTD. | PRC | 100% | 100% | Installation and maintenance of telecommunication products and ancillaries, including consultancy. |
| Huawei Software Technologies Co., Ltd | PRC | 100% | 100% | Development, manufacture and sale of telecommunication software and related products and services. |
| HiSilicon Technologies Co., Ltd. | PRC | 100% | 100% | Development and sale of semiconductors. |
| HiSilicon Optoelectronics Co., Ltd. | PRC | 100% | 100% | Development, manufacture and sale of optoelectronic products related to information technology. |
| Huawei Technologies Coöperatief U.A. | Netherlands | 100% | 100% | Intermediate parent company for certain overseas subsidiaries. |
| Huawei Global Finance (UK) Limited | United Kingdom | 100% | 100% | Treasury management. |
| Proven Honour Capital Limited | British Virgin Islands | 100% | 100% | Financing. |
| Futurewei Technologies, Inc. | United States | 100% | 100% | Technology research and development. |

## (c) Acquisition of subsidiaries

### Aspiegel Limited

On July 10, 2015, Huawei Technologies Coöperatief U.A., a wholly-owned subsidiary of the Company, acquired 100% equity interest in Aspiegel Limited (Aspiegel), for a consideration of EUR19 million (equivalent to CNY132 million) in cash.

Aspiegel is based in Dublin, Ireland, and develops software-defined networking (SDN) technology to allow network administrators to manager network services through abstraction of higher-level functionality. The acquisition of Aspiegel gives the Group improved access to the SDN market.

# Risk Factors

All "risk factors" listed in this Annual Report, particularly those covered in this section, refer to key future uncertainties that may influence the company's business objectives. Such risk factors have been identified in Huawei's strategic plans, business models, external environment, and financial system. "Major risk factors" refer to events that may significantly impact the company's competitive landscape, reputation, financial position, operating results, and long-term prospects over the coming 18 months. Huawei's major risk factors are outlined below.

## Huawei's Risk Management System

Based on the COSO framework, ISO 31000 risk management standards, and its organizational structure and operating model, Huawei has developed an ERM system, released ERM policies and processes, continuously refined its ERM organizations and operating mechanisms, and promoted risk management evaluations. Huawei's ERM system comprises the following major roles:

- Finance Committee (FC): As authorized by the Board of Directors, the FC acts as the decision-maker for risk management, coordinates company-wide risk management activities, and makes decisions on major corporate-level risks.
- Risk Management Committee under the FC: As authorized by the FC, this committee fulfills risk management responsibilities and manages the company's routine risks.
- Business managers: As primary risk management owners in their respective business domains, business managers proactively identify and manage risks to keep them at an acceptable level.

At Huawei, risk management factors are incorporated into strategic planning and business planning processes: Each business domain systematically identifies and assesses risks during strategic planning, lists risk countermeasures in its annual business plan, and monitors and reports risks during its daily operations through the management of priorities. Identifying major risk factors in strategic decision-making and planning, coupled with preemptive measures to control risks in business planning and execution, ensures that Huawei's business operations remain uninterrupted.

## Strategic Risks

The ICT industry is developing rapidly. In the telecom sector, new technological concepts are emerging one after another, including SDN, NFV, cloud computing, and digital operations. In the IT sector, business models for cloud services are evolving rapidly. CT players are now finding themselves competing with IT players. All these changes are bringing more uncertainties to technology, business, and transaction models.

Looking ahead, we will adhere to our pipe strategy for business development, invest more heavily in research on technology and business models where development is uncertain, stay focused on our goals, and make concentrated investments, with multiple teams pursuing both common and separate goals. In addition, we will strive to stay ahead of industry trends, and identify, understand, and satisfy our customers' diverse requirements. To maintain and increase our competitive advantages and continuously improve our operating performance, we will continue to launch better products and services while reducing customers' total cost of ownership. Going forward, we will continue to invest in the future to develop advantages in technologies and the industry ecosystem, and strive to become a strategic partner trusted by customers.

## External Risks

**Macro environment:** The global economy still faces challenges in regaining momentum, as financial and geopolitical risks are on the rise. Therefore, Huawei may face increasing risks, both internally and externally. We will continue to focus on the impact of the changing risks to business and promptly adjust our strategies.

**Legal risks:** The legal environments in some of the regions where Huawei operates are rather complex. We strive to fully comply with all local laws and regulations; nevertheless, we may still be susceptible to unforeseeable risks. As always, Huawei will proactively assess risks and take preventative measures to address such risks.

**Trade barriers:** Facing a flattening global trade, all countries are going all out to boost domestic economy and employment. As Huawei continues to grow, we will face more and more increasingly complicated challenges regarding global trade. As a global company, Huawei supports global trade rules and pledges to place trade compliance above its commercial interests. As part of this commitment, we standardize our internal business operations, build trust with governments, and proactively apply for highest qualifications in terms of customs in certain countries. In doing so, we aim to become an accredited partner of governments in countries where Huawei operates.

**Natural disasters:** Earthquakes, floods, epidemics, and other natural disasters may impact certain areas of Huawei's business operations. Supporting stable network operations is our mission and primary social responsibility. We have established a natural disaster response mechanism and have improved our capabilities in this regard. This has helped us ensure business continuity, and has supported our customers' business operations.

**Country-specific risks:** Huawei currently operates in more than 170 countries and regions worldwide. The complex international economic and political landscape may expose Huawei to particular risks in certain countries and regions, such as civil unrest, economic and political instability, sharp exchange rate fluctuations, foreign exchange controls, sovereign debt crises, regulations on local business operations, and labor issues. In particular, tensions between regions, civil wars, mutual sanctions, or local unrest may greatly hinder Huawei's business operations and development. To address these risks, Huawei must possess a high risk management aptitude. We must closely monitor possible risks and environmental changes, and employ prompt countermeasures to minimize any potential business impact.

## Operational Risks

**Business continuity:** As the division of labor becomes highly globalized, Huawei must rely on third parties (including companies and agencies) for manufacturing, logistics, and services. Therefore, third party business discontinuity may compromise Huawei's operations and business performance, either directly or indirectly.

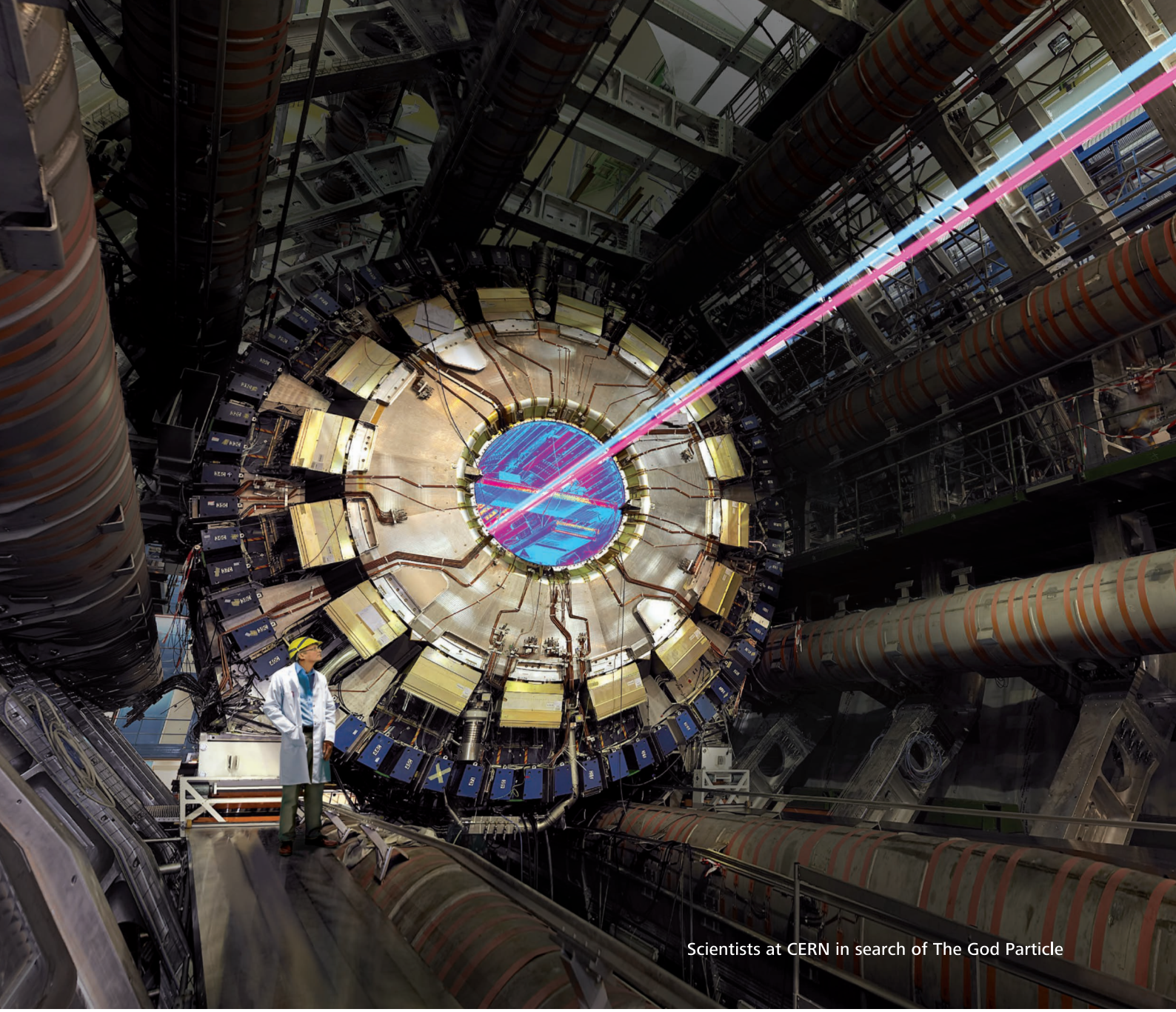
To ensure business continuity, Huawei has established a business continuity management system in the procurement, manufacturing, supply, global technical services, and other domains. This system covers the end-to-end process from suppliers to Huawei and then to customers. Under this system, we have established management organizations, developed emergency response and business continuity plans, provided training, organized drills, raised employees' awareness of business continuity, and improved emergency response capabilities, thus effectively ensuring business continuity.

In addition, we strive to avoid procuring from a single supplier and select suppliers of key components with multiple manufacturing sites. In terms of design, we prepare alternative solutions for key components, in order to minimize the impact on our product supply and delivery if a single supplier suspends supply or provides substandard products. We will continue to regularly assess and audit our suppliers, assess and identify material supply risks as early as possible, and take preventative actions (e.g., component substitutes, solution redesigns, inventory, and expanding production capacity) to minimize supply risks and ensure supply continuity.

**Information security and IPR:** While Huawei has adopted stringent information security measures to protect its IPR, it is impossible to completely prevent other companies from improperly using our IPR. Even when we can resort to intellectual property litigation to protect our IPR, we may still suffer losses from improper usage.

## Financial Risks

For further information on financial risks, see "Financial Risk Management" on pages 49 to 50 of this Annual Report.



Scientists at CERN in search of The God Particle

# Decades of patient investment, for a moment of divine clarity

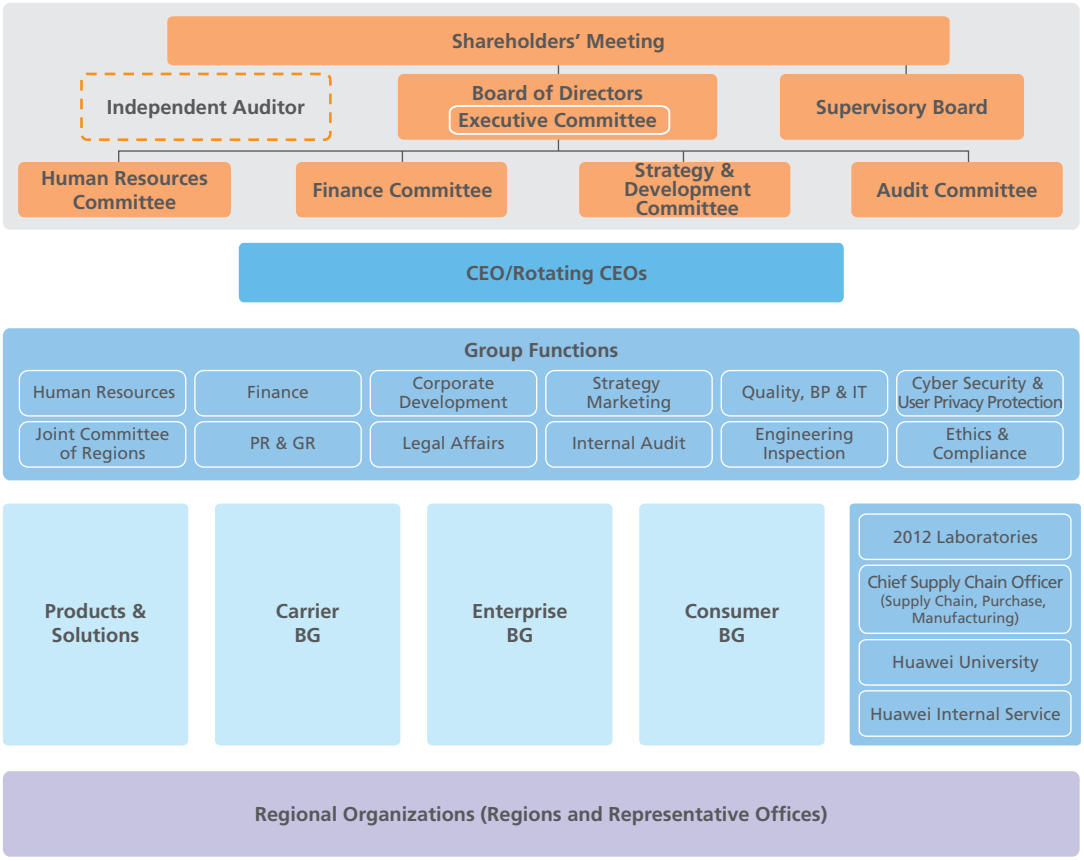
Focus · Persevere · Breakthrough

HUAWEI


Huawei Turkey employees rafting on Melen River, Düzce, Turkey

# Corporate Governance Report

By staying customer-centric and inspiring dedication, we have sustained long-term growth by continuously improving our corporate governance structure, organizations, processes, and appraisal systems.




## Shareholders

Huawei Investment & Holding Co., Ltd. (the "Company" or "Huawei") is a private company wholly owned by its employees. Huawei's shareholders are the Union of Huawei Investment & Holding Co., Ltd. (the "Union") and Mr. Ren Zhengfei.

Through the Union, the company implements an Employee Shareholding Scheme (the "Scheme"), which involved 79,563 employees as of December 31, 2015. The Scheme effectively aligns employee contributions with the company's long-term development, fostering Huawei's continued success.

Mr. Ren Zhengfei is the individual shareholder of the Company and also participates in the Scheme. As of December 31, 2015, Mr. Ren's investment accounts for nearly 1.4% of the Company's total share capital.

## The Shareholders' Meeting and the Representatives' Commission

The Shareholders' Meeting is the highest authority within the Company, and comprises two shareholders: the Union and Mr. Ren Zhengfei.

The Company's major issues, which involve the decisions of the Union as a shareholder of the Company, shall be primarily reviewed and decided on by the Representatives' Commission (the "Commission"). The Commission consists of all representatives of shareholding employees ("Representatives") and exercises rights on behalf of all shareholding employees. In 2015, the Commission held one meeting, at which it approved proposals on annual profit distribution and capital increases.

The Representatives and Alternate Representatives are elected by the active shareholding employees with a term of five years. In the event that there is a vacancy in the body of Representatives, the Alternate Representatives shall take up the vacancy in a predetermined sequence.

At present, current members of the Commission are Ms. Sun Yafang, Mr. Guo Ping, Mr. Xu Zhijun, Mr. Hu Houkun, Mr. Ren Zhengfei, Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, Ms. Meng Wanzhou, Ms. Chen Lifang, Mr. Wan Biao, Mr. Zhang Ping'an, Mr. Yu Chengdong, Mr. Liang Hua, Mr. Ren Shulu, Mr. Tian Feng, Mr. Deng Biao, Mr. Zhou Daiqi, Mr. Cai Liqun, Mr. Jiang Xisheng, Mr. Yin Xuquan, Mr. Yao Fuhai, Mr. Zha Jun, Mr. Li Yingtao, Ms. Ji Ping, Mr. Tao Jingwen, Mr. Zhang Shunmao, Mr. Ding Shaohua, Mr. Li Jin'ge, Mr. Wang Shengli, Mr. Wang Kexiang, Mr. Lv Ke, Mr. Yang Kaijun, Mr. Jiang Yafei, Ms. He Tingbo, Mr. Sun Ming, Mr. Wu Kunhong, Mr. Zhao Yong, Ms. Yan Weimin, Mr. Tang Xiaoming, Mr. Wang Jiading, Mr. Wei Chengmin, Mr. Xiong Lening, Mr. Li Shanlin, Mr. Xu Chi, Mr. Song Liuping, Mr. Zhou Hong, Ms. Chen Jun, Mr. Hui Chun, Mr. Peng Zhongyang, and Mr. Li Gang.

## Board of Directors and Committees

The Board of Directors (BOD) is the decision-making body for corporate strategy and management. The BOD guides and oversees the overall business operations and makes decisions on significant issues regarding strategy and operations. The BOD has established the Human Resources Committee, the Finance Committee, the Strategy & Development Committee, and the Audit Committee to assist and support BOD operations.

The main responsibilities of the BOD are to:

- Decide on the company's strategic directions; and approve and monitor the execution of the company's medium-to-long-term development plan.
- Provide advice and guidance to management regarding significant issues, including major crises and market changes.
- Review the company's business operations, organization, and processes; and approve major organizational restructurings, business transformations, and process transformations.
- Approve the company's major financial policies, financial arrangements, and business transactions.
- Approve the company's operating results, financial results, and financial statements.
- Establish the company's monitoring mechanisms and oversee their execution.
- Establish the company's governance structure and organize its optimization and deployment.
- Decide on the selection, appraisal, and compensation of the Chief Executive Officer; and approve the appointment and compensation of other members of senior management.
- Approve the corporate-level HR planning and major HR policies.

In 2015, the BOD held 10 meetings. At the meetings, the BOD reviewed and approved matters such as the company's medium-to-long-term development plan, annual business plan and budget, BOD committee members and operations, and compensation and incentives.

Currently, the BOD has 17 members, who were elected by all Representatives.

- Chairwoman: Ms. Sun Yafang.
- Deputy Chairmen: Mr. Guo Ping, Mr. Xu Zhijun, Mr. Hu Houkun, and Mr. Ren Zhengfei.
- Executive Directors: Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, and Ms. Meng Wanzhou.
- Directors: Ms. Chen Lifang, Mr. Wan Biao, Mr. Zhang Ping'an, Mr. Yu Chengdong, Mr. Li Yingtao, Mr. Li Jin'ge, Ms. He Tingbo, and Mr. Wang Shengli.

The BOD has established the Executive Committee, which acts as the executive body of the BOD while it is adjourned. Members of the Executive Committee include Mr. Guo Ping, Mr. Xu Zhijun, Mr. Hu Houkun, Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, and Ms. Meng Wanzhou. In 2015, the Executive Committee held 12 meetings.

### Human Resources Committee

The Human Resources Committee (HRC) manages and optimizes core corporate elements such as organization, talent, incentives, and culture. It operates under the BOD to develop, determine, and oversee the implementation of key policies and transformation initiatives relating to HR management. The committee aligns HR policies with the company's HR management philosophy and core concepts to ensure policy consistency. These policies also reflect the business characteristics and management models of departments at all levels to support business development.

The main responsibilities of the HRC are to:

- Manage HR initiatives for key managers and talent (including succession planning, deployment, appointments/removals, performance appraisals, compensation, and incentives).
- Set policies for incentives, benefits, the compensation structure, and job matching.
- Set policies for organizational development and optimization; and manage HR budgets and staffing for each budgetary unit.
- Set policies for and provide guidance on learning and development.
- Set policies for employee discipline and oversee disciplinary action for major violations.
- Set policies for and provide guidance on health and safety.
- Manage HR strategic planning and key HR transformation initiatives.

The HRC holds monthly meetings. Business executives, HR executives from different departments, and various experts are invited to attend as non-voting participants.

The committee met 12 times in 2015, and achieved its annual objectives in managing HR strategy, developing major HR policies, making key HR decisions, and overseeing policy execution. Specific initiatives are as follows:

- Effectively examined internal and external developments in HR management; formulated the company's HR Strategy Guide based on the global development needs of multiple business groups, which provided effective guidance to all departments on HR strategic planning; and conducted special research on key strategic issues regarding Huawei's future-oriented HR management.
- Continuously studied and identified key issues that impacted Huawei's organizational operations; began to optimize the operations of relevant organizations; continuously optimized the workforce budget management mechanism to increase its flexibility; and explored future-oriented methods of managing the size of the workforce.
- Implemented different management initiatives for different groups of employees in terms of Competency & Qualification (C&Q), compensation, and incentives to inspire passion across the organization; widened the gap in incentives between different groups of employees to boost passion among a larger number of outstanding employees; continuously optimized HR policies for hardship regions to help effectively implement the company's policy of providing more incentives to dedicated employees.

- Continuously optimized the internal talent management framework and employed different methods when managing different groups of employees; attracted external talent and retained internal talent despite increasingly fierce competition in the talent market, stabilized the workforce, and gradually adjusted its structure to meet strategic and business needs; quickly improved the skills and knowledge structure of a large number of employees by optimizing self-learning and strategic reserve mechanisms.
- Continuously improved healthcare initiatives, and introduced high-quality medical services to improve both the quality and capabilities of healthcare for all employees.
- Gradually explored and established the accountability mechanism for business violations, and standardized their daily management.

The HRC comprises 15 members, including BOD members, senior business executives, and senior HR experts.

- Chairman: Mr. Hu Houkun.
- Members: Mr. Guo Ping, Mr. Xu Zhijun, Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, Ms. Meng Wanzhou, Mr. Li Yingtao, Mr. Wan Biao, Ms. He Tingbo, Mr. Zhang Ping'an, Mr. Zha Jun, Mr. Li Jin'ge, Mr. Peng Bo, and Mr. Li Shanlin.

### Finance Committee

The Finance Committee (FC) is the company's overall enterprise value integrator. It operates under the BOD to exercise macro-control over the company's business operations, investment activities, and enterprise risks, helping to strike a dynamic balance between opportunities and resources to facilitate the company's long-term sustainable growth.

The main responsibilities of the FC are to:

- Align resources with business needs based on the company's resources and resource acquisition capabilities.
- Set financial objectives for the growth and investment projects of the company and each responsibility center; and determine the standards, structure, and pace for resource investments.
- Measure the monetary value of key strategies, conduct forward-looking forecasts and analysis, and submit proposals to the BOD; and review the company's annual budget plan, approve the annual budget for each responsibility center, and ensure closed-loop management of corporate-level planning, budgeting, accounting, and assessment.
- Review the capital structure plan; and propose major financing activities, the asset structure, and profit distribution.
- Review the company's key financial policies, annual financial statements, and related information disclosures.
- Review capital investment and strategic cooperation projects, submit proposals to the BOD, and periodically assess the execution of such projects.
- Review the company's risk management framework, and provide advice on operational compliance and business continuity management.

The FC holds monthly meetings and convenes special sessions as necessary. In 2015, the FC held 12 regular meetings and two special sessions. Based on business needs and BOD's requirements, the FC reviewed such key items as the company's medium-to-long-term development plan, annual budget plan, operational management, capital investment projects, capital structure, enterprise risk management, and subsidiary and joint venture management. The FC then discussed

and established financial policies and systems, reviewed and decided on key initiatives, and monitored their execution.

The FC comprises 15 members, including BOD members and various experts.

- Chairman: Mr. Guo Ping.
- Members: Mr. Xu Zhijun, Mr. Hu Houkun, Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, Ms. Meng Wanzhou, Mr. Liang Hua, Mr. Yi Xiang, Mr. Zou Zhilei, Mr. Yan Lida, Mr. Yao Fuhai, Mr. Song Liuping, Mr. Peng Qiu'en, and Mr. Jiang Xisheng.

### Strategy & Development Committee

The Strategy & Development Committee (SDC) develops, sets, and executes the company's strategic directions. The SDC gains insight into major industry and technological trends, and changes in customer needs; and identifies opportunities and paths for the company's development. Through macro-management of industrial investments, technologies, business models, and transformations, the SDC ensures that concerted efforts are made to sustain the company's growth.

The main responsibilities of the SDC are to:

- Manage the company's medium-to-long-term strategic planning, key initiatives, and major objectives of the year.
- Manage the company's brand strategy, brand architecture, and brand attributes, as well as publicity strategy and direction.
- Manage the company's strategy for strategic partnerships and alliances, as well as the selection of strategic partners and alliances.
- Manage the company's business portfolios and scope.
- Manage the company's pricing policies, commercial authorization principles, and actual pricing of key strategic products.
- Manage the company's medium-to-long-term technology development planning, standards and patent strategy, and major technology investments.
- Manage the company's medium-to-long-term business transformation strategy, process and management system structures, quality policies, etc.
- Review the company's business portfolios to ensure investments are made in strategic domains.

The SDC held 12 regular meetings and one special session in 2015. In accordance with the positioning and responsibilities determined by the BOD and based on the pre-determined strategic goals, the SDC continued to strengthen the enterprise business development strategy, identify new growth opportunities for the carrier business, and facilitate the consumer business in developing a global mid-to-high-end brand. On this basis, the SDC aims to make the industry pie bigger, plan for the future, and support the company's long-term development.

The SDC comprises 15 members, including BOD members, senior business executives, and various senior experts.

- Chairman: Mr. Xu Zhijun.
- Members: Mr. Guo Ping, Mr. Hu Houkun, Mr. Xu Wenwei, Mr. Li Jie, Mr. Ding Yun, Ms. Meng Wanzhou, Mr. Yu Chengdong, Mr. Li Yingtao, Mr. Liang Hua, Mr. Zhang Ping'an, Mr. Zha Jun, Mr. Deng Biao, Mr. Wang Shengqing, and Mr. Zhang Shunmao.

## Audit Committee

The Audit Committee (AC) operates under the BOD to oversee internal controls, including the internal control system, internal and external audits, corporate processes, legal compliance, and adherence to the *BCGs*.

The main responsibilities of the AC are to:

- Approve the annual internal audit plan, and review its scope, required resources, and audit outputs.
- Approve corporate policies for internal controls; approve the corporate development plan for internal controls and the plan's key milestones; and regularly assess the company's internal control status.
- Evaluate the effectiveness of the ethics and compliance function, legal compliance, and adherence to corporate policies.
- Approve the selection of the external auditor, notify the BOD of any proposed change to the external auditor for approval, approve related budgets, and evaluate the work of the external auditor.
- Supervise the completeness, accuracy, and legal compliance of the company's financial statements; and review compliance with accounting policies and all financial disclosures.
- Approve internal control Key Performance Indicators (KPIs), and instruct Global Process Owners (GPOs) and business executives to report internal control results.

The AC holds quarterly meetings and convenes special sessions as necessary. Business executives and various experts are invited to attend as non-voting participants.

The committee held six meetings in 2015. Focusing on topics such as risk management, the development of the internal control system, and anti-corruption, the committee:

- Reviewed and approved the company's annual internal audit plan and annual plan for internal controls over global processes.
- Received reports on Internal Control Maturity trends, SACAs (including internal controls over financial reporting), regions' internal control improvements, Business Process Architecture (BPA) and process management, and progress in resolving top internal control issues.
- Improved employee compliance with the *BCGs* through anti-corruption education and publicity of major audit findings and non-compliance cases.
- Arranged discussions between the committee Chairman and the external auditor on management improvement proposals.

The AC comprises 10 members, including Supervisory Board members, BOD members, and various experts.

- Chairman: Mr. Liang Hua.
- Members: Mr. Zhou Daiqi, Mr. Ren Shulu, Mr. Li Jianguo, Mr. Yin Xuquan, Mr. Tian Feng, Mr. Song Liuping, Mr. Yi Xiang, Mr. Li Jin'ge, and Mr. Hui Chun.

## Supervisory Board

Pursuant to the requirements of the *Company Law of the People's Republic of China*, Huawei has established a Supervisory Board. The key responsibilities of the Supervisory Board include overseeing internal and external compliance, examining the company's financial and operational status, monitoring the responsibility fulfillment of BOD members and senior management, as well as the standardization of BOD operations. Members of the Supervisory Board attend BOD meetings as non-voting participants.

In 2015, the Supervisory Board held three meetings. At the meetings, it evaluated the company's financial position, received reports from the company's supervisory functions and oversight-oriented boards of overseas subsidiaries, and assessed the responsibility fulfillment of BOD and supervisory board members in 2014. Throughout the year, members of the Supervisory Board attended 10 meetings of the BOD as non-voting participants, monitoring the company's financial position, the responsibility fulfillment of BOD members and senior management, and the standardization of BOD operations.

Members of the Supervisory Board are elected by all Representatives. Currently, the Supervisory Board comprises eight members.

- Chairman: Mr. Liang Hua.
- Executive members: Mr. Zhou Daiqi, Mr. Ren Shulu, and Mr. Yin Xuquan.
- Members: Mr. Tian Feng, Mr. Deng Biao, Mr. Song Liuping, and Mr. Yi Xiang.

The Supervisory Board has established the Executive Committee, which acts as authorized by the Supervisory Board. Members of the Executive Committee are Mr. Liang Hua, Mr. Zhou Daiqi, Mr. Ren Shulu, and Mr. Yin Xuquan. In 2015, the Executive Committee held four meetings.

## Rotating CEOs

Huawei implements the rotating CEO system under the BOD's leadership. As the primary owner of the company's operations and crisis management during the tenure, the Rotating and Acting CEO is responsible for the company's survival and development.

The Rotating and Acting CEO convenes and chairs the company's EMT meetings. During routine management decision making, the Rotating and Acting CEO promptly notifies BOD and Supervisory Board members of responsibility fulfillment.

Three Deputy Chairmen take turns to act as the Rotating and Acting CEO for a tenure of six months. In 2015, the acting tenures for the three rotating CEOs are as follows:

- Mr. Hu Houkun: October 1, 2014 – March 31, 2015
- Mr. Xu Zhijun: April 1, 2015 – September 30, 2015
- Mr. Guo Ping: October 1, 2015 – March 31, 2016

## Members of the Board of Directors, the Supervisory Board, and the BOD Committees

### Members of the Board of Directors

From the left in the first row: Mr. Li Jin'ge, Mr. Guo Ping, Ms. Meng Wanzhou, Mr. Xu Zhijun, Mr. Ren Zhengfei, Mr. Hu Houkun, Ms. He Tingbo, and Mr. Li Jie

From the left in the second row: Ms. Chen Lifang, Mr. Wan Biao, Mr. Zhang Ping'an, Ms. Sun Yafang, Mr. Xu Wenwei, Mr. Yu Chengdong, Mr. Ding Yun, Mr. Li Yingtao, and Mr. Wang Shengli

#### Ms. Sun Yafang

Ms. Sun joined Huawei in 1989, and had served as an engineer in the Marketing & Sales Dept, Director of the Training Center, President of the Procurement Dept, General Manager of the Wuhan Office, President of the Marketing & Sales Dept, Chair of the Human Resources Committee, Chair of the Business Transformation Executive Steering Committee (BT-ESC), Chair of the Strategy and Customer Standing Committee, and President of Huawei University. Since 1999, Ms. Sun has served as the Chairwoman of the Board.

Prior to joining Huawei, Ms. Sun worked as a technician at the state-owned Xinxiang Liaoyuan Radio Factory in 1982, a teacher at China Research Institute of Radio Wave Propagation in 1983, and an engineer at Beijing Research Institute of Information Technology in 1985.

Ms. Sun was born in 1955, and graduated in 1982 with a bachelor's degree from Chengdu University of Electronic Science and Technology.

### Mr. Guo Ping

Born in 1966, Mr. Guo holds a master's degree from Huazhong University of Science and Technology. Mr. Guo joined Huawei in 1988 and has served as R&D Project Manager, General Manager of Supply Chain, Director of Huawei Executive Office, Chief Legal Officer, President of the Business Process & IT Mgmt Dept, President of the Corporate Development Dept, and Chairman and President of Huawei Device. Currently, Mr. Guo serves as Deputy Chairman of the Board, Rotating CEO, and Chairman of the FC.

### Mr. Xu Zhijun (Eric Xu)

Born in 1967, Mr. Xu holds a doctorate degree from Nanjing University of Science & Technology. Mr. Xu joined Huawei in 1993 and has served as President of the Wireless Network Product Line, Chief Strategy & Marketing Officer, Chief Products & Solutions Officer, and Chairman of the Investment Review Board. Currently, Mr. Xu serves as Deputy Chairman of the Board, Rotating CEO, and Chairman of the SDC.

### Mr. Hu Houkun (Ken Hu)

Born in 1968, Mr. Hu holds a bachelor's degree from Huazhong University of Science and Technology. Mr. Hu joined Huawei in 1990 and has served as President of the Marketing & Sales Dept in China, President of the Latin America Region, President of the Global Sales Dept, Chief Sales & Service Officer, Chief Strategy & Marketing Officer, Chairman of the Global Cyber Security and User Privacy Protection Committee (GSPC), Chairman of the BOD of Huawei USA, Deputy Chairman of the Board, Rotating CEO, and Chairman of the HRC.

### Mr. Ren Zhengfei

Born on October 25, 1944 into a rural family where both parents were school teachers, Mr. Ren Zhengfei spent his primary and middle school years in a remote mountainous town in Guizhou Province. In 1963, he studied at the Chongqing Institute of Civil Engineering and Architecture. After graduation, he was employed in the civil engineering industry until 1974 when he joined the military's Engineering Corps as a soldier tasked to establish the Liao Yang Chemical Fiber Factory. Subsequently, Mr. Ren had taken positions as a Technician, an Engineer, and was lastly promoted as a Deputy Director, which was a professional role equivalent to a Deputy Regimental Chief, but without military rank. Because of his outstanding performance, Mr. Ren was invited to attend the National Science Conference in 1978 and the 12th National Congress of the Communist Party of China in 1982. Mr. Ren retired from the army in 1983 when the Chinese government disbanded the entire Engineering Corps. He then worked in the logistics service base of the Shenzhen South Sea Oil Corporation. As he was dissatisfied with his job, he decided to establish Huawei with a capital of CNY21,000 in 1987. He became the CEO of Huawei in 1988 and has held the title ever since.

### Mr. Xu Wenwei (William Xu)

Born in 1963, Mr. Xu holds a master's degree from Southeast University. Mr. Xu joined Huawei in 1991 and has served as President of the International Technical Sales & Marketing Dept, President of the European Area, Chief Strategy & Marketing Officer, Chief Sales & Service Officer, President of the Joint Committee of Regions, CEO of the Enterprise BG, and Chief Strategy Marketing Officer.

### Mr. Li Jie (Jason Li)

Born in 1967, Mr. Li holds a master's degree from Xi'an Jiaotong University. Mr. Li joined Huawei in 1992 and has served as Regional President, President of the Global Technical Service Dept, President of the Human Resource Mgmt Dept, and President of the Joint Committee of Regions.

### Mr. Ding Yun (Ryan Ding)

Born in 1969, Mr. Ding holds a master's degree from Southeast University. Mr. Ding joined Huawei in 1996 and has served as Product Line President, President of the Global Solution Sales Dept, President of the Global Marketing Dept, CEO of the Carrier Network BG, and President of Products & Solutions.

### Ms. Meng Wanzhou (Sabrina Meng)

Born in 1972, Ms. Meng holds a master's degree from Huazhong University of Science and Technology. Ms. Meng joined Huawei in 1993. She then obtained her M.A. in 1998. Ms. Meng has served as Director of the International Accounting Dept, CFO of Huawei Hong Kong, President of the Accounting Mgmt Dept, and President of the Sales Financing & Treasury Mgmt Dept. Currently, Ms. Meng serves as CFO of Huawei.

### Ms. Chen Lifang

Born in 1971, Ms. Chen graduated from Northwest University in China. Ms. Chen joined Huawei in 1995 and has served as Chief Representative of the Beijing Representative Office, Vice President of the International Marketing Dept, Deputy Director of the Domestic Marketing Management Office, President of the Public Affairs and Communications Dept, and Corporate Senior Vice President.

### Mr. Wan Biao

Born in 1972, Mr. Wan holds a bachelor's degree from the University of Science and Technology of China. Mr. Wan joined Huawei in 1996 and has served as Director for the UMTS RAN System, President of the UMTS Product Line, President of the Wireless Network Product Line, CEO of Huawei Device, and President of the Russia Region.

### Mr. Zhang Ping'an (Alex Zhang)

Born in 1972, Mr. Zhang holds a master's degree from Zhejiang University. Mr. Zhang joined Huawei in 1996 and has served as Product Line President, Senior Vice President, Vice President of Strategy & Marketing, Regional Vice President, Vice President of the Global Technical Service Dept, CEO of Huawei Symantec, and COO of the Enterprise BG. Currently, Mr. Zhang serves as President of the Carrier Software Business Unit.

### Mr. Yu Chengdong (Richard Yu)

Born in 1969, Mr. Yu holds a master's degree from Tsinghua University. Mr. Yu joined Huawei in 1993 and has served as 3G Product Director, Vice President of the Wireless Technical Sales Dept, President of the Wireless Network Product Line, President of the European Area, Chief Strategy & Marketing Officer, Chairman of Huawei Device, and CEO of the Consumer BG.

### Mr. Li Yingtao

Born in 1969, Mr. Li holds a doctorate degree from Harbin Institute of Technology. Mr. Li joined Huawei in 1997 and has served as Chief of the Sweden Research Center, Director of the Product Mgmt Dept of Wireless Marketing, Director of the Research Dept of Products & Solutions, Director of the General Technology Office of Products & Solutions, President of the Central Research & Development Unit, President of the 2012 Laboratories, Director of the Integrated Technology Management Committee, member of the HRC, and member of the SDC.

### Mr. Li Jin'ge

Born in 1968, Mr. Li holds a bachelor's degree from Beijing University of Posts and Telecommunications. Mr. Li joined Huawei in 1992 and has served as Regional Vice President, Regional President, President of the Global Technical Sales Dept, President of the Sub-Sahara Area, member of the Joint Committee of Regions, member of the FC, and President of the Asia Pacific Area.

### Ms. He Tingbo (Teresa He)

Born in 1969, Ms. He holds a master's degree from Beijing University of Posts and Telecommunications. She joined Huawei in 1996 and has since served as Chief ASIC Engineer, and R&D Director of HiSilicon. Currently, she serves as President of HiSilicon and Vice President of the 2012 Laboratories.

### Mr. Wang Shengli (Victor Wang)

Born in 1963, Mr. Wang holds a master's degree from Wuhan University. He joined Huawei in 1997 and has served as Regional Vice President, Regional President, and President of the Asia Pacific Area. Currently, Mr. Wang serves as President of the European Area, executive member of the Management Team of the Joint Committee of Regions, Director of the overseas subsidiaries' Board Bureau, and Chairman of the Board of Huawei Technologies Coöperatief U.A.

## Members of the Supervisory Board

From the left in the first row: Mr. Ren Shulu, Mr. Zhou Daiqi, and Mr. Liang Hua
From the left in the second row: Mr. Yi Xiang, Mr. Yin Xuquan, Mr. Tian Feng, Mr. Deng Biao, and Mr. Song Liuping

### Mr. Liang Hua (Howard Liang)

Born in 1964, Mr. Liang holds a doctorate degree from Wuhan University of Technology. Mr. Liang joined Huawei in 1995 and has served as President of Supply Chain, CFO of Huawei, President of the Business Process & IT Mgmt Dept, President of the Global Technical Service Dept, Chief Supply Chain Officer, and Chairman of the Audit Committee.

### Mr. Zhou Daiqi

Born in 1947, Mr. Zhou graduated from Xidian University. Mr. Zhou joined Huawei in 1994 and has served as ATM Product Manager, Chief Engineer and General Manager of the Multimedia Dept, Director of the Hardware Dept, Chief of the Xi'an Research Center, and Director of the HR Branch of Products & Solutions. Currently, Mr. Zhou serves as Chief Ethics & Compliance Officer, Director of the Corporate Committee of Ethics and Compliance, and member of the Audit Committee.

### Mr. Ren Shulu (Steven Ren)

Born in 1956, Mr. Ren holds a bachelor's degree from Yunnan University. Mr. Ren joined Huawei in 1992 and has served as President of Shenzhen Smartcom Business Co., Limited, Chairman of the Capital Construction Investment Management Committee, and Chairman of the Internal Service Management Committee. Currently, Mr. Ren serves as Huawei's Chief Logistics Officer.

### Mr. Yin Xuquan

Born in 1964, Mr. Yin holds a master's degree from Xi'an Jiaotong University. Mr. Yin joined Huawei in 1995 and has served as President of the Southern Africa Region, Vice President of the Turnkey Business Dept, President of the Optical Network Product Line, HR Director of Sales & Service Dept, and Vice President of the Procurement Qualification Mgmt Dept.

### Mr. Tian Feng

Born in 1969, Mr. Tian holds a bachelor's degree from Xidian University. Mr. Tian joined Huawei in 1995 and has served as EVP of the Middle East and Northern Africa Area, President of the Middle East Region, President of the China Region, CEO of Huawei Agisson, Vice President (acting) of the Human Resource Mgmt Dept, EVP of Huawei University, Director of the Institute of Education of Huawei University, Director of the Disciplinary and Supervisory Sub-committee of the HRC, and executive member of the Management Team of the Joint Committee of Regions.

### Mr. Deng Biao (Alex Deng)

Born in 1971, Mr. Deng holds a bachelor's degree from Jiangxi University. Mr. Deng joined Huawei in 1996 and has served as President of the Access Network Product Line, President of the Network Product Line, President of the Carrier Software & Core Network Business Unit, and President of the Quality, Business Process & IT Mgmt Dept.

### Mr. Song Liuping

Born in 1966, Mr. Song completed his postdoctoral research at Beijing Institute of Technology. Mr. Song joined Huawei in 1996 and has served successively as Manager of the Product Strategy Planning Dept, Director of the IPR Dept, Director of the External Cooperation Dept, PSST member, President of the Legal Affairs Dept, Chief Legal Officer, President of the Patent Review Board, Director of the Trade and Customs Compliance Committee, member of the Disciplinary and Supervisory Sub-committee of the HRC, and member of the FC.

### Mr. Yi Xiang (Steven Yi)

Born in 1975, Mr. Yi holds a bachelor's degree from Wuhan University. Mr. Yi joined Huawei in 1998 and has served as Director of the Sales Mgmt Dept in the Asia Pacific Area, General Manager of the Pakistan Representative Office, President of the Middle East Region, President of the Middle East and Africa Area, President of the Sales & Delivery Mgmt Dept, and Deputy CFO of Huawei. Currently, Mr. Yi serves as President of the Regions Mgmt Dept and member of the FC.

## Committee Members

Only committee members not listed in "Members of the Board of Directors" or "Members of the Supervisory Board" are included in this section. (The order is based on the number of strokes needed to complete the Chinese character that corresponds to the member's surname.)

### Mr. Wang Shengqing (Ken Wang)

Born in 1972, Mr. Wang holds a master's degree from Huazhong University of Science and Technology. Mr. Wang joined Huawei in 1997 and has served as Deputy Director of the Mobile Technical Sales Dept in China, Deputy Director (acting) of the Technical Sales Dept in the Asia Pacific Area, Deputy General Manager of the Indonesia Representative Office, Director of the Telefonica Account Dept, and President of the Marketing & Solution Sales Dept of the Carrier BG.

### Mr. Jiang Xisheng

Born in 1966, Mr. Jiang holds a bachelor's degree from Xidian University. Mr. Jiang joined Huawei in 1989 and has served as Vice President of the Marketing & Sales Dept, General Manager of the General Procurement Dept, Vice President and CFO of Huawei Electric, Director of the Investment Mgmt Dept, and Vice President of Finance. Currently, Mr. Jiang serves as Chief Secretary of the Board of Directors and member of the FC.

### Mr. Li Shanlin

Born in 1968, Mr. Li holds a master's degree from Beihang University. Mr. Li joined Huawei in 1996 and has served as R&D Project Manager, Department Manager at Huawei Technologies India Private Limited, Deputy Chief of the Beijing Research Center, Director of the R&D Dept of the Data Communications Product Line, Director of the HR Branch of Products & Solutions, Vice President of the Human Resource Mgmt Dept, and member of the HRC.

### Mr. Li Jianguo

Born in 1964, Mr. Li holds a master's degree from Huazhong University of Science and Technology. Mr. Li joined Huawei in 1993 and has served as an R&D engineer, Deputy Manager of the Development and Pilot (D&P) Dept, Manager of the Manufacturing Dept, Executive Vice President of Huawei Electric, Director of the Assembly Business Dept, Deputy Director of the Supply Chain Mgmt Dept, Director of the Board Design Engineering Dept under the Central Research & Development Unit (CRDU), Director of the PDT/TDT Leaders Mgmt Dept under the CRDU, and President of the Manufacturing SBG. Currently, Mr. Li serves as President of the Manufacturing Dept.

### Mr. Zou Zhilei

Born in 1971, Mr. Zou holds a bachelor's degree from Hefei University of Technology. Mr. Zou joined Huawei in 1998 and has served as General Manager of the Xi'an Representative Office, General Manager of the Guangzhou Representative Office, President of the Northern Africa Region, President of the Global Sales Dept under the Enterprise BG, and President of the Global Sales and Service Dept under the Enterprise BG. Currently, Mr. Zou serves as President of the Carrier BG and member of the FC.

### Mr. Zhang Shunmao (Patrick Zhang)

Born in 1966, Mr. Zhang holds a master's degree from Fudan University. Mr. Zhang joined Huawei in 1992 and has served as Director of the Switch Business Dept of the Central Research Dept, Vice President of the Technical Support Dept, Corporate Senior Vice President, EVP of the Marketing Dept, President of the Fixed Network Product Line, President of the Wireless Network Product Line, EVP of the Latin America Area, President of the Northern Latin America Region, and President of the Enterprise Business Marketing & Solutions Dept. Currently, Mr. Zhang serves as President of the Marketing and Solution Dept under Products and Solutions.

### Mr. Zha Jun

Born in 1971, Mr. Zha holds a master's degree from Zhejiang University. Mr. Zha joined Huawei in 1997 and has served as R&D Product Manager, Director of the IMS Product Line, President of the Router and Network Security Product Line, President of the Fixed Network Business Unit, President of the Fixed Network Product Line, member of the HRC, and member of the SDC.

### Mr. Yao Fuhai

Born in 1968, Mr. Yao holds a bachelor's degree from the University of Electronic Science and Technology of China. Mr. Yao joined Huawei in 1997 and has served as Director of the Pricing Center, Vice President of the Business Process & IT Mgmt Dept, Vice President of the Strategy Cooperation Dept, Vice President of the Global Technical Sales Dept, and President of the Global Technical Service Dept. Currently, Mr. Yao serves as President of the Procurement Qualification Mgmt Dept, Director of the Group Procurement Management Committee, and member of the FC.

### Mr. Yan Lida

Born in 1970, Mr. Yan holds a bachelor's degree from Tsinghua University. Mr. Yan joined Huawei in 1997 and has served as Vice President of the European Region, General Manager of the Japan Representative Office, and President of the East Asia Region. Currently, Mr. Yan serves as President of the Enterprise BG and member of the FC.

### Mr. Peng Qiu'en (Ted Peng)

Born in 1971, Mr. Peng holds a master's degree from Zhongnan University of Economics and Law. Mr. Peng joined Huawei in 1997 and has served as Director of the Budget & Cost Mgmt Section, Director of the Financial Planning & Analysis Dept, Vice President of the Sales & Delivery Finance Mgmt Dept, and CFO of the India Region. Currently, Mr. Peng serves as President of the Operation Mgmt Dept and member of the FC.

### Mr. Peng Bo (Vincent Peng)

Born in 1976, Mr. Peng holds a bachelor's degree from Harbin Institute of Technology. Mr. Peng joined Huawei in 1999 and has served as Account Manager of the Customer Relationship Mgmt Dept, Account Manager of the Hong Kong Representative Office, President of the Vodafone Account Dept, Vice President of the West

European Region, President of the Accounts Business Dept, President of the Sales & Accounts Business Dept under the Carrier BG, President of the West European Region, member of the Carrier BG EMT, member of the HRC, and member of the SDC.

**Mr. Hui Chun (Clark Hui)**
Born in 1963, Mr. Hui holds a master's degree from Huazhong University of Science and Technology. Mr. Hui joined Huawei in 1989 and has served as President of the Procurement Qualification Mgmt Dept, Vice President of Finance & President of the Business Control Dept, and Vice President of the Business Process & IT Mgmt Dept. Currently, Mr. Hui serves as Director of the Engineering Inspection Dept, member of the Audit Committee, and Acting Deputy Director of the Executive Steering Committee (ESC).

## Independent Auditor

An independent auditor is responsible for auditing a company's annual financial statements. In accordance with applicable accounting standards and audit procedures, the independent auditor expresses an opinion as to whether the financial statements are true and fair.

The scope of the financial audit and the annual audit results are subject to review by the Audit Committee. Any relationship or service that may potentially affect the objectivity and independence of the independent auditor can be discussed with the Audit Committee. The independent auditor may discuss any issues identified or any difficulties encountered during the course of the financial audits with the Audit Committee.

KPMG has been Huawei's independent auditor since 2000.

## Business Structure

The company has established a business structure that focuses on three dimensions: customers, products, and regions. All organizations jointly create value for customers, and are responsible for the company's financial results, market competitiveness, and customer satisfaction.

The Carrier BG and the Enterprise BG manage and support solution marketing, sales, and services that target carrier customers and enterprise/industry customers respectively. The two BGs provide innovative, differentiated, and advanced solutions based on the business characteristics and operational patterns of different customers while continuously improving the company's industry competitiveness and customer satisfaction.

The Consumer BG focuses on serving device consumers and deals with all aspects of the consumer domain. This BG is responsible for business performance, risk controls, market competitiveness, and customer satisfaction in the consumer business.

Products & Solutions is an organization that provides integrated ICT solutions to carriers and enterprise/industry customers. In addition to product planning, development, and delivery, this organization is also responsible for developing product competitiveness in order to deliver a better user experience and support the company's business success.

Regional organizations are the company's regional operations centers, and are responsible for developing and effectively utilizing regional resources and capabilities. The company has continuously optimized regional organizations and accelerated the delegation of authority to field offices. Command and on-site decision making authority has gradually been delegated to representative offices. While establishing closer partnerships with customers and helping them achieve business success, regional organizations have helped the company sustain growth.

Group Functions provide business support, services, and supervision. They are positioned to offer accurate, timely, and effective services to field offices and strengthen supervision while delegating sufficient authority to them.

## Improving the Management System

Our global management system enables us to promote our corporate culture company-wide and effectively manage our businesses. Our aim is to:

- Remain customer-centric and contribute to customer success.
- Control risks and ensure business continuity.
- Adopt CSR to promote sustainable social development.

Huawei's management system is based on ISO 9001 (an international standard for quality management systems) and TL 9000 (an international standard for quality management systems in the telecom industry). Empowered by continued evolution, Huawei frequently conducts self-assessments and makes improvements to meet the requirements and expectations of customers and other stakeholders.

In the past year, we:

- Fulfilled the requirements of our management system in accordance with our corporate strategy; and continued to develop our customer-oriented management system. Based on integrated business processes, the system effectively ensured business development and continuous improvement.
- Consolidated excellent business practices to develop an end-to-end process system composed of operating, enabling, and supporting processes. The process system incorporated requirements for quality, internal controls, cyber security, information security, business continuity, EHS, and CSR into multiple business domains, including marketing, R&D, delivery and service, supply chain, and procurement.
- Optimized our business systems through leadership development, total employee participation, Six Sigma, quality measurements, and internal and external assessments and audits.

To ensure that Huawei products and services are effective and reliable, our management system has been certified by multiple independent third parties, including ISO 9001/TL 9000 (quality), ISO 14001 (environment), OHSAS 18001 (occupational health and safety), ISO 27001 (information security), and ISO 28000 (supply chain security), as well as SA 8000 (CSR) in the device domain.

Our company has passed comprehensive audits, regular assessments, and stringent reviews conducted by 33 of the world's top 50 carriers, and by enterprise customers from various sectors. These audits and assessments covered a wide range of items, including financial robustness, quality management, delivery, supply chain management, knowledge management, project management, information and cyber security, risk management, EHS, CSR, and business continuity management. Huawei has obtained full and extensive recognition from its customers in these key domains, as evidenced by their choice of Huawei as a strategic partner.

We have continued to entrust professional third-party market survey companies to conduct customer satisfaction surveys among our three major customer groups worldwide: carriers, industry customers, and consumers. Based on customer feedback, we identified and consolidated key issues for improvements, and managed all issues in a closed loop to continuously improve customer satisfaction.

### From Strategy Development to Execution

Our Develop Strategy to Execute (DSTE) strategy management system makes the following tasks possible: strategy-driven business planning, budgeting, and performance appraisals. This system ensures that the medium-to-long-term strategic objectives of the company and business units are incorporated into annual plans and budgets, and that all business units are well coordinated. It also ensures that corporate investments are effectively managed to help the company achieve its strategic and business objectives.

We use balanced scorecards to measure organizational performance while formulating annual business plans and setting budgets. Specifically, we follow the process below:

- Break down corporate strategic objectives into organizational performance objectives at all levels.
- Include the above requirements in work reports from department heads at all levels.
- Manage employees' personal business commitments.
- Strengthen the application of organizational and individual performance results.

Each step in the process ensures that the individual and organizational objectives are aligned with those of the company, and that corporate strategy is thoroughly understood and effectively executed across the organization.

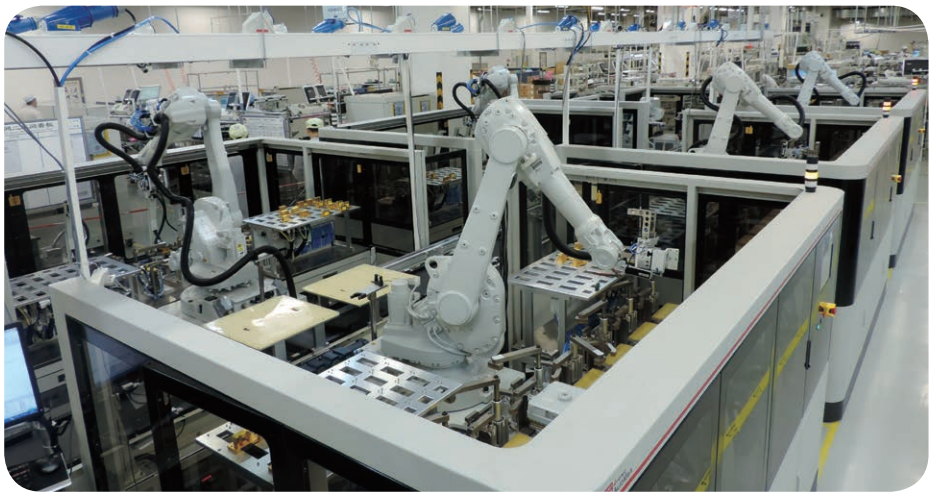
## Management Transformation

In 2015, Huawei focused on efficiency improvements, and implemented object-oriented transformation to streamline and integrate business processes based on the CRM+, IPD+, and ISC+ programs. As a result, major business processes at representative offices are now basically streamlined, and efficiency has been improved significantly, thus contributing to the company's business operations. Huawei has made it clear that it has now entered a new stage of transformation to achieve better financial results, so as to support business growth, continuously improve efficiency, and strike a balance between business growth/efficiency improvements and risk controls.

In 2015, Huawei launched the following initiatives.

- Implemented IPD+, a major business transformation based on market needs. Its purpose is to establish an end-to-end product management system that integrates product-related business processes and supports market-based innovation. The new process will support the effective operations of corporate-level emerging business opportunities (EBOs), preliminarily build an open innovation ecosystem, continuously improve the competitiveness and end-to-end efficiency of products and solutions, shorten the time-to-market perceivable to customers, support the company's sustainable growth, and improve the company's overall operational efficiency.

- Continuously promoted the integrated transformation of CRM+; implemented the LTC process in account departments globally to support significant growth of the carrier business and the improvement of its transaction quality; implemented the ISD process globally and deployed the IT platform to help decrease the company's delivery costs; launched the Three Clouds (Customer Solution Cloud, Experience Cloud, and Knowledge Cloud) and the



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*We adhere to the Quality First principle, and have shifted our focus of quality assurance from people to machines. We rely on equipment, tools, and methodologies to ensure quality. The core technics of our advanced automatic production lines and effective encapsulation are important to ensure high quality in Huawei products, which have supported our manufacturing in achieving high quality at 5.99 Sigma.*

Business Cloud to transition the Carrier BG and the Regions Mgmt Dept from a managerial role to an enablement, service, and support role.

- Set the direction for ISC+ transformation; focus on customer experience and use digital technologies to develop a proactive supply chain to ensure that supply capacity is visible and internal transactions are digitized. Through this, we will continuously improve internal operational efficiency; integrate the transformations of sales, products, supply, and delivery; make it easier for customers to do business with Huawei; and develop the supply chain into one of Huawei's core competences.

- Continued to streamline major business processes at representative offices and integrate them based on objects, to increase overall customer-facing capabilities and achieve the Five Ones goal for our transformation; made it clear that transformation in field offices was divided into three steps: streamlining major business processes, integrating them based on objects, and operating to deliver financial results. We will emphasize horizontal business process integration led by field offices and supported by the HQ. We aim to focus on business targets to deliver better financial results and establish an integrated management system at representative offices over the next three years. Streamlining major business processes like LTC and implementing integrated transformations targeting representative offices will be the basis of achieving agile and efficient field operations with the support of a large platform.

- Based on specific business scenarios and with the support of IT, we plan to turn Huawei into a digital company that has the characteristics of being online, fully-connected, real-time, smart, and automatic to comprehensively increase operational efficiency and improve customer experience. Huawei has begun its transformation in IT architecture. Driven by software packages, Huawei has preliminarily established a mobile operations platform based on IT technologies such as mobility, cloud computing, and Big Data; it has also cloudified the key functions of software packages, and is thus a half-step ahead of others in developing IT capabilities. Huawei will use globally available advanced software packages to build its own secure and high-quality IT system.

## Organizational Capabilities

Huawei has begun an organizational transformation which aims to allow people in field offices to call for support. This has helped realize the strategy of supporting elite team operations with a large platform and has gradually separated management authority from command authority.

We defined rules for delegating responsibility and authority to field offices to improve operational efficiency. This enabled field offices to flexibly change their organizational form and scale based on business needs. We were then able to develop highly competent, specialized, and professional customer-facing teams.

To better utilize our regional operating platforms, we:

- Refined our resource allocation mechanism to enhance expertise and knowledge sharing.
- Established multiple corporate-level strategic reserves – the Special Project Dept, tiger teams, and the Project Mgmt Resource Pool.
- Improved our management mechanism and methodologies for project-based organizations.

In the past year, we continued to improve the capabilities of our SSCs around the world. Our SSCs in five domains continued to improve their service quality to help the company constantly increase operational efficiency.

## Improving the Internal Control System

Huawei continued to design and implement an internal control system based on its organizational structure and operating model. The internal control framework and its management system apply to all business and financial processes of the company and its subsidiaries and business units. The internal control system is based on the five components of the COSO framework: Control Environment, Risk Assessment, Control Activities, Information & Communication, and Monitoring. It also covers internal controls of financial statements to ensure their truthfulness, integrity, and accuracy.

### Control Environment

A control environment is the foundation of an internal control system. Huawei is committed to a corporate culture of integrity, business ethics, and compliance with laws and regulations. Huawei has issued the *BCGs* to identify acceptable business conduct. The *BCGs* must be observed by all employees, including senior executives. Regular training programs are offered, and all employees are requested to sign the *BCGs* to ensure that the *BCGs* have been read, understood, and observed.

Huawei has implemented a mature governance structure, with clearly defined authorization and accountability mechanisms. The governance structure comprises the BOD, its committees, group functions, and multi-level management teams.

Huawei clearly defines the roles and responsibilities of its organizations to ensure the effective separation of rights and responsibilities. The CFO of Huawei is in charge of internal controls. The business control department reports to the CFO for any possible defects and improvements already made in terms of internal controls, and assists the CFO in building the internal control environment. The internal audit department independently monitors and assesses the status of internal controls for all business operations.

### Risk Assessment

Huawei dedicates a department to internal controls and risk management to regularly assess risks to the company's global business processes. This department identifies, manages, and monitors significant risks, forecasts potential risks caused by changes to the internal and external environments, and submits risk management strategies along with risk mitigation measures for decision making. All process owners are responsible for identifying, assessing, and managing business risks and taking necessary internal control measures. Huawei has instituted a mechanism for improving internal controls and risk controls to efficiently manage critical risks.

### Control Activities

Huawei has established the Global Process Management System and the Business Transformation Management System, released the global BPA, and appointed GPOs in line with the BPA. Responsible for building processes and internal controls, GPOs:

- Identify key control points and the Separation of Duties Matrix for each process, and apply these to all regional offices, subsidiaries, and business units.
- Conduct monthly compliance tests on key control points and issue test reports to ensure continuous and effective monitoring of internal controls.
- Optimize processes and internal controls based on business pain points to improve operational efficiency and help achieve business objectives.
- Perform SACAs to assess the overall process design and the effectiveness of process execution by each business unit, and then report the results to the AC.

## Information & Communication

Huawei has developed multi-dimensional information and communication channels to ensure the timely acquisition of external information from customers, suppliers, and other parties. It has also created formal channels for transferring internal information, and offered an online space, *Xinsheng Community*, for employees to freely communicate their thoughts and ideas. Corporate management holds regular meetings with departments at all levels to effectively communicate management orientation to employees and ensure effective implementation of management decisions.

All business policies and processes are available on the company's Intranet. Managers and process owners regularly organize training programs on business processes and internal controls to ensure that up-to-date information is made available to all employees. The company has established a mechanism for process owners at all levels to regularly communicate with each other, review the execution of internal controls, and follow up on internal control issues.

## Monitoring

Huawei has established an internal complaint channel, an investigation mechanism, an anti-corruption mechanism, and an accountability system. The *Agreement on Honesty and Integrity* that Huawei has signed with its suppliers clearly stipulates that suppliers may report improper conduct by Huawei employees through the channels stipulated in the *Agreement* to assist the company in monitoring the integrity of its employees. The internal audit department independently assesses the overall status of the company's internal controls, investigates any suspected violations of the *BCGs*, and reports the audit and investigation results to the AC and senior management.

Huawei has also implemented a mechanism for internal control appraisals of GPOs and regional managers, as well as their accountability and impeachment when and where necessary. The AC and the CFO regularly review the company's internal control status, and receive reports on action plans for improving internal controls, if necessary, and on plan execution progress. Both have the authority to request the relevant GPOs or business executives to explain their internal control issues and take corrective actions. The AC and the CFO may also need to submit their proposals to the HRC for disciplinary action or impeachment.

Students attending a lesson in a Huawei computer room at a school in Delhi

# Sustainable Development

## Introduction of Sustainability at Huawei

ICT is crucial for human progress in modern society. It is clear that connectivity-centered ICT technologies can enable the sustainable development of our economy, environment, and society. Effective utilization of ICT is vital to transform society in a way that creates economic opportunities and protects the environment. At present, ICT is helping to transform every industry. New technologies – such as cloud computing, Internet of Things, artificial intelligence, and 3D printing – will provide greater opportunities that enhance business efficiency and enrich people's lives. They will drive the global economy, environmental efficiency, and social sustainability. ICT has the potential to sustain a high quality of life for future generations.

Yet if used poorly, ICT could add to the world's problems. It could devour energy, accelerate climate change, and worsen economic inequality for those who do not have access. We have a choice, and the actions that we take along with our partners will directly determine our future. We remain committed to ensuring that the power of ICT helps make the world more sustainable.

### Sustainability Strategy

Through proactive communication with internal and external stakeholders, Huawei has established a sustainability strategy, and we have aligned it with our business strategy to reflect our commitment to promoting the harmonious and healthy development of the economy, the environment, and society over the long term.

Vision: To bridge the digital divide, and promote the harmonious and sustainable development of the economy, the environment, and society

Mission: To establish an excellent sustainability management system, operate with integrity and compliance, continuously improve communication with stakeholders, promote a harmonious business ecosystem, ensure the sustainable development of the company, and provide benefits to our customers and society

Huawei has identified the sustainability risks and opportunities facing our business, and defined the following sustainability priorities based on our sustainability vision, mission, and strategy:

- Continuous improvement of Huawei's sustainability management
- Sustainability of Huawei's own operations
- Sustainability of Huawei's products and services
- Huawei's contributions to social sustainability

## Huawei's Sustainability Strategy

## Overview of Huawei's Sustainability Initiatives in 2015

### Bridging the Digital Divide

- Huawei provides people across all geographic areas with easy access to voice communications services.
- Huawei ensures ubiquitous broadband for all and promotes future-oriented ICT technologies to address global challenges.
- Huawei establishes training centers and launches joint teaching initiatives to develop local talent, transfer knowledge, and increase people's engagement in the digital society.
- Huawei provides customized ICT applications and solutions that suit individual, corporate, and regional requirements to improve economic performance, quality of life, productivity, and competitiveness.

- Deployed products and solutions in over 170 countries and regions to serve nearly **3 billion** people
- Launched the first **white paper** on bridging the digital divide to support digital enablement
- Offered broadband access **for the first time** to households in Sri Lanka
- Provided ICT technologies for governments and the energy, transportation, and finance industries to **boost efficiency**

### Supporting Stable and Secure Network Operations

- Supporting network stability and security, especially at critical times (e.g., earthquakes, tsunamis, and other natural disasters and emergencies), is our highest priority and comes ahead of our own commercial interests.
- By fully considering service continuity and network resilience, Huawei continuously innovates to enhance the robustness and protection capabilities of our products. Huawei supports product testing, verification, and certification by independent parties to provide customers with internationally recognized security assurance approaches. Huawei maintains openness and transparency by proactively communicating and cooperating with stakeholders, and it complies with applicable security standards, laws, and regulations.

- Supported the stability of over **1,500** customer networks
- Supported network stability during over **130** major events and natural disasters worldwide
- Hosted the fifth meeting of the **ETSI** Cyber Security Committee
- Received the **Transparency Award for cyber security** from the German government

### Promoting Environmental Protection

- Huawei incorporates green concepts into the product planning, design, R&D, manufacturing, delivery, and service processes. Through continuous technological innovation, Huawei boosts resource utilization efficiency to provide customers with world-leading green and energy-efficient products and solutions.
- Huawei is dedicated to improving resource utilization efficiency in our offices, production facilities, logistics centers, and labs to minimize waste and greenhouse gas emissions and become a role model for environmentally friendly operations.
- Huawei continuously ensures that our products meet environmental protection requirements, and requires that our partners operate in compliance with green regulations. By being closely involved in business activities, we promote energy conservation and emissions reduction in the supply chain to improve our overall competitiveness in the industry chain.
- Huawei rolls out a wide variety of green integrated ICT solutions to help industries conserve energy and reduce emissions. Huawei is an active player in promoting an energy-conserving, environmentally friendly, and low-carbon society.

- Expanded our Global Consumer Recycling Program to recycle used mobile phones in **26** countries
- Saved **44.3 million kWh** of electricity via managerial and technological improvements
- Reduced the rate of waste sent to landfill to **2.03%** via a circular economy model
- Worked with suppliers to reduce over **77,000 tons** of $CO_2$ emissions

### Seeking Win-Win Development

- Huawei provides employees with varied career paths based on their special skill sets to help them realize their individual value.
- Huawei enthusiastically contributes to the communities and countries in which we operate.
- Huawei adheres to business ethics, opposing corruption, dumping, and monopolies. We operate with integrity and in compliance with applicable laws and regulations.
- Huawei focuses on sustainability risk management during our operating activities and service processes. We have gradually become a sustainability leader in the ICT industry and the world.
- Huawei closely works with suppliers to develop standards and benchmarks. We have shifted the focus from risk management to efficiency management and taken a leading position in sustainability in the industry chain.

- Ensured an employee localization ratio of **72%** outside China
- Invested over **CNY9,240 million** in employee benefits
- Investigated **977** suppliers about their use of conflict minerals
- Rolled out the CSR flagship program Seeds for the Future in **67** countries and regions

## Sustainability Management

### Sustainability Management System

Huawei has established a sustainability management system based on standards such as ISO14001, OHSAS18001, and SA8000 (for the Consumer BG). The company has also leveraged the ISO26000 standard to refine our sustainability management system, thereby ensuring the effective execution of our sustainability strategy. In 2015, Huawei further rolled out our sustainability management process to systemically plan, implement, monitor, and improve our sustainability efforts, and integrate sustainability requirements into business operations. In addition, Huawei conducted a comprehensive assessment across the company to review the maturity of our sustainability management. Through the assessment, our business departments are able to continuously improve their capabilities by identifying their weaknesses and pain points and finding directions for improvement.

### Stakeholder Engagement

Stakeholder engagement is at the core of Huawei's sustainability management efforts. We work closely with our stakeholders, listening to their needs and using them as key inputs for management improvements. We have established the Stakeholder Engagement Management Process to incorporate stakeholder engagement into day-to-day operations and drive continuous progress.

#### Engaging Stakeholders

Every year Huawei hosts various sustainability-related events – particularly sustainability conferences and workshops – to increase stakeholder awareness. The following are examples of sustainability-related meetings held in 2015:

- In March 2015, Huawei held a workshop in London to understand the challenges and solutions to bridging the digital divide. The workshop was attended by 50 experts from more than 10 countries and regions, representing telecom companies, government agencies, UN agencies, and NGOs.
- In June 2015, Huawei and CSR Europe co-hosted a sustainability conference with the theme *The Future of Sustainable Supply Chains: From Compliance to Innovation*. This event brought together over 150 stakeholders from our customers, governments, and industry organizations.
- During a sustainability-themed seminar held in Shenzhen in December 2015, Huawei discussed the implementation of the new UN Sustainable Development Goals with 40 experts from different industries and sectors.


*Panel discussion at the sustainability conference*

## Sustainable Operations

### Operating with Integrity and Compliance

Huawei complies with all applicable national and regional laws and regulations, operates ethically, and opposes all forms of corruption or bribery. We advocate fair competition, ensure trade compliance, and protect intellectual property rights. As one of the world's largest patent holders and investors in R&D, Huawei believes that integrity and compliance will contribute to a more favorable business environment and more robust business development around the world.

Huawei demands that every employee understand and sign the *Business Conduct Guidelines (BCGs)*, and pass an online test on it each year. Huawei has included strong ethical provisions in all contracts with suppliers, and requires suppliers to understand and sign the *Honesty and Integrity Agreement*.

Huawei encourages any BCG violation to be reported to BCGcomplain@huawei.com, and we strictly protect the information of whistleblowers.

### Caring for Employees

Huawei's core values include *Inspiring Dedication*, and we view *employee care* as our key responsibility. In fact, employee care has been embedded into all aspects of our operations. For example, Huawei provides employees with competitive compensation; implements employee incentive policies that equally emphasize monetary and non-monetary incentives; and provides reasonable and timely rewards to dedicated employees. The company helps employees develop their careers by offering a wide range of training sessions and career paths, allowing them to realize their full potential. Employee health and safety is always our top concern: We have established a comprehensive employee benefit system, where we purchase social insurance and commercial insurance packages for all employees around the world. In 2015, our investment in global employee benefits totaled CNY9,240 million, up over 25% year-on-year.

With a presence in over 170 countries and regions, Huawei gives employees fair access to work, learning, and promotion opportunities, irrespective of their nationality, gender, age, race, or religion. In countries outside China, we remain committed to hiring local employees, with a localization rate of 72% in 2015. We are also committed to creating an efficient, relaxing, and caring workplace, which gives employees a strong sense of happiness and encourages them to find the right work-life balance.

### Taking Rapid Response Measures to Protect Employee Health and Safety

On April 25, 2015, a devastating earthquake with a magnitude of 8.1 on the Richter scale struck Kathmandu, the capital of Nepal. The earthquake caused a great number of fatalities and injuries and left several buildings in ruins.

In the aftermath of the earthquake, Huawei took a series of measures to guard against potential epidemics that could compromise employee health. For example, we provided medical supplies for healthcare and epidemic prevention, and offered professional onsite medical support to local employees. We also enlisted International SOS doctors to provide three-week onsite healthcare services to employees in our Kathmandu-based Huawei Nepal Project Camp. Additional actions were taken to prevent epidemics and diseases, such as managing drinking water; ensuring a healthy living environment and personal hygiene (e.g., requiring everyone to use disinfectant for hand-washing); taking protective measures for employees and vehicles going out of the camp; and monitoring, in real time, the health and day-to-day changes in temperature of employees who continued to work onsite after the disaster.

*International SOS doctor giving a training course on first aid*

During the disaster relief period, all of our local employees remained in good health, and no one was infected with cholera, measles, or respiratory infectious diseases. Thus, our employees were able to effectively support local disaster relief and network recovery efforts.

## Safe Operations

In all countries where Huawei operates, we have implemented an environment, health, and safety (EHS) management system, and established a manager accountability system and a safety incident ownership mechanism. By developing and enforcing the EHS Absolute Rules, Huawei has built a positive safety-first culture. These actions have minimized safety risks and protected the health and safety of our employees, contractors, and other partners. Huawei delivers projects and services in over 170 countries and regions around the world. Such a huge scale and volume of delivery could result in many potential risks. Therefore, managing the safety of delivery projects has always been high on our priority list. Specifically, Huawei has set a corporate goal of 0 injuries or fatalities in delivery projects, and provides all employees and contractors with the required safety information, training, guidance, equipment, and incentives. In addition, we have assigned safety owners to every delivery project. Any negative safety incident and issue is reflected in managers' performance reviews. These measures are helping to keep the people working on our delivery projects safe.

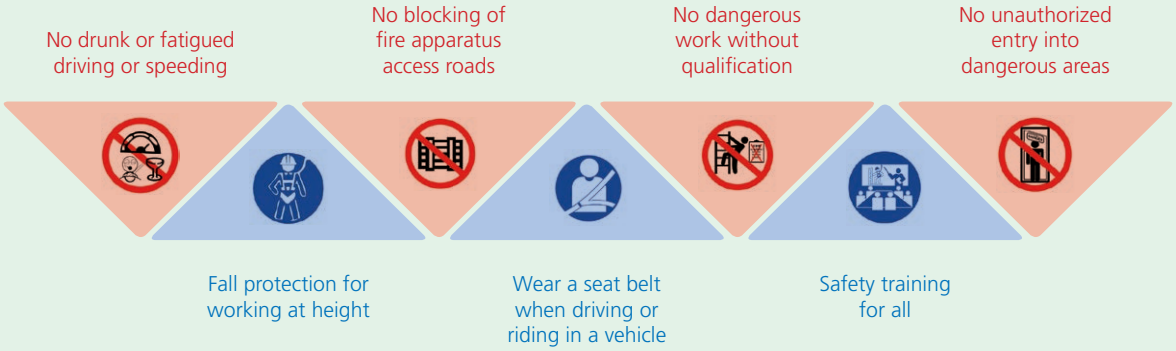
### Implementing the EHS Absolute Rules to Minimize EHS Incidents

Research by third parties reveals that the majority of safety incidents are a direct result of dangerous behaviors. It thus makes sense to minimize dangerous behaviors in order to effectively reduce EHS incidents.

Huawei has evaluated its business scenarios and EHS risks, and analyzed its EHS incidents and cases as well as those of its peers. Following this, Huawei established the EHS Absolute Rules at different levels (e.g., engineering delivery, administrative service, capital construction, R&D, manufacturing, and corporate levels) in accordance with industry best practices (e.g., Vodafone's), customer requirements, and applicable laws and regulations.

By disseminating information, providing training, and incorporating the Absolute Rules into business processes, Huawei has promoted the rules on a global scale. These rules have been turned into EHS Management Redline requirements, and all employees are required to comply with them. Following these measures, Huawei has managed to minimize dangerous behaviors and, more importantly, the number of EHS incidents.

#### Huawei's EHS Absolute Rules




## Green Operations

While using ICT to help society reduce energy consumption, Huawei also makes great efforts to minimize the environmental impact of our own operations as we strive to prevent climate change. In 2015, Huawei saved over 44.3 million kWh of electricity via technological and managerial improvements. As a result, our energy consumption per unit of sales revenue decreased by over 10% year-on-year. We have also expanded the use of clean energy. Our existing solar power stations can generate 20 million kWh of electricity each year, equivalent to a 18,000 ton reduction in $CO_2$ emissions. Though we do not produce a significant amount of waste, we strictly control the emissions from waste gas, waste water, and residues in order to meet or exceed applicable laws, regulations, and requirements. We also seek to conserve water resources by harvesting rainwater and using reclaimed water. In 2015, Huawei lowered the amount of waste that went to landfills to 2.03% by recycling and reusing as much waste as possible.

## Green Buildings

In 2015, Huawei began to pilot green building concepts in our Global Compliance and Testing Center (GCTC) on the Songshanhu Campus, Guangdong, China. The new center has been designed and constructed in accordance with world-leading green standards, from site selection and energy & water conservation to material utilization. After conducting energy consumption analysis and thermal simulation, we applied 13 leading energy-efficient technologies at the center (see the following table). The center is expected to reach the Gold level of the US Leadership in Energy and Environmental Design (LEED) and pass China's Green Building (3-Star) certification.

The new center will consume much less water and electricity than our old buildings, and will be less costly to maintain. Every year, the building is expected to help us save CNY1.9 million in electricity costs, and reduce 1,132.4 tons of $CO_2$ emissions.


| No. | Energy-efficient Technology |
|---|---|
| 1 | Sensible heat recovery from the ventilation air |
| 2 | Ice storage air conditioning |
| 3 | Renewable energy (solar power) system |
| 4 | Permeable paving |
| 5 | Rainwater harvesting system |
| 6 | Reclaimed water system |
| 7 | Water-efficient irrigation |
| 8 | Water metering based on category |
| 9 | Barrier-free facilities |
| 10 | Adjustable outdoor sunshade |
| 11 | $CO_2$ concentration monitoring system |
| 12 | Indoor natural light illumination system |
| 13 | Dustproof grating at entrances; garbage room |

## Sustainable Supply Chain

In 2015, Huawei launched the Quality First strategy and fully embedded it into our procurement strategy, procurement process, and supplier management. To urge our suppliers to continuously improve, we have adopted the "Top Four Initiative", which aims to achieve IT-based management, promote production automation, develop employee expertise, and retain staff in key positions. Sustainability is Huawei's key requirement for our products and manufacturing process. In fact, it has become a key element of our product lifecycle, value chain operations, and strategies for reducing costs and gaining differentiated competitive advantages. By emphasizing the business benefits of sustainability, Huawei has built a competitive advantage and identified opportunities for customer satisfaction, risk control, efficiency enhancement, and business innovation. In addition, Huawei has made continuous improvements by analyzing the cost effectiveness of sustainability efforts. In 2015, we focused on the following aspects as we managed supply chain sustainability:

- Better cooperation with customers: Sustainability was further embedded into our procurement process. In cooperation with our customers, we implemented joint audits and capability building projects, identified business opportunities of sustainability, and explored innovative practices and business cases relating to sustainability.

- Better cooperation with suppliers: Sustainability was assigned greater weight in our supplier qualification and performance appraisal. We redoubled our efforts to train suppliers, give them the required support, and share experiences with and among them. Our business-driven approach to supplier management effectively urged our suppliers to improve their sustainability performance.
- Better cooperation with governments and NGOs: This enabled Huawei to increase our supervision over suppliers' environmental protection as well as be more transparent. We identified market factors that promote a greener supply chain. To help suppliers further reduce energy use and emissions, Huawei uses software from the Institute of Public and Environmental Affairs (IPE) to regularly query data about 465 key suppliers' environmental performance. We also worked with a government agency on a pilot program for a greener supply chain.
- Better management of conflict minerals: In line with industry best practices, Huawei analyzed the latest trends related to the conflict minerals issue, improved our internal management process, and pushed for the use of smelters certified by the Conflict Free Smelter Initiative (CFSI). We investigated 977 suppliers based on the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-affected and High-risk Areas* and the CFSI conflict mineral questionnaire.
- Better cooperation with industry players: Huawei participated in discussing and setting industry standards, and played a leading role in developing the IPC-1401 standard for supply chain sustainability. We also encouraged peer cooperation and collaboration with supply chain players, in order to convert best practices into industry standards and actions.

## Building a Greener Supply Chain

In 2014, Huawei and the Human Settlements and Environment Commission of Shenzhen jointly launched the Greener Supply Chain Pilot Project. As an experiment in a new public-private partnership model of environmental governance, this project uses the procurement power of large companies under government leadership to encourage environmentally friendly operations by SMEs. Building on this success, in 2015 we expanded the program further down our supply chain. Ten of our suppliers selected several of their suppliers to join the pilot, and Huawei invited nine other large companies and their suppliers to participate. Together, we aim to create a learning network that helps to build a greener supply chain.

Through factory tours, expert-led training, technical exchanges, and experience sharing, Huawei has encouraged suppliers to embed green requirements into their products and manufacturing; analyze the financial results from the perspective of environmental protection; identify opportunities for risk control, efficiency improvement, and business innovation; and design and implement improvement measures. Huawei has also encouraged industry peers to align their directions. Additionally, we have enabled upstream and downstream players to share experience, learn best practices, and explore new cost-effective ways to increase their expertise in environmental protection.

At a review meeting in 2015, experts from the Greener Supply Chain Pilot Project praised Huawei's new approach to building a greener supply chain. At green supply chain workshops held in Dongguan and Tianjin, in China, we also shared and discussed our practices in building a greener supply chain. Our efforts were well recognized by experts at the workshops.


*Signing ceremony of the Shenzhen Greener Supply Chain Pilot Project Agreement*

## Sustainable Products and Services

### Cyber Security

As the ICT industry has advanced and become an essential part of our lives, businesses, and countries, cyber security and privacy have become increasingly greater concerns. Cyber security, the global challenge of our age, is having a far-reaching impact on the ICT industry and beyond.

Huawei places our responsibility to guarantee the security of networks and services above any commercial interest, and is committed to implementing an end-to-end global cyber security assurance system as a strategic priority. Huawei has developed a comprehensive cyber security management system and incorporated it into business processes and across the entire company based on our "Assume nothing, Believe nobody, Check everything" philosophy.

#### Increasing Recognition from Stakeholders in Cyber Security

Huawei is committed to communicating and cooperating openly, transparently, and in good faith with governments, customers, and industry partners via various platforms, organizations, and channels. We have thus increased our influence and reputation in cyber security.


*Huawei representative receiving the Cyber Security Transparency award at CeBIT*

In 2015, our cyber security efforts were well recognized by governments, industry organizations, and customers. Examples include the Cyber Security Transparency award from four municipal governments in Lower Saxony, Germany; the 10 Years of Excellence in Information Security Testing award from the International Computer Security Association Labs (ICSA Labs); and the Protocol of Security Development Assurance (PSDA) stamp from Telefónica.

### Greener Products and Services

Huawei's approach to environmental production is based on the Circular Economy concept, which helps to constantly improve resource and energy efficiency and enable the re-use of raw materials, products, and components. In the product design stage, Huawei maximizes product lifespan and ensures easy take-back, maintenance, recycling, and re-use. Our design approach also uses the lifecycle assessment methodology to help us select recyclable or compostable materials, thus minimizing material use. Huawei is committed to providing our customers with green and efficient products and solutions that consume less energy to lower customers' operating expenditures, use of resources, and carbon emissions.

Our environmental protection strategy includes the following initiatives:

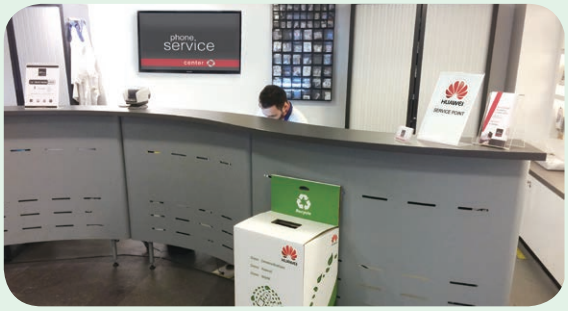
- Design products and manufacturing processes to use less energy and materials and more eco-friendly materials
- Increase products' energy efficiency to help customers minimize carbon emissions
- Reduce the use of packaging and utilize eco-friendly packaging materials
- Reduce emissions from logistics by optimizing our use of different transportation models and routes as well as establishing more regional logistics centers
- Take back, reuse, and recycle products

### Building Huawei's Global Consumer Recycling Program

In 2015, Huawei expanded its Global Consumer Recycling Program. By taking back scrapped mobile phones and tablets, Huawei seeks to fulfill its extended producer responsibility, minimize the environmental impact of e-waste, and improve resource utilization efficiency.

By the end of 2015, the program had 444 recycling stations in 26 countries and regions, including 165 new stations in China and 102 in 14 other countries and regions. Through this program, Huawei is encouraging consumers to act responsibly for a greener world. As part of our Circular Economy approach, we are maximizing the value of used devices and ensuring their disposal is in compliance with applicable regulations.


*Recycling station in Helsinki, Finland*




*Recycling station in Antwerp, Belgium*

## Safe Products

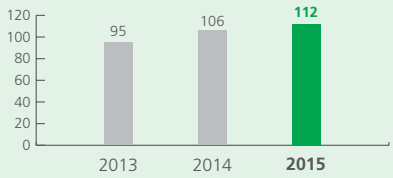
Huawei has put in place a rigorous product safety control mechanism. Through various research and innovation initiatives, we have continuously increased the safety and reliability of the products and services we provide to our consumers and customers. Reducing electromagnetic radiation remains our R&D priority as more network equipment is used in homes and public places, and amid the ongoing expansion of wireless networks and the growth of smart watches and other wearables. In addition to pursuing breakthroughs and innovations in product safety, Huawei has collaborated extensively with world-leading institutes to meet noise control requirements on products. Thanks to a scenario-based approach to product safety design, our products can guarantee ease of use and maintenance, and also meet health and safety standards.

### Ergonomic Design of Products

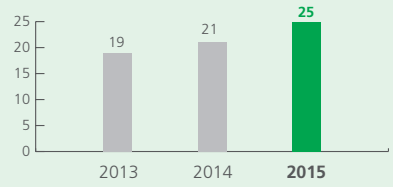
Huawei is well aware of its responsibility and obligation in product health and safety. We have established a special product ergonomic design team, and adopted a scenario-based approach to product safety design in all R&D procedures, from product planning and design to development and testing. Owing to these efforts, our products can better meet users' ergonomic and technical requirements, and are free of potential health or safety risks during product installation and use stages.

By the end of 2015, Huawei had developed user scenarios for leading carriers in 25 countries in Europe, North America, Latin America, Africa, and Asia. In 2015, we expanded our surveys in African countries to better understand local engineering delivery and user habits. Our innovative scenario-based design approach has ensured that our products are easy to install and use, with significantly reduced health or safety risks.

User scenarios analyzed by Huawei globally




Number of countries in which user scenarios have been analyzed




## Sustainable World

### Communications for All

More than 87% of the world's population is within reach of a mobile signal, but that leaves 13% without. Often those people live in remote areas with a sparse population and low incomes. The technical difficulties of building networks in these remote environments and providing power for them only increase the already high per capita cost of network construction.

Huawei has worked with our customers to install 2G networks in some of the remotest and poorest parts of the world, often powered entirely or partly by solar energy. Our innovations reduce the capital and operating costs of equipment. During network deployments, we collaborate with our customers so that the networks can be upgraded with small hardware and software tweaks at a later date to bring faster broadband speeds as local circumstances (including the availability of spectrum resources) change. In 2015, we constructed several 2G and 2.5G networks in remote areas in countries such as India, Ghana, Azerbaijan, and Jordan. These networks have put convenient mobile communications services into the hands of more local people.

### Broadband Inclusion for All

With over four billion people still offline, and the rate of new Internet users beginning to drop, there is a real fear that the benefits of broadband Internet may never reach the majority of the world's population. In developing countries, up to two thirds of the population may be offline.

In 2015, Huawei launched a new white paper entitled *Digital Enablement: Bridging the Digital Divide to Connect People and Society*. It clarified the challenges of bridging the digital divide in detail, and provided specific tools and recommendations that we can all use.

Our network solutions seek to reduce the total cost for carriers or governments to provide high-speed network connectivity and enable new business models. This means they can continue to invest in building networks and providing services to consumers. We provide a full range of broadband solutions, including international submarine networks, backhaul networks, backbone networks, fixed networks, mobile networks, and the software that enables them all. In 2015, we built or upgraded hundreds of 3G and 4G networks. We also provided low-cost smartphones and explored ways to make them more affordable to low-income users through installments. In 2016, Huawei will advance its cooperation with carriers to increase access to high-speed networks and contribute to socioeconomic progress in local countries where we operate.


*Download the white paper at www.huawei.com/minisite/digital-enablement.*

### Offering Broadband Access for the First Time to Households in Sri Lanka

In March 2015, Huawei announced the commercial use of its Wireless to the X (WTTx) broadband access solution based on LTE-TDD technology. Using only mobile technologies, WTTx provides an alternative to a home-based fixed broadband connection at much lower costs (down 80%) and much faster deployment (up 90%). The WTTx solution (with a customized terminal) can be used inside or outside the home to turn a mobile signal into a Wi-Fi signal. Its multi-antenna technology enables a fast mobile broadband network to be accessed across a greater coverage radius.

WTTx can enable fast broadband at lower costs for individual users who can access it using any low-cost Wi-Fi-enabled smartphone and can share the connection cost among all household users. WTTx is also an excellent solution for SMEs that would otherwise need a fixed broadband solution which would be more expensive and slower to roll out.

In Sri Lanka, the telecommunication company Dialog began to deploy WTTx in 2013 and rapidly expanded it in 2015 with 500 new base stations reaching numerous households, 80% of which had never accessed broadband before. After the initial connection fee of US$27, the service costs as little as US$4 per month for 5 GB of data and a voice line. With few users possessing a 4G device in Sri Lanka, people can access broadband using any Wi-Fi-enabled device, including more prevalent 3G devices, personal computers, and tablets.

## ICT Applications

Nowadays, ICT systems are transforming from a support role into a primary vehicle of value creation. Huawei is committed to leveraging our advanced ICT technologies to stimulate economic development and create socioeconomic benefits in sectors such as education, healthcare, and finance.

- Huawei enables educational institutions to build networks connecting students, teachers, and government agencies to each other and to information. These networks dramatically improve educational efficiency and expand the coverage of high-quality education.
- Huawei helps health institutions to go digital, so as to increase efficiency, reduce costs, and improve health outcomes. Our products and solutions enable better storage and analysis of crucial data and better use of scarce health expertise between institutions.
- Huawei's mobile money solution allows telecom companies to provide efficient and low-cost financial services to consumers, thereby enabling easier purchasing, saving, borrowing, and insurance. Access to mobile financial services can completely change the lives of about two billion unbanked adults.
- Huawei's connectivity solutions for industries and public sectors enable increases in productivity. They expand access for individuals, businesses, and government institutions while dramatically increasing efficiency. Our IoT solutions allow for the tracking and monitoring of items in supply chains, manufacturing processes, or in transit. Analysis of this information brings huge benefits and improvements to users.

### Enhancing Education in Ethiopia

The Ethiopian government aims to advance ICT-based education and nurture an ICT-skilled workforce, both of which are crucial to building an information society. In Addis Ababa, the Education Bureau runs more than 150 schools and was seeking to use high-quality and effective information systems to improve ICT-based education. With a full understanding of the government's needs and long-term strategic plan, Huawei implemented the Schoolnet project, hoping to evolve it into a benchmark and promote ICT-based education in the country.

In this project, Huawei provided an integrated ICT solution, which included a Cloud Desktop System and software. Unlike traditional computers with hard drives, Huawei's Desktop Cloud System comprises a small thin client, a monitor, a mouse, and a keyboard. The system's hard drive is stored in a centralized data center and can be accessed via the cloud. Huawei's solution also incorporates software to protect and restore the network connection, as well as software to compress image and video data which reduces bandwidth use. In addition to interacting with others and accessing customized content, students can enjoy better video-on-demand services over a low-bandwidth Internet with the help of Huawei's solution.

After the switch to this Desktop Cloud System, the usage of computers in these schools has increased from 10% to 60% and power consumption has been greatly reduced. With a unified cloud management platform, the Education Bureau's O&M personnel can easily manage all the education resources through a unified portal, and remotely monitor and manage the entire network. This has significantly improved the quality of O&M and provided users with high-quality educational resources. Huawei's solution has significantly improved the ICT utilization and management efficiency in 65 schools covered by this project, and lowered the schools' annual operating cost. By the end of 2015, more than 50,000 students had benefitted from our solution. We also provided extensive training to those in the schools and in the Education Bureau to manage the system and improve their overall ICT skills.

The project has been recognized by the Minister of Education as a key initiative that is leading the transformation of education in Ethiopia.

*Students using computers via the Desktop Cloud System*

## Facilitating ICT Talent Development and Skills Transfer

Bridging the digital divide is difficult and requires great efforts from different parts of society. In many countries, particularly developing countries, there is still a lack of skilled workers to develop ICT solutions. As technology advances rapidly, governments around the world are actively seeking to improve people's ICT literacy, and are launching policies to drive the development of the ICT industry and bridge the digital divide. Huawei has adopted the following initiatives to advance the ICT ecosystem:

- In countries where it operates, Huawei has nurtured local ICT talent, facilitated ICT knowledge transfer, increased people's engagement in the digital society, and contributed to local employment and economic growth. For example, we have built the Huawei Authorized Information and Network Academies (HAINAs) with over 140 colleges and universities around the world, providing highly practical training to more than 5,000 people. In Bangladesh, Huawei has provided ICT training to 240,000 women in rural areas. This has been done through our cooperation with the ICT Division of the Ministry of Posts & Telecommunications & Information Technology (MoPT&IT) and telecom carrier Robi Axiata.

- We collaborate with governments, regulators, industry associations, peers, and developers to improve their understanding of how to most effectively bridge the digital divide and use ICT to further economic, social, and environmental development. For example, our Global Connectivity Index (GCI) helps countries understand how they are using ICT to drive their economies and what they should do to further grow.

- We double our R&D efforts around the world and proactively engage third parties (e.g., universities and developers) in our R&D activities. In 2015, we opened our new R&D campus in India with a capacity of holding 5,000 engineers, twice the number in our old center.

## Network Stability

Huawei is dedicated to supporting stable network operations – even in extreme conditions. When people rush away from dangerous environments during a crisis, Huawei employees always run in the opposite direction. This has been true for many years, whether it was the tsunami in Indonesia, the Wenchuan earthquake, the Ya'an earthquake, the Fukushima nuclear leak, or the earthquake in Chile. We always stay onsite with our customers, responding fast to restore communications. Huawei is also committed to supporting network stability during times of high demand on a network, such as at major events. Every year, we support the stability of 1,500 networks serving nearly 3 billion people, especially in major events, natural disasters, and special occasions requiring particular support.

## Restoring the Networks After the Nepal Earthquake

On April 25, 2015, a devastating earthquake with a magnitude of 8.1 rocked Nepal, causing severe devastation and many casualties in local communities. Communications infrastructure in the worst-hit areas was badly damaged.

Despite the risk of aftershocks, engineers in Huawei's Nepal Representative Office ran all the way to the local carrier's equipment room within 20 minutes of the earthquake. They knew they had to work with the customer to keep the network operational. Back at the office, Huawei launched a business continuity management mechanism and emergency response plan, set up a disaster recovery team, issued an earthquake alert, and began stocking medical supplies and other essential items. The supply chain and procurement departments swung into action to support our engineers in the field. Within 30 hours, the first shipment of emergency equipment arrived.

In the aftermath of the earthquake, voice traffic on local networks rose to four times its normal levels, and it remained high over the following week. This placed enormous strain on already damaged networks. The power grid was down, and many base stations did not have enough diesel to keep their emergency generators running, so even key stations were failing. Huawei swiftly coordinated all its resources: power supplies, diesel, and satellite phones. A joint technical support team with employees from the Shenzhen HQ, Southern-East Asia Region, India Representative Office, and Nepal Office closely with the customer to keep voice traffic flowing while we scrambled emergency repairs. As a result, we were able to restore the networks, help those in the earthquake zone to reach their families, enable rescuers to stay connected, and ensure that the media could report on the disaster and the relief efforts.

Twenty-four hours after the earthquake, Huawei and the customer had repaired 40 key base stations at hospitals, government agencies, disaster relief centers, and embassies. Over the next few days, we cut the number of non-functional base stations from 30% to below 6%. Some of our competitors were unable to organize effective disaster recovery, so we helped our customer repair 260 non-Huawei base stations. In areas where the transport network was no longer functioning, our engineers were ferried by helicopter deep into the earthquake zone to restore communications.

Because of these comprehensive measures, local network equipment was able to perform stably with dramatically reduced congestion, even though voice traffic remained high one week after the earthquake. Once again, these concrete measures demonstrated Huawei's unwavering commitment to network stability.

*Huawei engineers restoring communications networks in a customer's equipment room*

As the global population continues to increase, the use of resources continues to grow. Waste and carbon emissions will also increase. There is tremendous potential for ICT to help alleviate these pressures. As estimated in the *Smarter 2030* report issued by GeSI in 2015, ICT has the potential to hold global $CO_2$ emissions at 2015 levels – and also to reduce the consumption of scarce resources – by 2030. As part of our commitment to building a greener world, Huawei has continuously explored innovative ways to reduce the energy used in our network equipment and data centers. Our renewable energy solutions (e.g., solar power) enable ICT equipment to operate without generating any carbon emissions. To date, we have deployed nearly 20,000 base stations powered entirely or partly by solar or wind energy, reducing their fuel consumption by 80%. Separately, we also provide smart photovoltaic (PV) solutions that enable solar energy plants to operate highly efficiently.

## Contributing to a Low-carbon Society

Solar power and other clean energy can reduce our reliance on fossil fuels and ease climate change. Many countries are now researching clean energy and putting it into wider use. Huawei has always been committed to building a low-carbon society by providing ICT technologies and solutions to help industries conserve energy and cut emissions.

Smart PV solutions can generate electricity with zero emissions and pollution. They put no pressure on the environment, and can cut a company's carbon footprint. In 2015, thanks to the efforts of Huawei and our partners, smart PV stations were widely adopted around the world. Huawei's smart PV solution can enable solar power plants to be more efficient and decrease $CO_2$ emissions, thus contributing to a low-carbon society.

Our smart PV solution can also deliver socioeconomic benefits. For example, customers can apply our smart PV solution in their farms. Solar panels can be raised above the ground so that the arable land can still be planted, and the land can thus generate revenue both from the electricity and from agricultural use.

*13.5MW smart PV plant in the UK*

## Social Contributions

As a global corporate citizen, Huawei believes that seeking win-win development with local communities where we operate is one of our key social responsibilities. Leveraging our ICT expertise and experience, we initiate charity projects with governments, customers, and non-profit organizations. These include supporting ICT innovation and start-ups; facilitating local communities' green initiatives, and cultural, sports, and traditional events; enabling ICT talent education; offering support to local charity organizations; and supporting underprivileged groups. Examples include:

- In the Philippines, Huawei supported start-ups that participated in tech competitions.
- In South Africa, we supported local charity organizations and donated smartphones to rural girls.
- In Myanmar, we donated equipment to a local university.
- In Mauritius, we sponsored the traditional Festival of Lights as part of our commitment to carrying forward traditional culture.
- In Nepal and Zimbabwe, we provided school funds and supplies to orphans.
- In Zambia, Mauritania, Mauritius, the Comoros, Madagascar, and other African countries, we donated computers, desks, and chairs to schools in remote areas, and mobile phones and tablets to underprivileged women and young students.
- In Bangladesh, Vietnam, Cameroon, Botswana, Saudi Arabia, and Belarus, we funded ICT knowledge competitions and provided scholarships to local schools to facilitate ICT knowledge transfer.
- Our CSR flagship program Seeds for the Future has continued to facilitate global knowledge transfer, support local talent training, and enhance people's inclusion in a digital society.

## Seeds for the Future Program

In the Seeds for the Future program, Huawei selects college students from different countries to take part in a study trip in China. We share our ICT expertise and cross-cultural enterprise management experience, and thus nurture ICT professionals. Through the program, Huawei can also contribute to a more prosperous ICT industry in local countries. What makes this program unique is that it offers first-hand learning opportunities through interaction with Huawei experts and visits to Huawei laboratories, where program participants can engage in hands-on practice and witness live demonstrations of the latest ICT technology.

By the end of 2015, Seeds for the Future covered 67 countries and regions across five continents, bringing over 1,700 program participants to China (including over 800 in 2015 alone).

*"Every year, Huawei invites 10 students from each country to come to study at our HQ. We discuss future trends and show them how they can harness new opportunities. The name of the program represents our desire to nurture promising young professionals in every country where Huawei operates. No one can say for sure what the future information society will be like. Some take a negative view, but we at Huawei remain optimistic. We bring together young people of different races who speak different languages. In a few years, they will unleash their potential and contribute to global progress. Huawei is committed to doing its part to shape the future."*

—— Ren Zhengfei

*Program participants studying ICT knowledge*

*Program participants taking a photo*

**For further details, please see the complete *Huawei 2015 Corporate Sustainability Report*.**

Florence Griffith Joyner ("Flo-Jo") celebrating her victory

# A lifetime of dedication, for a moment of victory

Focus · Persevere · Breakthrough

HUAWEI

# Abbreviations, Financial Terminology, and Exchange Rates

## Abbreviations

| Abbreviation | Full Name |
|---|---|
| 3GPP | 3rd Generation Partnership Project |
| 5GIC | 5G Innovation Centre |
| 5G-PPP | 5G Infrastructure Public Private Partnership |
| 5GVIA | 5G Vertical Industry Accelerator |
| AAU | Active Antenna Unit |
| AC | Audit Committee |
| AI | Artificial Intelligence |
| AMI | Advanced Metering Infrastructure |
| APT | Advanced Persistent Threat |
| AR | Augmented Reality |
| ATM | Asynchronous Transfer Mode |
| BCGs | Business Conduct Guidelines |
| BDII | Business-Driven ICT Infrastructure |
| BES | Business Enabling System |
| BG | Business Group |
| BOD | Board of Directors |
| BPA | Business Process Architecture |
| BSS | Business Support System |
| C&Q | Competency & Qualification |
| CAGR | Compound Annual Growth Rate |
| CBTC | Communication-Based Train Control |
| CC | Common Criteria |
| CCSA | China Communications Standards Association |
| CEM | Customer Experience Management |
| CEO | Chief Executive Officer |
| CETC | Customer Experience Transformation Center |
| CGU | cash-generating unit |
| CMA | Cloud Mitigation Alliance |
| CNCF | Cloud Native Computing Foundation |
| COSO | Committee of Sponsoring Organizations under the Treadway Commission |
| cPPs | collaborative Protection Profiles |
| CRM | Customer Relationship Management |

| Abbreviation | Full Name |
|---|---|
| CSA | Cloud Security Alliance |
| CSP | Certified Service Partner |
| CSR | Corporate Social Responsibility |
| CT | Communications Technology |
| DC | Data Center |
| DDoS | Distributed Denial of Service |
| DOCSIS | Data Over Cable Service Interface Specification |
| DSTE | Develop Strategy to Execute |
| EBO | Emerging Business Opportunity |
| EC | European Commission |
| EHS | Environment, Health, and Safety |
| EMEA | Europe, the Middle East and Africa |
| EMT | Executive Management Team |
| EPC | Evolved Packet Core |
| ESC | Executive Steering Committee |
| eSDK | Ecosystem Software Development Kit |
| ETSI | European Telecommunications Standards Institute |
| EWI | EastWest Institute |
| FC | Finance Committee |
| FCC | Federal Communications Commission |
| FRAND | Fair, Reasonable, and Non-discriminatory |
| FTTH | Fiber to the Home |
| GCI | Global Connectivity Index |
| GeSI | Global e-Sustainability Initiative |
| GNEEC | Global Network Evolution and Experience Center |
| GNOC | Global Network Operation Center |
| GPO | Global Process Owner |
| GPON | Gigabit-capable Passive Optical Network |
| GSMA | Global System for Mobile Communications Association |
| GSPC | Global Cyber Security and User Privacy Protection Committee |

| Abbreviation | Full Name |
| --- | --- |
| GTS | Global Technical Service |
| HAINA | Huawei Authorized Information and Network Academy |
| HCC | Huawei Cloud Congress |
| HCIE | Huawei Certified Internetwork Expert |
| HD | High Definition |
| HDC | Huawei Developers Congress |
| HiApp | Huawei AppStore |
| HIRP | Huawei Innovation Research Program |
| HNC | Huawei Network Congress |
| HRC | Human Resources Committee |
| IaaS | Infrastructure as a Service |
| IASB | International Accounting Standards Board |
| ICSA | International Computer Security Association |
| ICT | Information and Communications Technology |
| IEEE | Institute of Electrical and Electronics Engineers |
| IEEE-SA | IEEE Standards Association |
| IETF | Internet Engineering Task Force |
| IFRSs | International Financial Reporting Standards |
| IMS | IP Multimedia Subsystem |
| IOPS | Input/Output Operations Per Second |
| IoT | Internet of Things |
| IoV | Internet of Vehicles |
| IP | Internet Protocol |
| IPD | Integrated Product Development |
| IPR | Intellectual Property Right |
| IPS | Instructions Per Second |
| IPTV | Internet Protocol Television |
| IPv6 | Internet Protocol version 6 |
| ISD | Integrated Service Delivery |
| ISF | Information Security Forum |
| ISP | Internet Service Provider |
| IT | Information Technology |
| ITU | International Telecommunication Union |

| Abbreviation | Full Name |
| --- | --- |
| ITU-R | ITU Radiocommunication Sector |
| KPI | Key Performance Indicator |
| LEED | Leadership in Energy and Environmental Design |
| LTC | Lead to Cash |
| LTE | Long Term Evolution |
| MBB | Mobile Broadband |
| MIMO | Multiple Input Multiple Output |
| NB-IoT | Narrowband Internet of Things |
| NFV | Network Functions Virtualization |
| NGO | Non-Governmental Organization |
| NPS | Net Promoter Score |
| NVMe | Non-Volatile Memory express |
| O2O | Online to Offline |
| OASIS | Organization for the Advancement of Structured Information Standards |
| OCI | Open Container Initiative |
| OFDM | Orthogonal Frequency Division Multiplexing |
| ONOS | Open Network Operating System |
| OPNFV | Open Platform for NFV |
| OTN | Optical Transport Network |
| OTT | Over The Top |
| PaaS | Platform as a Service |
| PCN | Packet Core Network |
| PEA | Provincial Electricity Authority |
| PET | Privacy Enhancing Technologies |
| PSDA | Protocol of Security Development Assurance |
| PV | Photovoltaic |
| QDS | Quality Driven Streaming |
| ROADS | Real-time, On-demand, All-online, DIY, Social |
| SaaS | Software as a Service |
| SACA | Semi-Annual Control Assessment |
| SBG | Service Business Group |
| SCM | Storage Class Memory |
| SCMA | Sparse Code Multiple Access |
| SDC | Strategy & Development Committee |

| Abbreviation | Full Name |
|---|---|
| SDM | Subscriber Data Management |
| SDN | Software-defined Networking |
| SDP | Service Delivery Platform |
| SPO Lab | Service Provider Operations Lab |
| SSC | Shared Services Center |
| SSD | Solid State Disk |
| STAR | Security, Trust & Assurance Registry |
| TBU | time-based unit |
| TD-SCDMA | Time Division-Synchronous Code Division Multiple Access |
| TMF | TeleManagement Forum |
| T-SDN | Transport-SDN |
| TUP | Time-based Unit Plan |
| UBB | Ultra Broadband |
| UMTS | Universal Mobile Telecommunications System |
| UPS | Uninterruptible Power Supply |
| USITC | United States International Trade Commission |
| U-vMOS | User, Unified, Ubiquitous-Mean Opinion Score for Video |
| vCPE | Virtual Customer Premise Equipment |
| VoLTE | Voice over Long Term Evolution |
| VoWiFi | Voice over Wi-Fi |
| VR | Virtual Reality |
| WAN | Wide Area Network |
| WFA | Wi-Fi Alliance |
| WRC-15 | World Radiocommunication Conference 2015 |
| XaaS | X as a Service |

## Financial Terminology

### Operating profit
Gross profit less research and development expenses, selling and administrative expenses, plus other (expenses)/income, net

### Cash and short term investments
Cash and cash equivalents plus other current investments

### Working capital
Current assets less current liabilities

### Liability ratio
Total liabilities expressed as a percentage of total assets

### Days of sales outstanding (DSO)
Trade receivables at the end of the year divided by revenue, and multiplied by 360 days

### Inventory turnover days (ITO)
Inventories at the end of the year divided by cost of sales, and multiplied by 360 days

### Days of payables outstanding (DPO)
Trade payables at the end of the year divided by cost of sales, and multiplied by 360 days

### Cash flow before change in operating assets and liabilities
Net profit plus depreciation, amortization, unrealized exchange loss, interest expense, loss on disposal of fixed and intangible assets, and other non-operating expense, less unrealized exchange gain, investment income, gain on disposal of property, plant and equipment and intangible assets, and other non-operating income.

## Exchange rates

Exchange rates used in the annual report:

| CNY/USD | 2015 | 2014 |
|---|---|---|
| Average rate | **6.2927** | 6.1701 |
| Closing rate | **6.4927** | 6.1958 |

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